Transactions

of the

Dumfriesshire and Galloway Natural History

and

Antiquarian Society

LV 1980

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Dumfriesshire and Galloway Natural History

and

Antiquarian Society

FOUNDED 20th NOVEMBER, 1862

THIRD SERIES, VOLUME LV

Editors:

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ISSN 0141-1292

1980

DUMFRIES

Published by the Council of the Society

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EDITORIAL

Contributions are invited on the Natural History, Antiquities, Archaeology or Geology of South-West Scotland or the Solway Basin and preference is always given to original work on local subjects. It may also be possible to provide space for Industrial Archaeology. Intending contributors should, in the first instance, apply to the Editors for "Instructions to Contributors". Each contributor has seen a proof of his paper and neither the Editors nor the Society hold themselves responsible for the accuracy of scientific, historical or personal information.

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This Volume is made with the assistance of a generous Carnegie Grant. The Council is also indebted to the Scottish Arts Council for meeting the greater part of Dr. Islay Donaldson's article on S. R. Crockett.

The Council is also grateful to the University of Glasgow and the Carnegie Trust for subventions towards the cost of Dr. Jardine's article on Coastal Deposits and Shorelines of Dumfriesshire.

Furthermore they are also indebted to the Scottish Development Department for a grant towards the cost of Dr. Breeze's and Dr. Ritchie's article on a Roman Burial at High Torrs, Luce Sands.

HOLOCENE RAISED COASTAL SEDIMENTS AND FORMER SHORELINES OF DUMFRIESSHIRE AND EASTERN GALLOWAY

by W. G. Jardine

Department of Geology, University of Glasgow

SYNOPSIS

Broadly, the sediments comprise fine- to medium-grained marine carse deposits overlain in places by storm-beach gravels or wind-blown sand in association with organic deposits. East of Annan, carse deposits, containing rare remains of marine fauna, accumulated in coastal marshes penetrated only for short periods by the distal, brackish waters of flood tides. At Newbie, carse deposits comprise a lower unit containing occasional to abundant remains of marine micro-fauna and an upper unit in which remains of micro-fauna are rare but thin layers of plant debris are laterally extensive. In places interruptions, attributable to the movement of gullies in the contemporaneous tidal flats and other local events, occur between the upper and lower units or within the upper unit. In the Lochar Gulf, accumulation of faunally-rich carse deposits in conditions similar to those existing at present in the eastern part of the Solway Firth, was followed by formation of gravel bars near the mouth of the gulf. At New Abbey and Carsethorn, deposition of carse sediments containing marine micro-fauna was succeeded by formation of gravel ridges (New Abbey) and accumulation of brackish-water sediments (Carsethorn). Throughout the area, the position of the shoreline at the maximum of the Holocene marine transgression was determined mainly by the distribution, orientation and morphology of late-Pleistocene deposits. Late-Holocene shorelines, marking stages in marine regression to the present shoreline, may be complex products of erosive and depositional processes in combination.

CONTENTS

I. INTRODUCTION

The coasts of Dumfriesshire and eastern Galloway, forming the northern shore of the eastern part of the Solway Firth, are bordered in places by raised coastal sediments deposited during the last 10,000 years, the geological time interval known as the Holocene epoch (text-fig. 1). The sediments vary in composition and grain size from one locality to another, and they represent a variety of depositional environments (Jardine 1967, p. 223; Jardine & Morrison 1976, pp. 175-179), but collectively they constitute a unity in their occurrence now at a few metres above British Ordnance Datum (Newlyn), in the unconformable nature of their lower surface in relation to glacial till or meltwater deposits of the Devensian glaciation, and in their ages as established by radiocarbon assay (Jardine 1975).

The Holocene sediments were first mapped by the Geological Survey prior to 1879 (one-inch sheets, Scotland, first published : No. 5, 1879; No. 6, 1879; No. 10, 1885), and brief reference to their extent and nature was made in the Explanation of Sheet 5 (Horne *et al.* 1896, pp. 36-39). No detailed account has been given of the characteristics of these sediments or of the conditions in which they accumulated. Investigations of the inorganic coastal sediments and associated organic deposits by Wallace (1918), Donner (1959, 1963) and Marshall (1962a, 1962b) were mainly geomorphological in emphasis; botanical and palynological studies of Lochar Moss, which overlies Holocene coastal deposits of the former Lochar Gulf (text-fig. 5), were made by Erdtman (1928, p. 175) and Nichols (1967), and brief reference to the same moss was made by Godwin (1943, pp. 227-228) in a general survey of British coastal peats. Bishop & Coope (1977, pp. 63-66 and 79-81) included discussion of a site near the eastern end of the Solway Firth in consideration of the early-Flandrian environment of south-western Scotland. Preliminary results of the investigations

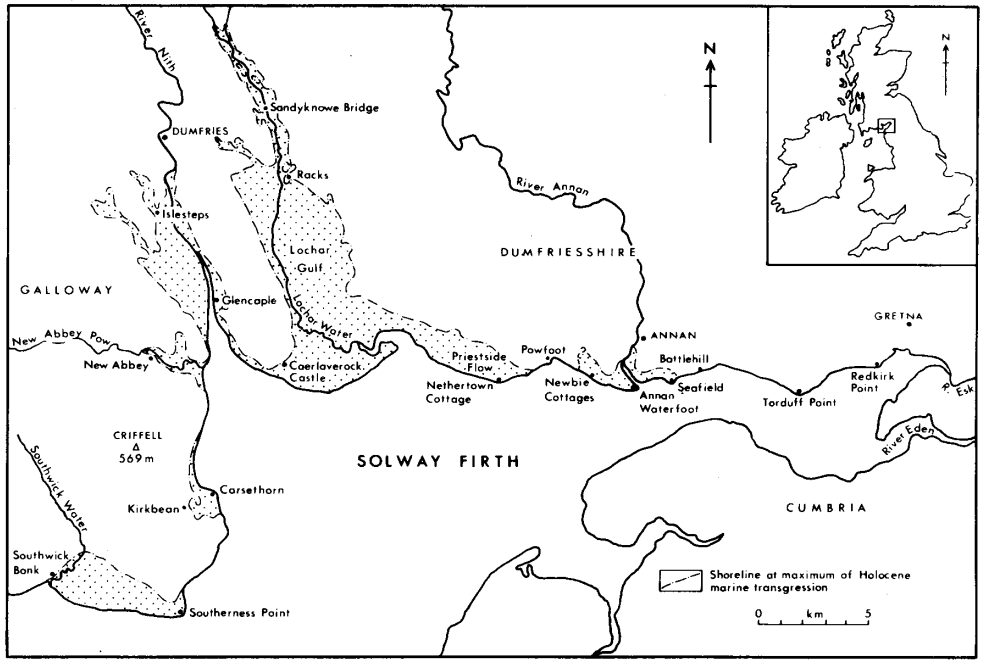


Fig. 1

Map of the seaboard of Dumfriesshire and eastern Galloway, showing the principal localities mentioned in the text and the position of the shoreline at the maximum of the Holocene marine transgression in relation to the present shoreline. Areas of Holocene raised coastal deposits are indicated by the stippled ornament. Inset: location of the study area within the British Isles.

recorded here were given by Jardine (1964, 1967, 1971). The chronology of Holocene marine transgression and regression, and the archaeological significance of the Holocene coastal deposits were discussed by Jardine (1975) and Jardine & Morrison (1976).

The purposes of this paper are :

1. To record the characteristics of the Holocene raised coastal deposits of Dumfriesshire and eastern Galloway, and to consider the environmental conditions in which the sediments accumulated.
2. To examine the nature of the visible Holocene shorelines in the same area.
3. To examine the relationships between the Holocene coastal sediments and adjacent Pleistocene sediments.

II. METHODS OF INVESTIGATION

The extent of the Holocene raised coastal sediments along the shores of Dumfriesshire and eastern Galloway was mapped on the scale 1 : 10,560. The area of the deposits mapped is somewhat greater than that of the '25 ft raised beach' in the most recently published one-inch maps of the Institute of Geological Sciences (Geological Survey) because parts of the '50 ft raised beach' of the Geological Survey maps are believed to represent Holocene rather than earlier deposits.

Natural sections of the Holocene sediments are few in comparison with the total surface area of the deposits but along the incised meanders of the lower reaches of some of the watercourses, especially at times of low tide, parts of the sedimentary succession are exposed. Occasional coastal cliff sections provide additional details of the sedimentary characteristics and stratigraphy of the Holocene sediments. Supplementary data were obtained at inland sites by digging, by the use of small-diameter screw and bucket hand-augers, and by 150 mm diameter percussive boring with a portable mechanised drilling rig. Additional bore logs and sediment samples were provided at a few locations by civil engineering companies engaged in commercial investigations.

At all localities where samples were collected, thicknesses of strata measured or boreholes sunk, the altitudes recorded were obtained by precise levelling from Ordnance Survey bench-marks, using the latest available altitudes indicated on bench-mark lists. In many cases levelling over extensive tracts from the nearest bench-mark to a recorded site provided additional data concerning the altitude of the area traversed. In the text, all measurements are given in metric units. Ordnance Datum (Newlyn) is the reference level for all altitudes recorded.

Samples collected in the field were examined in the laboratory for two main purposes. 1. To check the field determination of sedimentary textural classes. 2. To determine and record the presence or absence of microscopic remains of organic material in samples that, in bulk, appeared to be largely inorganic in composition.

A limited number of samples of organic sediments was collected for radiocarbon age determination. To avoid contamination, rigorous precautions were taken in the collection of these samples. It should be noted also that only samples whose precise positions in the stratigraphical sequence were known were used for age determination *(cf.* Jardine 1975, p. 175).

III. TERMINOLOGY

Several terms and abbreviations used in this paper are explained or defined below.

1. *Coastal deposits* include the products of a number of individual sedimentary environments each of which existed in the neighbourhood of the contemporaneous coast of the Solway Firth *(cf.* Jardine & Morrison 1976, pp. 175-179).
2. The sediments of one particular group of coastal deposits are termed *carse deposits (cf.* Jardine 1975, pp. 174-175). These are former marine tidal-flat, gulf or estuarine sediments that now flank the northern coast of the Solway Firth or form extensive relatively-flat tracts bordering the lower reaches of many of the watercourses of the area. They are dominantly medium- or fine-grained sediments.
3. The term *merse* is employed here, as in local usage, to denote the low areas, adjacent to present high water mark of ordinary spring tides, that are flooded occasionally by tidal waters. The merse comprises a tract of land, generally up to *circa* 100 m in width, but locally much more extensive, colonised by halophytic plants and traversed by a ramifying system of shallow creeks or gullies. Occasionally the merse merges with the territory of the high tidal flats of the present Solway Firth, but

commonly a small cliff *(c.* 1 m in height) marks the seaward boundary of the merse at high water mark of ordinary spring tides. In essence, the merse is the floodplain of the present Solway Firth, and in places it merges with the present floodplains of certain of the watercourses of Dumfriesshire and eastern Galloway.

4. The terms used to describe the principal size grades of the sediments conform to B.S. 1377 of the British Standards Institution (1975) : gravel, sand, silt, clay. The terms of the textural classes (e.g. loamy sand, silty clay) used in the detailed descriptions of the inorganic sediments are those used by soil scientists (e.g. Clarke 1971, p. 45).

5. The terms used to describe the organic deposits are those of the field classification of West (1977, p. 60) : peat, organic detritus, organic mud.

6. The terms used to describe the frequency of occurrence of mineral fragments, macroscopic plant remains, foraminiferal tests, ostracod valves, etc. in samples that were examined in the laboratory are, in ascending order of frequency : rare, occasional, common, frequent, abundant, very abundant *(cf.* botanical practice, e.g. Willis 1973, p. 90).

7. The letters A.O.D. or B.O.D., following a given altitude, denote respectively *above Ordnance Datum* or *below Ordnance Datum* (Mean Sea Level at Newlyn, Cornwall).

8. H.W.M.O.S.T. and L.W.M.O.S.T. denote respectively high water mark of ordinary spring tides and low water mark of ordinary spring tides.

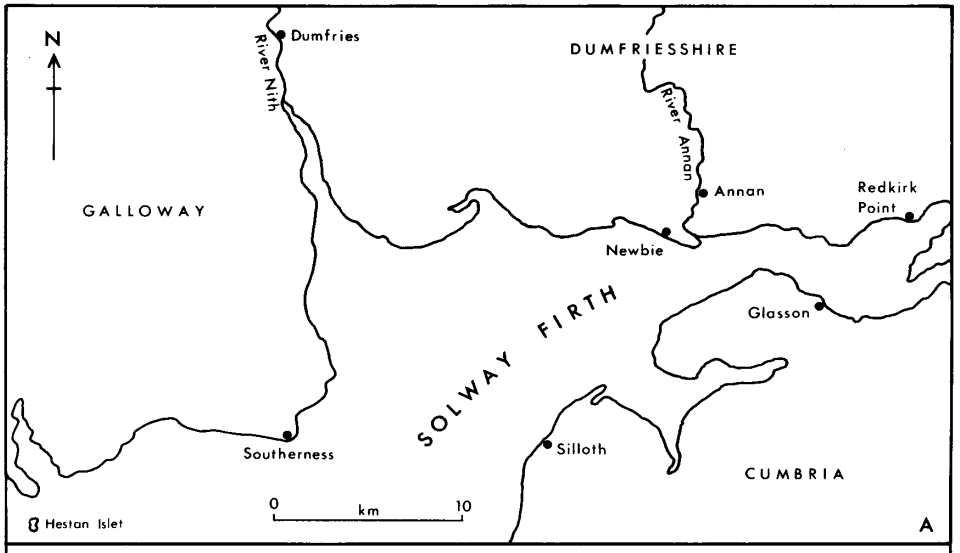
9. Specific locations mentioned in the text are identified by National Grid References.

10. Following standard practice, all radiocarbon ages quoted in the text are given in radiocarbon years B.P., calculated on the basis of the Libby half-life of radiocarbon, 5568 ± 30 years *(cf.* Godwin 1962).

IV. TIDAL RANGE

The present area of the Solway Firth adjacent to the coasts of Dumfriesshire and eastern Galloway comprises banks of sand and silt separated by slowly-migrating channels. At times of both spring and neap high tides the banks are completely covered by marine waters. In contrast, at low water the water-mass is restricted (spring tides) or almost restricted (neap tides) to the main channels and, as a result, near the head of the Firth low water seldom falls below Ordnance Datum *(cf.* Jardine 1975, pp. 190-191 and table 2). Correspondingly, tidal range within the part of the Solway Firth east of Southerness Point, in the adjacent embayments and in the river estuaries that empty into the Firth, is anomalous compared with tidal range in the part of the Firth to the west of Southerness Point. The nature of the anomaly is that within the eastern part of the Firth tidal range at any given coastal location is not necessarily twice the altitude of high water at that location and, correspondingly, tidal range does not increase eastwards from Southerness Point to the head of the Firth although, in general, the altitude of high water mark *does* increase from west to east along the Dumfriesshire coast (text-fig. 2).

Conditions involving the presence of slowly-migrating channels and banks are believed to have existed in the eastern part of the Solway Firth throughout the Holocene epoch. It is reasonable to infer that, similarly, tidal range in this area has been anomalous during the same interval. It is on this assumption that some of the deductions concerning the Holocene coastal environments of the northern side of the Solway Firth have been made.



LOCATION	SPRING TIDAL RANGE	MEAN HIGH WATER LEVEL (Spring Tides)	MEAN LOW WATER LEVEL (Spring Tides)
HESTAN ISLET	7·40 m	+ 4·20 m	- 3·20 m
SILLOTH	8·40 m	+ 4·80 m	- 3·60 m
NEWBIE		+ 5·00 m	- 2·00 m
GLASSON		+ 5·44 m	+ 0·24 m
REDKIRK POINT		+ 5·51 m	+ 1·71 m

C

Fig. 2

A. Map of the eastern part of the Solway Firth, showing coastal locations for which tidal data are given in text-figure 2C. B. Idealised west-east section of the eastern part of the Solway Firth. The altitudes of present mean high water spring tides (MHWST) and present mean low water spring tides (MLWST) at locations shown in text-figure 2A are projected on to the section to show how mean tidal range differs to the west and east of Silloth. The tidal data used are from text-figure 2C. C. Tidal data for locations on the shores of the Solway Firth, calculated from figures published in Admiralty Tide Tables, Volume 1, 1975. The text-figure is adapted from Jardine 1975, fig. 12 and table 2.

V. HOLOCENE COASTAL SEDIMENTS

The Holocene raised coastal sediments occur discontinuously along the northern seaboard of the eastern part of the Solway Firth (text-fig. 1). The sporadic distribution of the sediments almost certainly is an original feature, determined by the intricacies of the coast at the time of sedimentation. Accordingly, the characteristics of the sediments and the conditions of their deposition may be discussed on an areal basis, although the broader topics of this paper, for example the form of the Holocene shoreline during phases in the transgression and regression of the sea, are best considered on a regional basis. The deposits concerned constitute the narrow marginal tract of the Solway Firth seaboard at altitudes up to *c.* 8 m A.O.D. from near Redkirk Point in the east to near Annan in the west. More extensive areas of the same deposits underlie Priestside Flow to the west of Annan and the southern part of Lochar Moss to the east and south-east of Dumfries, together with the low ground bordering both sides of the River Nith between Dumfries and Glencaple and the low ground in the neighbourhood of New Abbey. In south-eastern Galloway a small elongate area of the deposits extends northwards from near Carsethorn, and a broader tract extends from near Southerness Point westwards to near Southwick Bank (text-fig. 1). Selected representatives of these areas, studied in detail, are discussed below.

(a) Redkirk Point to Annan

The sediments

Along the present shore between Redkirk Point and the mouth of the River Annan, the raised coastal sediments are exposed discontinuously in low cliffs between higher bluffs of red glacial till. The Holocene coastal deposits vary in thickness up to about 6.5 m, attaining their maximum at Redkirk Point (National Grid Reference NY 300651). The sedimentary sequence there and the lateral distribution of the deposits were studied between 1960 and 1967 by W. W. Bishop, G. R. Coope and H. A. Moisley. A generalised description of the sedimentary succession was given by Jardine (1964, pp. 6-7), and a detailed description by Bishop & Coope (1977, pp. 63-66). As noted by Bishop & Coope, the sequence varies somewhat in thickness and sedimentary detail from place to place.

The following succession was exposed in the cliff at **Redkirk Point** in April 1970 :

National Grid Reference : NY 30086511

Surface level : 8.34 m A.O.D.

	Thickness
Light-brown loam	0.30 m
Grey silty clay. Being above present H.W.M.O.S.T., dries out readily to give blocky to prismatic structure	0.90 m

Grey fine sandy silt to silty fine sand, with frequent black, sub-horizontal streaks of (contemporaneous) organic detritus and frequent vertical oxidised and indurated (? modern) root or rhizome channels. On sub-horizontal surfaces polygonal dehydration cracks develop, and the surface weathers to a sulphur-yellow colour.	1.24 m
Grey fine sandy silt with abundant black, sub-horizontal streaks of organic detritus and frequent vertical (non-oxidised and non-indurated) root or rhizome channels	0.36 m
Grey silt and dark-brown organic detritus, with frequent vertical (non-oxidised and non-indurated) root or rhizome channels (Peat 3 of Bishop & Coope 1977, pp. 63-66)	0.05 m to 0.08 m
Grey laminated silt (laminae *c.* 2 mm thick) with abundant contemporaneous plant detritus (including tree branch *c.* 0.15 m diam) and frequent vertical (? modern) rhizomes	1.11 m
Dark-brown to black organic detritus with numerous wood fragments (Peat 2 of Bishop & Coope 1977, pp. 63-66). *c.* 25 m east of the described section a tree stump in position of growth was radiocarbon dated 8135 ± 150 years B.P.; Q-637, Godwin & Willis 1962, p. 59.	0.08 m
Grey to pink-grey sand. Top part is leached A_2 horizon of (buried) soil profile	1.14 m

Interface of strata : 3.15 m A.O.D.

Grey gravelly sand	at least 0.25 m

Samples from seven horizons distributed through the profile were sieved and examined under the microscope. The only faunal remains observed comprised one poorly-preserved ostracod valve in association with abundant fragments of plant debris at 4.29 m A.O.D.

About 10 m seawards of the cliff section described above, a prominent layer of orange ferruginous coarse sand was exposed on the foreshore. Digging showed that it is the lateral equivalent of the lowermost bed (grey gravelly sand) of the sequence described above. Westwards, and down-dip, it is replaced by a thin layer of organic debris (Peat 1 of Bishop & Coope 1977, pp. 63-66; Peat I of Shotton *et al.* 1968, p. 202; Birm-40, dated 10,898 ± 127 years B.P., and Birm-41, dated 11,205 ± 177 years B.P.). The ferruginous sand, varying in thickness from 0.15 m to 0.38 m, rests on and grades into pink sand (minimum thickness 0.70 m) which in turn rests on red glacial till. The full sequence at Redkirk Point, from New Red Sandstone rock at the base, through red till, sands, silts and fine sandy silts, with frequent inclusions of organic debris and occasional thin interstratified layers of organic detritus, is shown diagrammatically by Bishop & Coope (1977, figs. 2 and 3).

Westwards from **Battlehill farm** (NY 217650), carse deposits up to 4 m thick are well exposed along the shore to a point approximately 250 m from the farmstead, whence they wedge out rapidly over a thin soil developed on red glacial till. A typical section in the carse deposits comprises :

Grey silty fine sand or fine sandy silt, with indistinct traces of lamination and with frequent vertical oxidised and indurated root or rhizome channels	*c.* 2.10 m
Fine sandy silt or silty fine sand exhibiting irregular, undulating lamination (laminae *c.* 5 mm thick), with abundant plant debris along stratification planes and frequent vertical oxidised root or rhizome channels	at least 1.80 m

No remains of marine fauna have been found in these deposits. At location NY 21596494 the top 50 mm of a 0.10 to 0.12 m-thick layer of brown organic mud that underlay the carse deposits was dated 6800 ± 250 years B.P. (Birm-256, Shotton & Williams 1973a, p. 3). The determined age probably is younger than the actual age because of contamination from adjacent modern rhizomes.

The sedimentary environment

The environment of deposition of the carse deposits bordering the present Dumfriesshire coast between Redkirk Point and the vicinity of Annan Waterfoot may be inferred from the data presented above in combination with additional information given by Bishop & Coope (1977, pp. 63-66) and further data now discussed. The presence of several layers and lenses of organic detritus (ranging in age from 12,290 ± 250 years B.P., Q-816, to 10,300 ± 185 years B.P., Q-815) interstratified with layers of sand immediately above the red till at Redkirk Point suggests fluctuations in the position of the water table that may have been produced by changes in the position of the shoreline in late-Pleistocene times and perhaps during the early part of the Holocene epoch but, as yet, no definite evidence of marine transgression earlier than *c.* 8135 ± 150 years B.P. has been found on the northern shore of the Solway Firth east of Annan Waterfoot. Indeed, there is evidence to suggest that the coastal zone, eventually flooded after *c.* 8135 ± 150 years B.P. by the transgressive Holocene sea, had been a land surface for a considerable length of time prior to its inundation. The evidence is principally that of the large number of locations along the present coast (including the location at NY 30086511, at Redkirk Point, described above, pp. 7-8) where the A_2 and B_2 horizons of a buried podsolic soil profile — at some locations surmounted by organic detritus — occur in the top part of the red till or fluvio-glacial sands and gravels that underlie the marine carse deposits. In addition, at a location, NY 267639, a few tens of metres east of Torduff Point, a 150 mm-thick basal layer of the carse deposits rests on a 70 mm-thick layer of dark-brown to dark-grey silty clay in which small fragments of charcoal occur, and this layer in turn rests on *c.* 0.30 m of yellow sand overlying red till. At the time that the charcoal fragments were discovered (in April 1970) the significance of their presence was not fully realised. In May 1976, however, a recognisable hearth containing fragments of charcoal was found at Redkirk Point (NY 30056514) in the

sands below the thin layer of organic detritus in which the tree stump dated 8135 ± 150 years B.P. (Q-637) was rooted (Langhorne & Masters 1977, pp. 27-28). Taken together, these two pieces of evidence suggest that not only was soil formation occurring at Torduff Point and Redkirk Point in conditions of free drainage (implying a low position of the water table), but early human occupation also was in progress at these locations prior to commencement of the main Holocene marine transgression in the eastern Solway Firth area.

The environment of deposition of the carse deposits flanking the present Dumfriesshire shore between Redkirk Point and the vicinity of Annan Waterfoot may be inferred from the data for Battlehill and Redkirk Point given above (pp. 7-9). Abundant contemporaneous plant debris and traces of abandoned channels of roots and rhizomes are present in the carse deposits and occasionally the plant debris constitutes discrete, thin layers (e.g. Peat 3 of Bishop & Coope 1977, pp. 63-66, at Redkirk Point). Taken together with the fact that no reliable traces of marine fauna were found in the carse deposits overlying the dated layers of organic detritus at Redkirk Point and Battlehill, such evidence suggests that, during the time of the main Holocene marine transgression, much of the area near the easternmost extremity of the Solway Firth was a coastal marsh penetrated only for short periods by the distal, brackish waters of flood tides. Indeed, perhaps penetration was effected only during the few days of spring tides in any given 14-day tidal cycle (*cf.* Jardine & Morrison 1976, p. 179). It follows that the carse deposits, although apparently constituting a continuous vertical sedimentary sequence at most localities within this area, probably include a very large number of minor disconformities or diastems. It is interesting, also, to note that present tidal conditions in this area are such that the tide is ebbing for approximately 75 per cent. of the semi-diurnal tidal interval. If the conditions were similar for the duration of the main Holocene marine transgression, the areas of carse deposits now preserved as remnants on the northern shore of the Solway Firth east of Annan Waterfoot may have accumulated in a total (cumulative) time interval that amounted to *c.* 100-150 years.

(b) **Annan to Powfoot**

Between Annan Waterfoot and Powfoot, 4 km to the west, occur the most extensive natural sections of Holocene raised coastal sediments in Dumfriesshire. The deposits occupy the remnants of a number of small kettle holes associated with a late-Pleistocene esker system that borders the present Solway Firth coast and, in addition, they fill a large shallow hollow located between the esker system and a broad expanse of fluvio-glacial sands and gravels to the north of Newbie Mains (text-fig. 3). In the cliff exposures of the present coast the Holocene sedimentary sequence exhibits lateral variation, especially in its upper part. There are three main areal units, each typified by its distinctive sequence of sediments : 1. Between Annan Waterfoot and Newbie Mains. 2. A composite unit occurring between Newbie Mains and Newbie Cottages and between Muir Beck and Powfoot. 3. Between Newbie Cottages and Muir Beck.

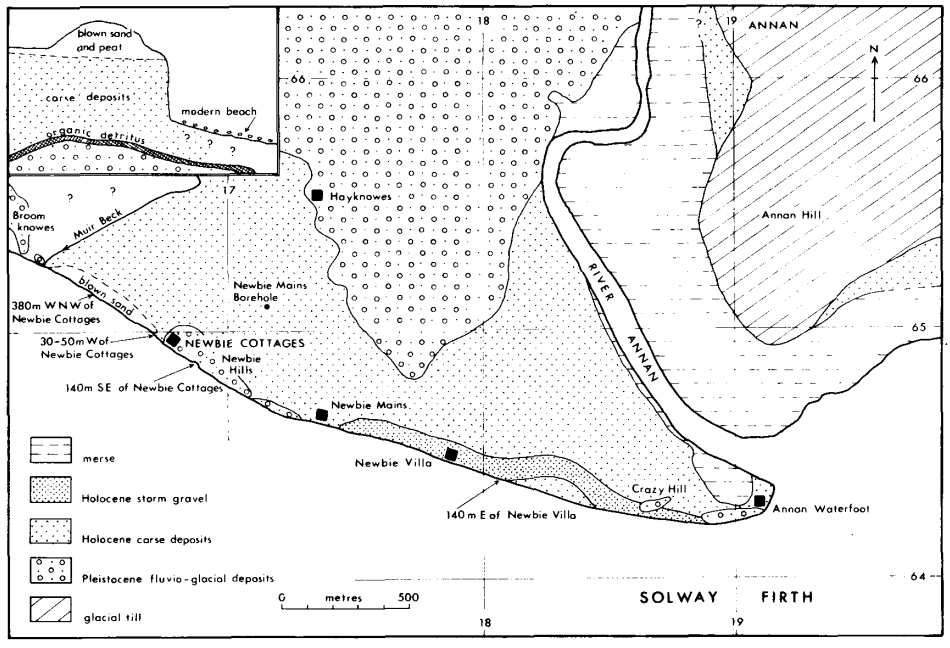


Fig. 3

Map of the Newbie area, south-west of Annan, showing locations mentioned in the text and the distribution of Quaternary deposits exposed at the ground surface. The numbered lines, spaced at 1 km intervals, are those of the Ordnance Survey National Grid. Inset: idealised section, not to scale, showing the probable relationships between modern beach deposits and older Holocene and Pleistocene sediments on the present coast west-north-west of Newbie Cottages.

Annan Waterfoot to Newbie Mains

For much of the 2 km length of (present) coastline between Annan Waterfoot and Newbie Mains a broad, low ridge caps the coastal cliff or forms a rampart a few tens of metres inland (text-fig. 3). From 33 m east of Newbie Villa westwards to near Newbie Mains the ridge comprises up to 2.5 m of horizontally-bedded sands and gravels overlying a variable thickness of carse deposits. The sedimentary succession is best developed 140 m east of Newbie Villa (location NY 18036440) where, from youngest to oldest, the generalised sequence is : stratified sands and gravels, 2.18 m; laminated loamy sands, sandy clay loams and clayey silts, 1.35 m; loamy clay or silty clay with abundant plant debris, 2.54 m; fine sand or sand, with occasional foraminiferal tests and occasional mollusc valves in the lower part, 1.52 m; compact organic detritus, at least 0.05 m.

In detail, the sequence **140 m east of Newbie Villa,** as established in a cliff section and by hand augering, is :

National Grid Reference : NY 18036440

Surface level : 10.65 m A.O.D.

	Thickness
Grey-brown sandy loam (A_2 horizon of podsol)	0.41 m
Orange sand	0.23 m
Orange-grey pebbles and cobbles	1.55 m
Top of carse deposits : 8.46 m A.O.D.	
Grey loamy sand	0.05 m
Dark-grey to black sandy loam with organic debris	0.05 m
Orange sand	0.03 m
Grey-orange loamy sand	0.02 m
Clay loam	0.02 m
Grey-orange loamy sand	0.05 m
Brown-grey sandy clay loam with contemporaneous plant fragments and modern roots and rhizomes. Traces of lamination on weathered surfaces	0.35 m
Brown-grey clayey silt with yellow sand partings (up to 5 mm thick)	0.30 m
Dark-brown clayey silt to silty clay, with occasional thin partings of sand near top, and abundant dark organic debris throughout; vertical (? modern) rhizomes common	0.44 m
Orange-yellow sand	*c.* 5 mm
Dull red-brown loamy clay, becoming sandier with depth, with modern roots and rhizomes. Lamination indistinct except near base, where 5 mm-thick yellow sand layers occur	0.84 m
Grey and yellow-grey silty clay with frequent vertical rhizomes and abundant contemporaneous plant debris along stratification planes. Faintly laminated (laminae 1 mm to 3 mm thick). Flakes of muscovite common	1.27 m
Grey clayey silt to silty clay, with abundant contemporaneous plant debris; flakes of muscovite common	0.43 m
Grey fine sand, coarsening to sand with depth; plant debris common to frequent; flakes of muscovite common; occasional foraminifers near top, common near bottom	1.14 m
Base of carse deposits : 3.05 m A.O.D.	
Brown compact organic detritus	at least 0.05 m

Samples from the following horizons were sieved and examined under the microscope for faunal remains : 6.07 m A.O.D., 4.80 m A.O.D. and 4.35 m A.O.D., no faunal remains observed; 4.02 m A.O.D., occasional foraminifers, rare to occasional spines of echinoids; 3.41 m A.O.D., occasional fragments of molluscan shells, foraminifers occasional to common.

Newbie Mains to Newbie Cottages and **Muir Beck to Powfoot**

At a number of locations on the present coast between Newbie Mains and Newbie Cottages and between Muir Beck and Powfoot carse deposits and younger sediments occupy the remnants of kettle holes that were penetrated by the sea for short periods about the time of the maximum of the Holocene marine transgression. The thickest and best-exposed sequence of Holocene sediments occurs 140 m south-east of Newbie Cottages, at location NY 16866486, where up to 3.5 m of dull-red blown sand, with interbedded layers of dark-brown sand containing charcoal fragments and occasional angular stones, overlie *c.* 1.7 m of carse deposits. The carse deposits are dominantly silts or clayey silts. They rest on a thin layer of organic detritus which in turn covers fluvio-glacial sands and gravels. To the south-east, at location NY 17106472 (*c.* 400 m SE of Newbie Cottages), a much thinner sequence of Holocene sediments rests directly on late-Pleistocene fluvio-glacial deposits. The carse deposits at this second location vary in thickness from a few mm up to a maximum of *c.* 1 m and comprise clays or silty clays. They are overlain by sands through which are shot thin layers of dark-coloured sand with charcoal fragments. Details are given in text-figure 14. A few of the broad, shallow kettle holes occurring between the mouth of Muir Beck (NY 162652) and Powfoot (NY 149657) contain similar sediments. Present shore erosion is rapidly destroying these deposits.

The detailed sequence **140 m south-east of Newbie Cottages** is :

National Grid Reference : NY 16866486

Surface level : c. 11.80 m A.O.D.

	Thickness
Light-brown sandy gravel, disturbed in places	0.61 m
Orange-brown sand with occasional stones and rare, sporadic charcoal fragments	0.66 m
Dark-brown sand with occasional stones and frequent small fragments of charcoal	0.20 m
Dull-red indurated sand with irregular sub-horizontal layers of stones 5 mm to 10 mm in diameter	0.33 m
Orange-brown sand	0.38 m
Dark-brown to black sand with locally-frequent aggregates of angular stones in association with frequent small and occasional large fragments of charcoal. Charcoal dated 3480 ± 110 years B.P., Birm-218, Shotton & Williams 1971, p. 145. (See also Jardine & Morrison 1976, p. 190.) Centre of stratum is at 9.53 m A.O.D.	0.28 m
Dull-red sand	0.20 m
Black sand and charcoal fragments interbedded with dull-red sand and occasional angular stones	0.075 m
Yellow or golden sand	0.20 m
Grey-brown sand with occasional charcoal fragments	0.075 m
Light-brown sand	0.075 m

Yellow sand	0.15 m
Grey-brown sand	0.05 m
Yellow sand with large stones (frequent)	0.23 m
Grey-brown sand with occasional stones and charcoal fragments	0.09 m
Yellow to orange sand	0.45 m
Top of carse deposits : 7.75 m A.O.D.	
Grey-brown fine sandy silt or silty loam, with occasional fragments of dark-brown organic debris	0.10 m
Orange and grey mottled fine sandy loam	0.03 m
Grey silt with occasional orange mottles	0.35 m
Yellow-grey silt	0.30 m
Grey silt with blotches of rusty root or rhizome channels	0.57 m
Grey and rusty-mottled fine sandy silt with frequent fragments of plant debris and impressions of leaves; flakes of muscovite common to frequent	0.33 m
Base of carse deposits : 6.07 m A.O.D.	
Brown organic detritus	0.23 to 0.30 m
Yellow-grey sand	*c.* 0.30 m
Gravel (probably fluvio-glacial in origin)	at least 0.30 m

No faunal remains were observed in samples taken from the carse deposits at 6.87 m A.O.D. and 6.42 m A.O.D.

Newbie Cottages to Muir Beck

Carse deposits, overlain by blown sand interstratified with organic debris, are exposed almost continuously for 525 m in a low cliff bordering the present shore from 30 m west of Newbie Cottages to the mouth of Muir Beck. Augering shows that the thickness of the carse deposits is very variable, especially in the western third of the exposure, ranging from 1.5 m near the extremities to more than 4.5 m at a number of sites where the base has not been reached (text-fig. 4A). The variable thickness probably is the result of deposition of the carse deposits on the irregular surface of a buried ridge or ridges of the esker system whose crests in parts of the surrounding area (as at Newbie Hills, NY 169649) rise to as high as 15 m A.O.D. It should be noted that at every point where the base of the carse deposits is exposed or has been located by augering a bed of compacted organic detritus, commonly 0.1 to 0.3 m thick, intervenes between the underlying late-Pleistocene sand and gravel deposits and the carse deposits (text-fig. 4A).

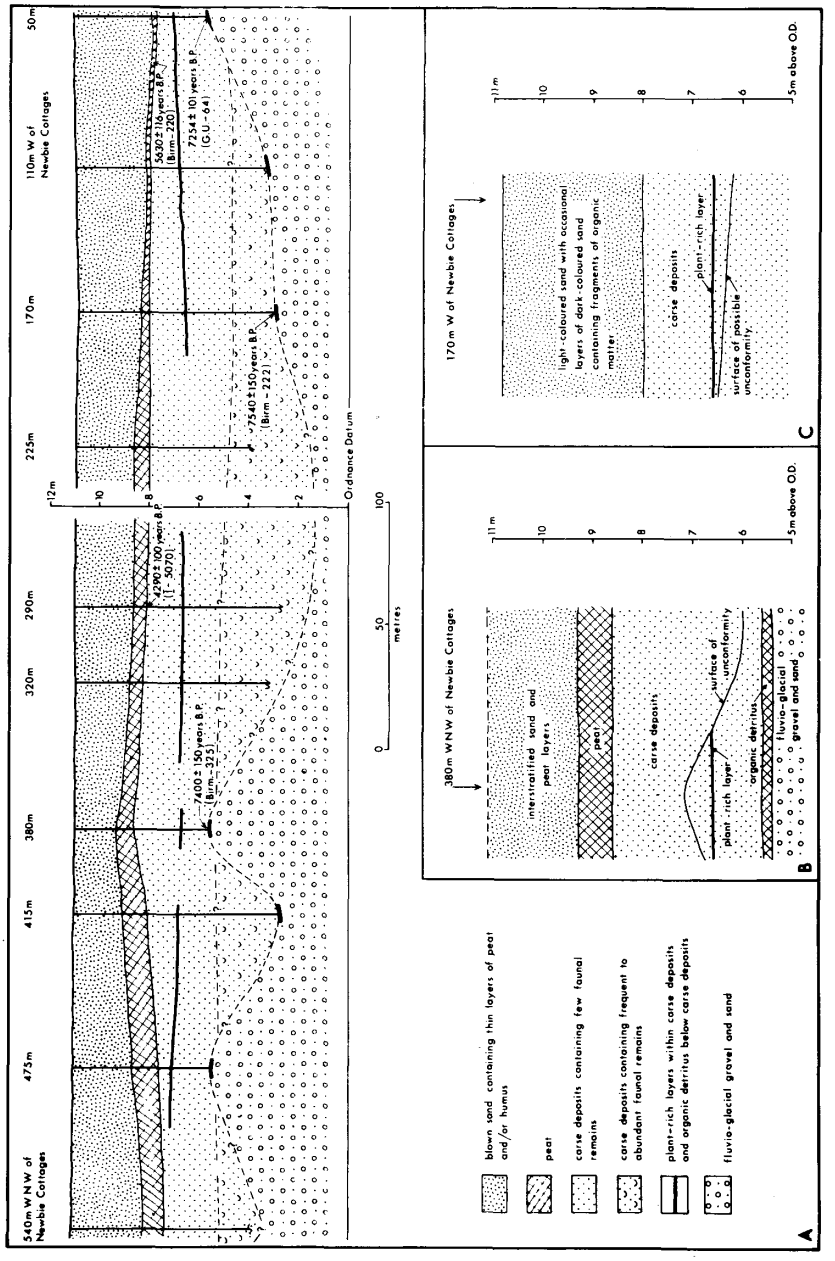


Fig. 4

A. Simplified representation of part of the coastal cliff section to the west-north-west of Newbie Cottages, based on measurements made at, and analysis of samples collected at, the locations represented by the vertical lines. Vertical exaggeration is 10 x. B. Detail of the section exposed in the cliff at 380 m west-north-west of Newbie Cottages. Vertical and horizontal scales are the same. C. Detail of the section exposed in the cliff at 170 m west of Newbie Cottages. Vertical and horizontal scales are the same.

The carse deposits are not uniform throughout their occurrence from Newbie Cottages to the mouth of Muir Beck. In terms of grain size and stratification they comprise two units : a lower, mainly of medium sand and fine sand, which in places shows horizontal lamination; an upper, mainly of silt and clay, which seldom exhibits lamination. At most locations the junction between the two units is gradational and it varies in altitude above a minimum of *c.* 4.80 m A.O.D., being highest near the centre of the cliff section. In faunal content the sediments also comprise two units : a lower, containing tests of foraminifers (common), ostracod valves, echinoid spines and mollusc shell fragments (occasional) and sponge spicules (rare); an upper, in which microscopic examination shows marine faunal remains are present though scarce (occasional tests of foraminifers and rare fragments of echinoid spines and sponge spicules occur; *cf.* Jardine 1975, pp. 183-184). Along most of the length of the cliff section, the altitude of the junction between the faunal units varies between *c.* 4.70 and 5.30 m A.O.D. The more-fossiliferous sediments commonly are of medium- or fine-sand grade while the less-fossiliferous deposits vary in grade from medium sand to clay, but consist mainly of fine grades.

A conspicuous feature within the upper unit is a discontinuous layer in which plant debris is concentrated. The layer varies in altitude (possibly because of differential compaction) between *c.* 6.70 and 7.00 m A.O.D., being highest near the extremities of the exposure. The 75-150 mm-thick stratum can be traced continuously from the margin of the carse deposits near Newbie Cottages westwards to around 190 m WNW of Newbie Cottages. Farther west, towards the margin of the carse deposits at Muir Beck, several breaks in the continuity of the layer occur. The stratum is present, however, between 260 m and 350 m, at 380 m and between 415 m and 500 m WNW of Newbie Cottages (text-fig. 4 and Pl. 1a and 1b). The significance of this bed and other, less prominent, organic-rich layers in relation to coastal changes and marine transgression and regression is discussed below (pp. 50 to 51).

Between Newbie Cottages and the mouth of Muir Beck the carse deposits are overlain by a variable thickness (up to 3.5 m) of blown-sand deposits interstratified with plant debris. No simple pattern has been observed in the arrangement of the inter-bedded organic-rich layers and blown sand. Thirty metres west of Newbie Cottages some of the sand layers contain angular stones and small fragments of charcoal that may have been introduced by human agency (*cf.* detailed profile at location NY 16866486, 140 m south-east of Newbie Cottages, pp. 13-14).

The above generalised account of the Holocene deposits occurring between Newbie Cottages and Muir Beck is based on study of the 525 m-long cliff exposure and examination of samples obtained by digging and augering at a number of points along the length of the exposure. The sedimentary succession is summarised in text-figure 4. Details of the succession at three representative sites are given below (see also text-fig. 12C and Pl. 1). The reference point from which distances are given is the Ordnance Survey bench mark located at the southern corner of Newbie Cottages (NY 16776496).

Thirty metres west of Newbie Cottages, near the feather edge of the carse deposits against late-Pleistocene fluvio-glacial sediments, the following section is exposed :

National Grid Reference : NY 16716497

Surface level : c. 8.00 m A.O.D. (estimated altitude; not measured instrumentally)

	Thickness
Made ground	0.23 m
Grey-brown sand (rounded grains)	0.45 m
Thin dark layer in sand	0.005 m
Grey to orange sand	0.17 m
Thin dark layer in sand	0.005 m
Grey-orange sand	0.025 m
Dark-brown sand; weathers to thin laminae of carbonaceous matter	0.10 m
Dried-out peat	0.13 to 0.18 m
Grey-brown sand with numerous stones, both rounded and angular (up to 100 mm in diam.), and small fragments of charcoal	0.25 m
Black sand bands with intervening grey bands	0.25 m
Grey-brown sand with modern plant rhizomes	0.10 m
Dull-brown sand with numerous angular stones and small charcoal fragments (especially in upper half)	variable : up to 0.30 m
Grey-brown sand (single grains)	0.15 m
Thin carbonaceous sand layer	0.025 m
Grey sandy clay loam : *lateral equivalent of top part of carse deposits*	0.18 m
Thin carbonaceous sand layer	0.025 m
Light-brown sand : *top part of late-Pleistocene fluvio-glacial deposits*	at least 0.30 m

Westwards the carse deposits thicken rapidly, and the (generalised) sequence of these sediments at **50 to 70 m west of Newbie Cottages** is :

National Grid Reference : NY 167649

Surface level : 11.13 m A.O.D.

	Thickness
Pink-brown wind-blown sand with at least seven inter-stratified layers of dark-brown to black organic matter	3.07 m
Brown peat. 82 m west of Newbie Cottages this layer of peat contains tree stumps *in situ* (see Pl. 1a). Wood (probably allochthonous) from the lower half of this layer, at 66 m W of Newbie Cottages, was dated 5630 ± 116 years B.P. (Birm-220, Shotton & Williams 1971, p. 145)	0.28 m
Top surface of carse deposits : 7.78 m A.O.D.	
Grey clayey silt with abundant remains of plant debris (giving laminated, flaky appearance). Penetrated by numerous modern roots and rhizomes, which on decomposition give a sulphur-yellow colour	0.70 m

Dark-brown layer of fine sandy silt with abundant remains of plant debris. Grades into overlying and underlying deposits, but distinguishable as a distinct layer from 30 m W of Newbie Cottages to vicinity of 170 m W of Newbie Cottages	0.20 m
Grey silty fine sand with abundant remains of plant debris. Penetrated by numerous modern roots and rhizomes	0.65 m
Discontinuous but distinct layer of plant debris and grey fine sandy silt	0.10 m
Grey finely-laminated silty fine sand with abundant remains of plant debris	0.34 m
Base of carse deposits : 5.79 m A.O.D.	
Dark-brown to black organic detritus. Sample from top 50 mm of this layer at 50 m W of Newbie Cottages was dated 7254 ± 101 years B.P. (GU-64, Baxter *et al.* 1969, pp. 50-51)	variable : up to 0.125 m
Pink-brown sand (A2 horizon of buried podsolic soil profile)	0.20 m
Orange-brown gravel	at least 0.30 m

No faunal remains were observed in samples from *c.* 7.00 m A.O.D., 6.60 m A.O.D. and 6.20 m A.O.D. in an exposure located 50 m west of Newbie Cottages.

The sedimentary succession **170 m west of Newbie Cottages** is :

National Grid Reference : NY 166650

Surface level : 10.84 m A.O.D.

	Thickness
Disturbed ground	*c.* 1.00 m
Thin layer of sand containing organic matter	0.01 m
Pink-brown quartz sand with occasional traces of (diffuse) organic matter and numerous modern rootlets	0.25 m
Dark-brown sand with abundant organic matter	0.03 m
Dark-orange-brown sand with occasional poorly-developed oxidised root channels	0.25 m
Thin layer of dark-brown to black sand containing organic matter	0.01 m
Light-grey sand (spherical grains) with numerous vertical (modern) roots and occasional thin and poorly-developed oxidised root channels	0.36 m
Dark-brown sand containing organic matter	0.01 to 0.03 m
Pink-white sand (spherical or sub-spherical grains)	0.19 m
Undulating interface	
Dark-brown to black sand containing organic matter. Varies in thickness from 40 mm to 150 mm. Thicker part contains rounded stones fractured to give flat faces	*c.* 0.10 m
Grey-orange-brown sand with diffuse humus staining	0.35 m

Indistinct interface	
Sand with dark-brown streaks of organic matter	0.05 m
Brown organic detritus with thin lenses of sand	0.10 m
Brown fine sand to sand with abundant organic matter	0.13 m
Top surface of carse deposits : 8.01 m A.O.D.	
Grey fine sandy silt with faint traces of lamination. Fragments of contemporaneous organic matter are present, but the grey-yellow colour present in places is caused by decomposition of modern roots and rhizomes	1.10 m
Brown-grey silty clay with abundant remains of plant debris. Grades into overlying and underlying deposits, but distinguishable as distinct layer from 30 m W of Newbie Cottages westwards as far as this location	0.15 m
Grey (silty) fine sand with faint traces of lamination. Some contemporaneous plant debris present. Numerous modern roots and rhizomes penetrate the deposit	0.83 m
Grey fine sand or silty fine sand with small flakes of muscovite and remains of plant debris (occasional to common), rare to occasional tests of foraminifers and rare valves of ostracods, spines of echinoids and spicules of sponges	2.98 m
Base of carse deposits : 2.95 m A.O.D.	
Brown organic detritus. A sample from the top 100 mm of this layer was dated 7540 ± 150 years B.P. (Birm-222, Shotton & Williams 1971, p. 145)	at least 0.18 m

Samples from the following horizons were sieved and examined under the microscope for faunal remains : 7.23 m A.O.D., 6.77 m A.O.D., 6.16 m A.O.D., 5.68 m A.O.D., 5.42 m A.O.D., no faunal remains observed; 4.86 m A.O.D., foraminifers present but rare; 4.53 m A.O.D., rare to occasional foraminifers; 3.95 m A.O.D., occasional foraminifers, rare spines of echinoids, rare sponge spicules; 3.24 m A.O.D., foraminifers present (occasional to common), rare to occasional spines of echinoids, rare to occasional small fragments of molluscan shells; 3.05 m A.O.D., rare foraminifers, rare spines of echinoids.

To the east of the cliff exposure described above, the carse deposits occupy a wide hollow between the esker ridges in the vicinity of Newbie Cottages and a broad expanse of fluvio-glacial sands and gravels in the vicinity of Hayknowes (NY 173655) (text-fig. 3). A borehole (Newbie Mains Borehole) sunk near the centre of the hollow penetrated 5.79 m of carse deposits before being abandoned without reaching the base of these sediments.

The sequence in **Newbie Mains Borehole** was :

National Grid Reference : NY 17146510

Surface level : **8.99 m A.O.D.**

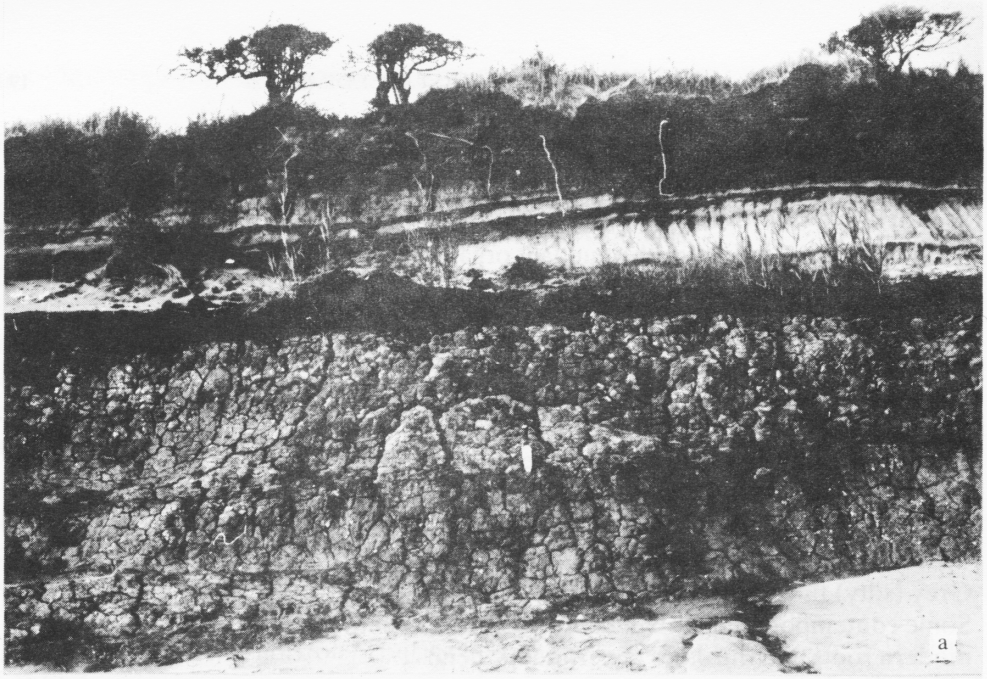
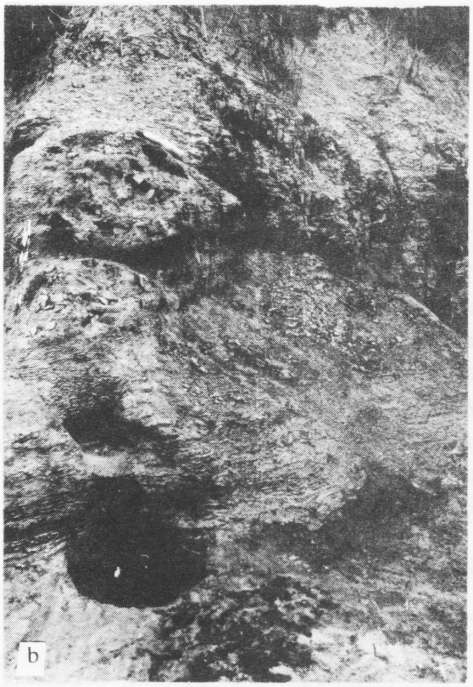


Plate 1a : Exposure of upper part of carse deposits and overlying layers of peat and wind-blown sand in the coastal cliff *c.* 82 m west of Newbie Cottages. The polygonal dehydration cracks developed in the carse deposits are clearly seen, as is the thin but persistent layer of plant debris within the inorganic deposits (indicated by the trowel). A tree stump *in situ* within the peat layer overlying the carse deposits may be seen near the centre of the photograph. The modern beach is seen in the foreground.



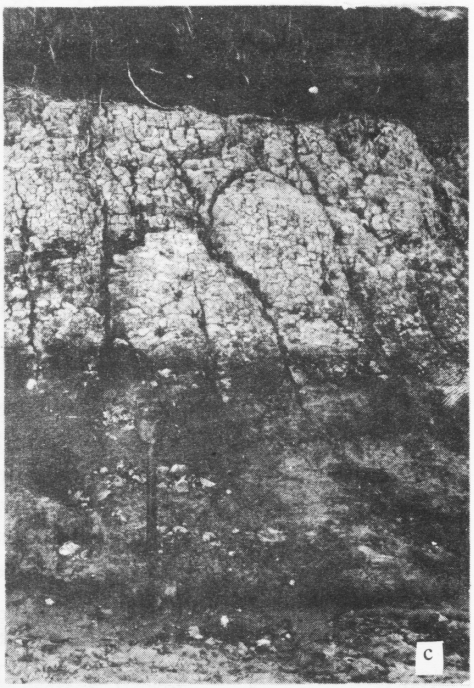


Plate 1b : Exposure of carse deposits and underlying layer of organic detritus in the coastal cliff *c.* 380 m west-north-west of Newbie Cottages. The surface of unconformity within the carse deposits slopes downwards from the trowel to the blade of the spade. In the small pit on the left of the photograph, the tape measure is located at the junction of the carse deposits and underlying layer of organic detritus (*cf.* text-figs. 4A and 4B). Plate 1c : Exposure of carse deposits in the coastal cliff *c.* 170 m west of Newbie Cottages, showing the thin but persistent layer of plant debris within the carse deposits (best seen above and left of the handle of the spade) and faint traces of lamination in the lower part of the exposure.

	Thickness
Topsoil	0.23 m
Brown-grey and orange mottled fine sand with rare echinoid spines and very rare sponge spicules	1.14 m
Grey silty clay with rare to occasional echinoid spines	3.05 m
Interface of strata : 4.57 m A.O.D.	
Brown organic detritus, dated 7812 ± 131 years B.P. (GU-375, Ergin *et al.* 1972, p. 325)	0.10 m
Brown sand with abundant plant debris	0.05 m
Grey sand with frequent to abundant plant debris, frequent to abundant flakes of muscovite, occasional small molluscan shell fragments and frequent to abundant tests of foraminifers	at least 1.22 m
Base of borehole : 3.20 m A.O.D.	

Samples from the following horizons were sieved and examined under the microscope for faunal remains : 7.62 m A.O.D., rare sponge spicules; 6.25 m A.O.D., no faunal remains observed; 4.12 m A.O.D., tests of foraminifers occasional to common, occasional echinoid spines; 3.96 m A.O.D., occasional small fragments of molluscan shells, foraminifers frequent to abundant; 3.66 m A.O.D., occasional small fragments of molluscan shells, foraminifers frequent to abundant, occasional echinoid spines.

The sedimentary environment

Along the entire length of cliff-exposure of carse deposits between Newbie Cottages and Muir Beck the sediments bear almost no visible signs of interruption in deposition. An exceptional situation occurs, however, at a small projection from the main cliff 380 m WNW of Newbie Cottages (at NY 16436516) where a surface of unconformity is to be seen within the carse deposits (text-fig. 4B and Pl. 1b). In summary, beneath the surface of unconformity laminated sands and fine sands up to 1.35 m in thickness overlie 0.20 m of silty clay which in turn overlies, at 5.60 m A.O.D., a thin layer of compacted organic detritus dated 7400 ± 150 years B.P. (Birm-325, Shotton & Williams 1973b, p. 455). The organic detritus rests on indurated gravel, presumed to be a late-Pleistocene fluvio-glacial deposit.

The sediments below the unconformity contain only rare remains of marine fauna. This is not surprising, because the deposits occur at altitudes higher than 5.60 m A.O.D. and, therefore, although well-laminated, they probably belong to the upper of the two sedimentary (and faunal) units that may be distinguished in the carse deposits exposed in the cliff section west of Newbie Cottages (p. 16). Evidence in support of this suggestion is the presence in the profile at 380 m WNW of Newbie Cottages of a thin organic-rich layer within the deposits (below the unconformity) at *c.* 6.60 m A.O.D. Such an altitude corresponds with that of the conspicuous, though discontinuous, layer of plant debris that occurs within the upper sedimentary unit over long stretches of the cliff section (p. 16). It may be concluded that the unconformity detectable at 380 m WNW of Newbie Cottages occurs within the upper

sedimentary unit, i.e. the interruption in sedimentation represented by the surface of unconformity at this location occurred during a late phase of the accumulation of the carse deposits.

The surface of unconformity descends to the north and to the ESE from a maximum at 7.15 m A.O.D. to *c.* 6.00 m A.O.D. in a distance of *c.* 2.50 m, flattening beyond this in the cliff section to continue parallel to the horizontal stratification developed in the overlying and underlying sediments. Where the surface of unconformity is horizontal or almost so, it is virtually undetectable in the vertical cliff section and would be equally so in (vertical) auger holes. It is possible, therefore, that the same unconformity or other unconformities occur at a number of locations along the length of the cliff section.

Some evidence in support of this suggestion occurs a few metres to the west of the section at 170 m west of Newbie Cottages (pp. 18-19), where faint traces of a gently-dipping surface occur within the carse deposits. As seen in text-figure 4C, this possible unconformity occurs below the thin organic-rich layer that extends westwards from the eastern margin of the cliff to *c.* 190 m west of Newbie Cottages (p. 16). Samples from below the possible unconformity in the carse deposits were taken at levels of *c.* 6.31 m A.O.D., 6.11 m A.O.D., 5.91 m A.O.D.,5.71 m A.O.D. and 5.51 m A.O.D. A few sponge spicules were obtained from each sample, but no other faunal remains were observed when the samples were examined under the microscope. No traces of sponge spicules were found in the carse deposits above the gently-dipping surface. This evidence is inconclusive; the possible unconformity may occur within the upper of the two sedimentary units of the carse deposits or it may constitute the boundary between the upper and lower units at this location.

The presence of an unconformity or unconformities within the carse deposits between Newbie Cottages and Muir Beck raises questions concerning some aspects of the sedimentary environment of this area :

1. Do the unconformities represent exceptional conditions that are not in operation at present in the eastern part of the Solway Firth?
2. Do the unconformities represent short or long intervals of interruption in sedimentation?
3. Were the unconformities produced by local events such as movement in the position of a tidal channel and its tributary gullies in the contemporaneous Solway Firth, or by regional events such as adjustments in land level (e.g. as the result of isostatic rebound or hydro-isostatic loading), or by global events such as changes in ocean level? (Combinations of local, regional and global events are possibilities also.)

In attempting to answer these questions, tidal range in the vicinity of Newbie Cottages must be considered. Tidal range during the period of accumulation of the carse deposits is not known precisely. In a previous publication, however, on the basis of present tidal range and tidal behaviour in the vicinity of Newbie Cottages, it was suggested that the difference between mean high level of spring tides and mean sea level during the relevant period was 5.0 m at the locations concerned, and spring tidal range perhaps was *c.* 7.0 m (Jardine 1975, pp. 188-191; see also above, pp. 5-6 and text-fig. 2).

In the Solway Firth adjacent to Newbie Cottages, present conditions produce what may be regarded as 'conditions of unconformity' each time the ebbing tidal waters recede from the tidal-flats for a period of a few hours before returning to submerge the flats in the succeeding flood tide. The altitudinal range of the sediments uncovered and submerged in the course of a semi-diurnal spring tidal interval at present is *c.* 7.0 m, markedly greater than the 1.5 m difference in altitude between the highest part and the lowest part of the remnant of carse deposits preserved below the surface of unconformity at 380 m WNW of Newbie Cottages. It is suggested, therefore, that the unconformities detectable within the carse deposits between Newbie Cottages and Muir Beck were caused by conditions similar to those that are in operation at present in the eastern area of the Solway Firth, and the unconformities do not represent long intervals of interruption in sedimentation (although it is improbable that the unconformable relationship between the two sedimentary units at 380 m WNW of Newbie Cottages was produced in the course of a single semi-diurnal tidal interval).

Further, it is suggested that the unconformities were produced by local events rather than by regional or global events. The environment of deposition of the carse deposits in the vicinity of Newbie Cottages, as in many of the other areas of carse deposits preserved along the northern seaboard of the eastern Solway Firth, probably resembled closely the environment of deposition of the present tidal-flat sediments in the eastern Solway Firth. The tidal flats of the present sediments are interrupted in places by narrow, sinuous gullies which change their position with time. It is reasonable to suppose that similar conditions existed during accumulation of the carse deposits at Newbie Cottages. Similarly, it is reasonable to expect that remnants of gullies will be preserved occasionally in the carse deposits. The surface of unconformity observable at the location 380 m WNW of Newbie Cottages is believed to be evidence of the presence of a gully within the carse deposits, the small remnant of carse deposits below the unconformity being part of the side of a gully that was present in the carse deposits at the time of their accumulation.

Other aspects of the Holocene sedimentary environment in the coastal area between Annan and Powfoot require to be considered. As seen in exposures and as demonstrated by borehole data, the floor of the area of deposition was variable in altitude but, where the floor is exposed naturally or has been penetrated by exploratory boreholes and auger holes, commonly a layer of compacted organic detritus overlies the surface of (presumed) late-Pleistocene fluvio-glacial sand and gravel deposits that was inundated by the Holocene sea (p. 14). Also, at a number of locations along the length of the cliff sections between Annan Waterfoot and the mouth of Muir Beck the layer of sub-carse organic detritus is underlain by the A_2 and B_2 horizons of a podsolic soil profile developed in the fluvio-glacial sands and gravels. The presence of these horizons, developed in conditions of free drainage, suggests that the water table, and therefore H.W.M.O.S.T., lay at least one or two metres below the surface of the pre-Holocene deposits at the time of formation of the organic detritus. It may be concluded that most, possibly all, of the surface of this area that was covered by the sea during the main Holocene marine transgression had been a land surface for many hundreds of years prior to the marine transgression.

The environment of accumulation of the carse deposits probably was a shallow basin lying to the west, south and east of a shore located along a promontory of fluvio-glacial deposits on which the farmstead of Hayknowes is sited now (text-fig. 3), and connected with the main area of the contemporaneous Solway Firth through gaps in the complex esker ridge that underlies the present coastal zone from near the mouth of Muir Beck by Newbie Cottages to Annan Waterfoot. The summits of nodes on the esker ridge formed a chain of islands, some permanent, others temporary. The presence of thin, discontinuous layers of plant debris within the carse deposits at the majority of locations where these sediments are exposed or were penetrated by boreholes and auger holes (e.g. at Newbie Mains borehole) testifies to the shallow nature of the basin to the north of, and along the length of, the chain of islands. It may be inferred that temporary interruptions in marine sedimentation were produced by minor changes in the configuration of the basin or by changes in the positions of the tidal streams in the contemporaneous Solway Firth.

Interesting contrasts in conditions of sedimentation in several parts of the coastal zone between Annan and Powfoot occurred during the period towards the end of, or immediately after, the main Holocene marine transgression. Between Newbie Cottages and the mouth of Muir Beck the carse deposits are overlain by a sequence of wind-blown sand deposits (in which traces of former land surfaces appear in places) interstratified with layers of peat (pp. 17-19). Similarly, in isolated hollows between Newbie Cottages and Newbie Mains farmstead carse deposits are overlain by sand deposits in which former land surfaces are present (but no peat is interstratified with the blown sand). In contrast, between Newbie Mains farmstead and Newbie Villa, and to the east of Newbie Villa as far as Annan Waterfoot, the carse deposits are overlain, at a few locations only, by a thin layer of organic matter, being covered directly at most places by a thick layer of boulders, cobbles and pebbles that constitutes a gravel bar (p. 11).

Only limited information is available, as yet, concerning the ages of the interstratified layers of peat and wind-blown sand that occur above the carse deposits WNW of Newbie Cottages : the basal 70 mm of a peat layer immediately above the carse deposits at a location 290 m west of Newbie Cottages was dated 4290 ± 100 years B.P., (I-5070); a fragment of wood in the lower part of a peat layer immediately above the carse deposits at a location 66 m west of Newbie Cottages was dated 5630 ± 116 years B.P. (Birm-220) (but see Jardine 1975, p. 184, concerning the relative reliability of these radiocarbon age determinations). Similarly, information concerning the chronology of the post-carse wind-blown sand deposits, which include several former land surfaces, ESE of Newbie Cottages is minimal; charcoal in one of the surfaces near the middle of the sequence at a location 140 m south-east of Newbie Cottages was dated 3480 ± 110 years B.P. (Birm-218). No radiometric information is available concerning the age of the gravel ridge that extends between Newbie Mains farmstead and Annan Waterfoot. Stratigraphically all three groups of deposits occur immediately above the carse deposits, and in terms of the altitude of the base of each group there is no significant difference. Such evidence does not necessarily imply that all three groups of post-carse deposits are precisely contemporaneous : cessation of accumulation of the carse deposits may have been followed by a pause in sedi-

mentation before accumulation of the overlying peat deposits commenced; at those locations east of Newbie Villa where no organic matter intervenes between the carse deposits and the overlying gravel deposits, the gravel may rest disconformably on the carse deposits (implying at least a short period of interruption in sedimentation). It is probable, however, that any extraordinary events experienced at one part of the coast would affect other parts also. It is interesting, therefore, to find that apparently towards the end of, or shortly after the culmination of, the main Holocene marine transgression (and certainly before relative mean sea level along this part of the coast had fallen to near present mean sea level), a number of storms built the gravel ridge that occurs now between Newbie Mains farmstead and Annan Waterfoot whilst, penecontemporaneously, the effect of intermittent storm winds in the area to the WNW of Newbie Cottages was to deposit a line of low coastal sand dunes that interrupted the conditions of peat formation that existed normally there at that time. Contemporaneously, also, perhaps the effect of storm winds in the (former kettle-hole) hollows between Newbie Cottages and Newbie Mains farmstead was to deposit sand on the land surfaces that developed in periods of quieter aeolian conditions. It is interesting to reflect that the storm conditions being considered probably occurred at times when early human occupation of the area in the vicinity of Newbie Cottages and in the hollows to the south-east of Newbie Cottages was in operation; some of the wind-blown sand layers near Newbie Cottages contain small charcoal fragments in association with angular stones (p. 17), and similar traces of human occupation occur 140 m and *c.* 400 m south-east of Newbie Cottages (p. 13) (*cf.* Jardine & Morrison 1976, pp. 189-190).

(c) The Lochar Gulf

The sediments ·

Much of the large tract of Holocene raised coastal sediments (carse deposits) occurring between Cummertrees in the east and Caerlaverock Castle in the west, and extending northwards on either side of the Lochar Water to the vicinity of Locharbriggs (text-fig. 5), is covered by thick peat deposits. As a result, natural exposures of the carse deposits are few, being confined almost entirely to occasional cut-off slopes of the meandering, slow-flowing Lochar Water or to the low scarp which, extending from the vicinity of Caerlaverock Castle eastwards to Salcot Hills (NY 052652), forms the abandoned shoreline of the late-Holocene sea (see section VIb, below). At the time of the main Holocene marine transgression, the area concerned constituted a large gulf with adjacent narrow inlets at its northern extremity, the inlet in which the upper reaches of Lochar Water are now sited being by far the largest extension of the gulf.

At the south-eastern extremity of the embayment, between Riddindyke (NY 134653) near Cummertrees and Brow Well (NY 084675) near the mouth of Lochar Water, much of the surface of the raised coastal sediments is covered by three to four metres of peat which constitutes Priestside Flow. In the south, however, where the ground is cultivated, only a thin surface layer of organic deposits occurs. A borehole

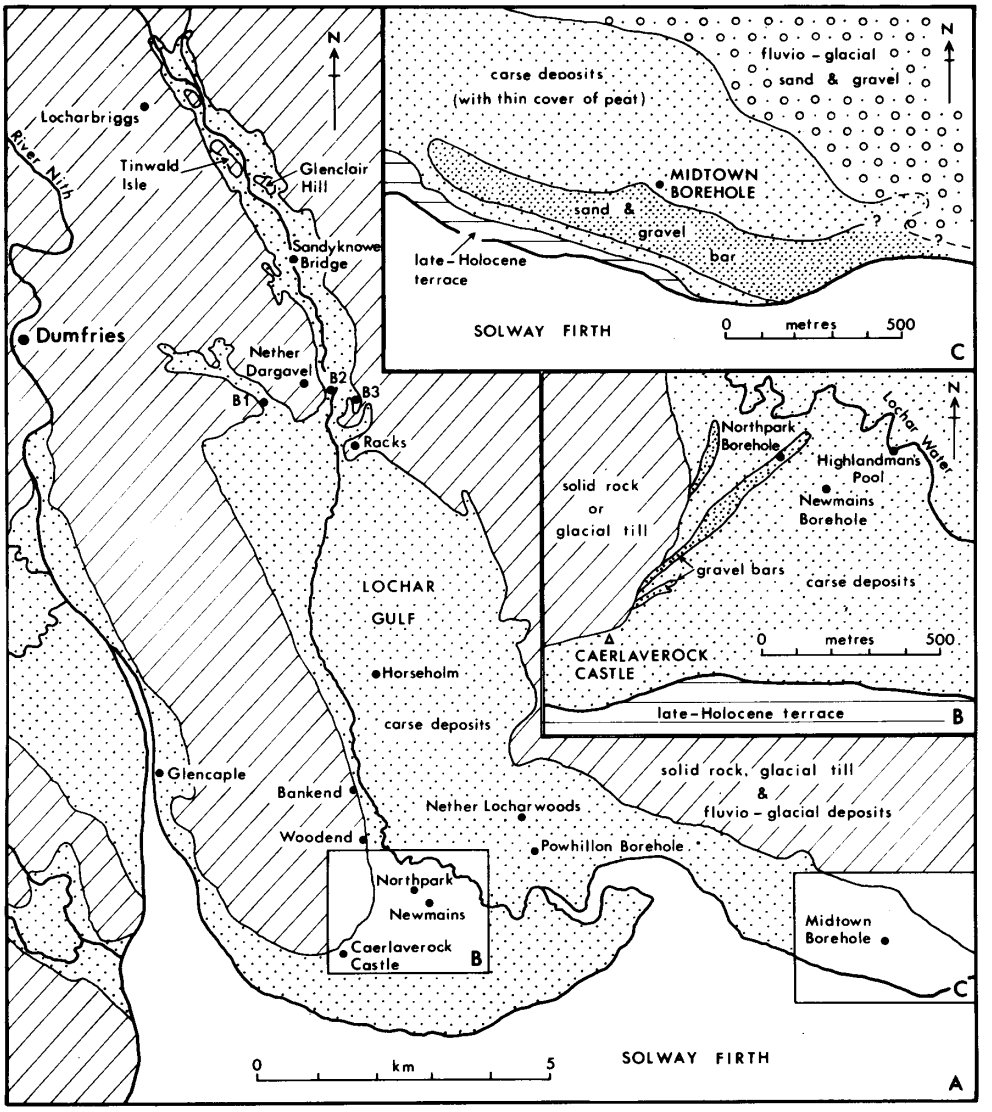


Fig. 5

A. Map of the former Lochar Gulf and its environs, showing the locations of sites mentioned in the text, including the sites of boreholes B1, B2 and B3 drilled by George Nicholson & Co. Ltd. B. Detail of Holocene surface deposits in the vicinity of Caerlaverock Castle, and location of the river-bank exposure at Highlandman's Pool, mentioned in the text. C. Detail of surface deposits in the vicinity of the borehole at Midtown.

sunk at location NY 11896577 on **Midtown** farm (text-fig. 5) gave what is believed to be a representative profile through the raised coastal deposits of this area. In summary, the inorganic sediments comprise 0.78 m of grey silty clay on 2.45 m of grey silty fine sand or sand, which in turn rests, at 5.40 m A.O.D., on red stony sand, glacial or fluvio-glacial in origin (text-fig. 6). No remains of marine micro-fauna were found in sieved samples of the deposits.

The carse deposits at Midtown are not typical of the sediments of the former Lochar Gulf, probably because the Midtown site is located behind a large gravel bar near the south-eastern edge of the gulf, where the full thickness of the Holocene marine deposits was not developed. In the centre of the embayment the Holocene sediments consist largely of sands, occasionally of fine sands and silts, in which fragments of shells of molluscs are common and tests of foraminifers are common or, in places, abundant. Valves of marine ostracods, spines of echinoids and spicules of sponges also occur in the deposits, their frequency varying from one location to another.

Little is known of the nature and form of the basal surface of the marine sands that occur in the central area of the gulf because no boreholes have penetrated this surface; the lowest depths reached by boreholes sunk in running sand were 1.76 m A.O.D. (Powhillon, NY 057675), 1.42 m A.O.D. (Newmains, NY 040666) and 1.04 m A.O.D. (Horseholm, NY 031706). Limited information is available, however, concerning the basal surface near the northern edge of the main area of the gulf. On the edge of **Racks Moss** at NY 040732 and NY 041731, Nichols (1967, p. 155) recorded 0.25 to 0.59 m of oxidised fen peat underlying relatively-thin developments of carse silt and clay deposits at *c.* 5.5 to 5.8 m A.O.D. Similarly, in three boreholes sunk in 1971 by George Nicholson & Co. (Mineral Borers) Ltd., Bathgate, at locations NY 012751 (B1), NY 024753 (B2), and NY 026751 (B3) sited in inlets adjacent to the gulf, thicknesses of 1.01 m, 0.65 m and 0.83 m of buried peat were recorded. The basal surface of the carse deposits at these sites occurred (respectively) at 5.61 m, 3.79 m and 6.27 m A.O.D. (text-figs. 5 and 6).

Additional data from two boreholes sunk (by Geotechnical and Concrete Services Ltd., Sheffield) within a distance of 12 m of each other at **Sandyknowe Bridge** (NY 017776) show that in the central part of the long inlet between Racks and Locharbriggs the marine carse sediments were laid down directly on fluvio-glacial sand and gravel deposits, the surface of which occurs at 0.55 m B.O.D. to 0.58 m A.O.D. No basal organic layer intervened between the late-Pleistocene deposits and the Holocene marine sediments at this site. In one of the boreholes, however, a few wood fragments were found near the junction of the two inorganic sedimentary units.

As mentioned above, much of the area of the former Lochar Gulf is covered now by a thick layer of peat. Despite this, the form of the top surface of the carse deposits that accumulated in the gulf is fairly accurately known. Unpublished contour maps of the sub-peat surfaces of Craigs Moss, Racks Moss, Ironhirst Moss and Longbridge Moor, based on borings by the Department of Agriculture and Fisheries for Scotland and the Macaulay Institute for Soil Research (*cf.* Nichols 1967, fig. 4),

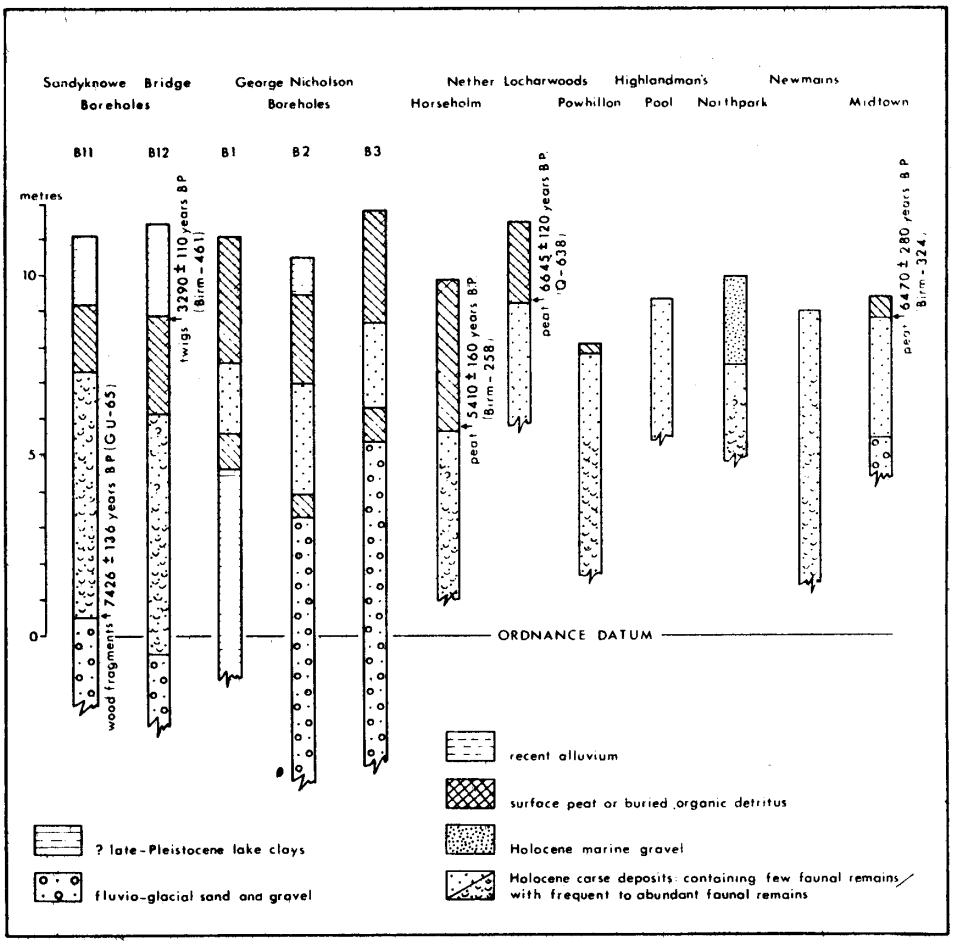


Fig. 6

Simplified sections of the sedimentary successions at the river-bank exposure at Highlandman's Pool and 11 other sites within the former Lochar Gulf and the adjoining inlets where mechanical boreholes or hand-auger holes were drilled. The locations of the sites are shown in text-figure 5.

indicate that over much of the area the top of the carse deposits is an undulating surface ranging in altitude from *c.* 6 m to 10 m A.O.D. (text-figs. 7A and 7B). Also, the altitudes of about forty widely-distributed spot heights on large-scale Ordnance Survey maps at locations where carse deposits are known to constitute the present ground surface, together with the surveyed altitudes of several tens of points on the top surface of the carse deposits, range from 7.30 m to 9.75 m A.O.D. Such information suggests that the form of the top surface of the carse deposits in the gulf is similar in those parts not overlain now by thick peat deposits and in those parts where a thick peat cover now exists. The significance of the irregular form of the surface is discussed below (p. 31).

The uppermost inorganic sediments of the area of the gulf are not everywhere carse deposits of sand or finer grade. Near the south-western and south-eastern edges of the gulf occur ridges of gravel that represent spit-like structures that projected from the adjacent coasts during a late phase of the occupation of the gulf by the Holocene transgressive sea (text-fig. 5). The thickness of the large gravel ridge located near the south-eastern extremity of the gulf is not known, and it is possible that this ridge represents late-Pleistocene sand and gravel debris re-distributed only in minor degree by the sea in mid-Holocene times, the deposits being derived from adjacent fluvio-glacial material. The thicknesses of the two small ridges at the south-western extremity of the former gulf also are unknown, but it is probable that they are comparable with or less than that of the adjacent large gravel ridge that extends from near Caerlaverock Castle north-eastwards to beyond Northpark (NY 037668). A borehole sunk at **Northpark** established that this ridge consists of *c.* 2.5 m of gravel (and sand) underlain by carse deposits in which small fragments of shells of molluscs together with micro-fauna occur (text-fig. 6). The maximum thickness of this gravel ridge probably is developed south-west of the site of the borehole.

Five boreholes sunk within the central area of the Lochar Gulf provide detailed information about the nature of the sediments that accumulated in the gulf in the course of the main Holocene marine transgression. In addition, analysis of samples from two boreholes sunk at Sandyknowe Bridge shows that conditions within the long inlet between Racks and Locharbriggs were fully marine throughout the time of accumulation of the carse deposits in the inlet. Details of the sedimentary successions in boreholes sunk at Newmains and Horseholm are given below; they are believed to be representative of the carse deposits of the main area of the gulf. Summaries of the sedimentary sequences at Northpark (NY 03726685), Highlandman's Pool (NY 04476692), Powhillon (NY 05726750), Sandyknowe Bridge (B11 and B12, NY 017776) and in an auger hole sunk by the late Professor W. W. Bishop at Nether Locharwoods (NY 056680) are given in text-figure 6.

A 150 mm-diameter borehole sunk at **Newmains,** together with a subsidiary hole drilled with a hand auger through the top 3.50 m of carse deposits at a point *c.* 20 m to the south-west of the borehole, provided the following information :

National Grid Reference : NY 040666

Surface level : c. 9.02 m A.O.D.

	Thickness
Grey-brown silty fine sand with small flakes of muscovite (abundant) and small fragments of plant debris (common to abundant). Frequent to abundant small fragments of black (?) charcoal also are present. Occasional orange-brown fragments of abandoned root channels are present	*c.* 1.22 m
Grey (silty) fine sand with abundant small flakes of muscovite, occasional to abundant small fragments of plant debris and frequent to abundant small fragments of black (?) charcoal. Rare spines of echinoids are present in upper part, foraminifers common to abundant, ostracods	*c.* 2.03 m

common, occasional fragments of molluscan shells and spines of echinoids common to frequent in lower part	
Grey, becoming golden-brown with depth, fine sand with abundant small flakes of muscovite, abundant fragments of plant debris, abundant small fragments of black (?) charcoal, small fragments of molluscan shell fragments common to abundant, abundant tests of foraminifers, ostracod valves occasional to common especially in upper part, spines of echinoids common to frequent	at least 4.25 m

Samples from the following horizons were sieved and examined under the microscope for faunal remains : 8.82 m A.O.D., rare spines of echinoids; 8.42 m A.O.D. and 7.56 m A.O.D., no faunal remains observed; 7.25 m A.O.D., occasional small fragments of molluscan shells, rare spines of echinoids; 6.69 m A.O.D., foraminifers common to frequent; 6.16 m A.O.D., foraminifers abundant, ostracods common, occasional fragments of molluscan shells, spines of echinoids common to frequent; 5.82 m A.O.D., foraminifers abundant, ostracods frequent, spines of echinoids common; 5.14 m A.O.D., foraminifers abundant, ostracods frequent to abundant, spines of echinoids abundant; 4.90 m A.O.D., foraminifers frequent to abundant, occasional ostracods, spines of echinoids abundant; 4.45 m A.O.D., abundant small fragments of molluscan shells, frequent to abundant foraminifers, occasional ostracods, frequent to abundant spines of echinoids; 3.61 m A.O.D.,abundant whole bivalve shells and fragments of molluscan shells, occasional foraminifers, rare to occasional spines of echinoids; 3.08 m A.O.D., abundant whole bivalve shells and fragments of molluscan shells, occasional foraminifers, occasional spines of echinoids; 2.85 m A.O.D., abundant fragments of molluscan shells, occasional foraminifers, occasional ostracods, occasional spines of echinoids; 1.55 m A.O.D., frequent fragments of molluscan shells, occasional foraminifers, rare spines of echinoids.

Four kilometres north of the site at Newmains, a borehole was sunk through the thick peat cover at **Horseholm** (NY 03137062) into the underlying carse deposits. The profile obtained was as follows :

National Grid Reference : NY 03137062

Surface level : 9.91 m A.O.D.

	Thickness
Dark-brown to black peat with numerous large fragments of wood. The basal 50 mm were dated 5410 ± 160 years B.P. (Birm-258, Shotton & Williams 1973a, p. 3)	3.22 m
Top surface of carse deposits : 5.69 m A.O.D.	
Grey (silty) sand with abundant fragments of plant debris	*c.* 0.30 m
Light-grey-brown sand with frequent small flakes of muscovite, fragments of plant debris occasional to common and occasional fragments of black carbonaceous matter	1.35 m

Light-grey-brown sand with frequent small flakes of muscovite, fragments of black carbonaceous matter occasional to common, fragments of molluscan shells common to frequent, frequent to abundant tests of foraminifers, valves of ostracods occasional to common, spines of echinoids common to frequent and rare spicules of sponges	at least 3.00 m

The borehole was abandoned in running sand at *c.* 1.04 m A.O.D. without the base of the carse deposits being reached.

Samples from the following horizons were sieved and examined under the microscope for faunal remains : 5.65 m A.O.D., no faunal remains observed; 4.34 m A.O.D., one possible fragment of a bryozoan, otherwise no faunal remains observed; 3.73 m A.O.D., occasional fragments of molluscan shells, very abundant foraminifers, abundant ostracods, abundant spines of echinoids, occasional spicules of sponges; 3.12 m A.O.D., frequent to abundant fragments of molluscan shells, frequent to abundant foraminifers, ostracods common, spines of echinoids common; 1.37 m A.O.D., fragments of molluscan shells occasional to common, foraminifers common to frequent, ostracods common, spines of echinoids occasional to common.

The sedimentary environment

The nature and approximate altitude of the surface of the sediments on which the carse deposits rest in the central area of the Lochar Gulf are unknown. On the basis of the evidence provided at sites on the margin of the gulf, however, it is probable that the main embayment is floored by fluvio-glacial deposits and that the floor (which may be undulating) lies several metres below Ordnance Datum.

At the maximum of the main Holocene marine transgression, the gulf must have resembled the present area near the head of the Solway Firth except that in the case of the gulf the watercourses entering the embayment on its northern and eastern shores would be minor streams compared with the River Esk and River Eden which enter the present Solway Firth at its head. The irregular form of the top surface of the carse deposits (pp. 27-28 and text-figs. 7A and 7B) resembles broadly the present top surface of the deposits of the easternmost part of the Solway Firth, but on first consideration there appear to be differences in detail. The contours shown on maps of the surface of the carse deposits in the gulf indicate a number of closed hollows located between higher areas (text-figs. 7A and 7B), whereas the surface of the present tidal flats of the eastern Solway Firth includes only occasional isolated hollows, the lower areas between the sand and silt banks being connected by sinuous gullies that drain into the main tidal channels. The data from which the map shown in text-figures 7A and 7B was constructed — hundreds of bores sunk through peat to the top of the carse deposits — were interpreted by the makers of the map (the Department of Agriculture and Fisheries for Scotland) as indicative of closed hollows located between higher areas. It is suggested that the same data might have been interpreted somewhat differently, and the maps might have been drawn in such a way as to show that the top surface of the carse deposits in the former Lochar Gulf consisted of occasional isolated hollows, whilst some of the lower areas indicated by borehole data were parts of a dendritic system of narrow, sinuous gullies that extended through the carse deposits.

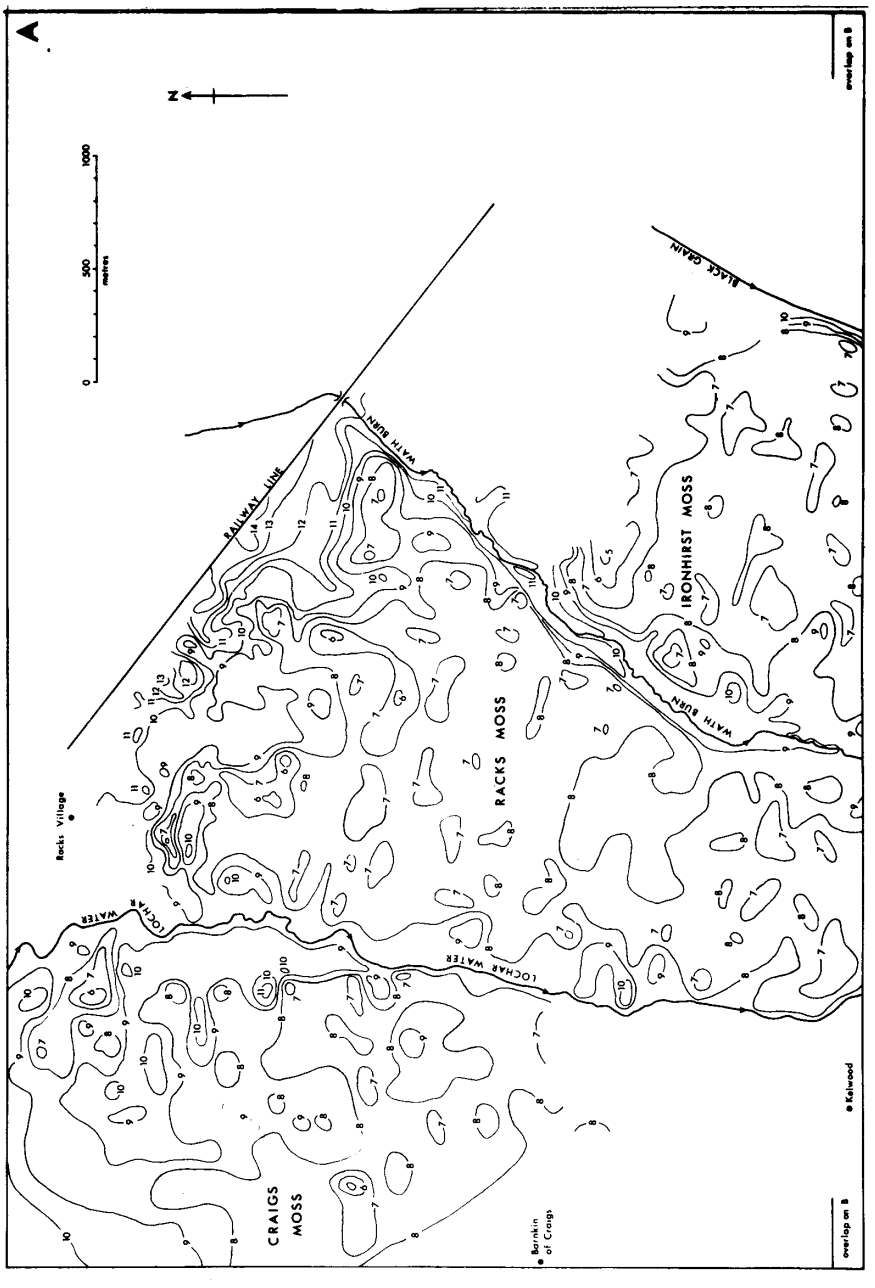
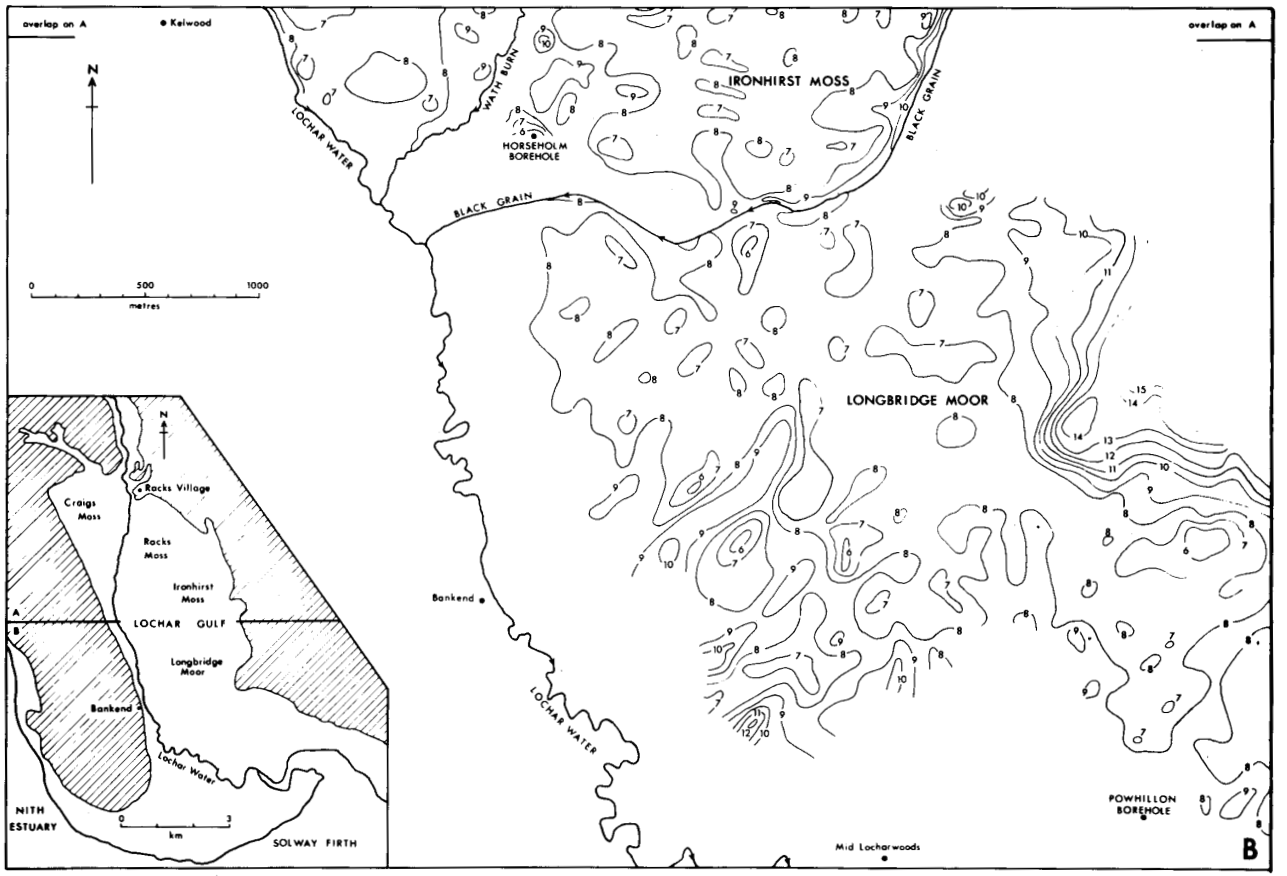


Fig. 7

Map of the sub-peat surface (equivalent to the top of the carse deposits) of part of the former Lochar Gulf. Based on maps supplied by the Macaulay Institute for Soil Research, Aberdeen, and constructed from borehole data obtained by the Department of Agriculture and Fisheries for Scotland and the Macaulay Institute for Soil Research. Contours are in metres above Ordnance Datum, Newlyn. A. Northern part of the area. B. Southern part of the area, including locations of Horseholm and Powhillon Boreholes, mentioned in the text. Inset : locations of text-figures 7A and 7B in relation to the former Lochar Gulf.



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Tidal conditions and sedimentary conditions in the gulf at the time of the marine maximum probably were similar to those near the eastern end of the Solway Firth at present : at low tide marine waters would be confined to several major channels; at high water of spring tides the waters would lap the shores of the gulf; at high water of neap tides parts of the top surface of the deposits in the gulf would be uncovered, and perhaps at such times also the sea would not penetrate into the long inlet between Racks and Locharbriggs. Exclusion of the sea from the Lochar Gulf appears to have been brought about by the growth of gravel bars near the mouth of the gulf both on the western and eastern side, and perhaps also by the growth of sand bars in the vicinity of the mouth, but there is no firm evidence of this (*cf.* Jardine 1975, p. 183).

Comparison of the ages obtained by radiocarbon dating of samples from the basal layers of the peat that overlies the carse deposits at two sites within the central area of the gulf is interesting in relation to conditions of sedimentation. At Nether Locharwoods (NY 056680) the radiocarbon age of the basal 0.37 m of peat was 6645 ± 120 years B.P. (Q-658, Godwin & Willis 1962, p. 59), whereas at Horseholm (NY 03137062) the radiocarbon age of the basal 50 mm of peat was 5410 ± 160 years B.P. (Birm-258, Shotton & Williams 1973a, p. 3). The junction between the peat (above) and carse deposits (below) at Nether Locharwoods is at 9.25 m A.O.D. and at Horseholm is at 5.69 m A.O.D. The evidence suggests that, after the main area of the Lochar Gulf had been cut off from the sea around 6645 ± 120 years B.P., peat formation commenced on the higher parts of the (former) marine deposits left in the abandoned embayment and it was only when the water table had fallen in the course of the next several hundreds of years that peat formation eventually was possible at lower levels.

(d) New Abbey to Carsethorn

The sediments

Along the coast of eastern Galloway, between the mouth of New Abbey Pow and the village of Carsethorn, stretches a narrow tract of Holocene raised coastal deposits, interrupted for 300 metres at Craiglebbock Rocks (NX 990638), where cliffs in Lower Palaeozoic rocks occur (text-fig. 8). North of the cliffs, the Holocene deposits comprise two main sedimentary units. One, dominantly of fine sands, typical carse deposits, forms the low, flat areas flanking New Abbey Pow and Drumillan Pow in the vicinities of the farmsteads of Carse (NX 977657) and Ingleston (NX 980651). It is typically developed in the south-bank meander-scar of New Abbey Pow at location NX 98326579 where the profile, in summary, comprises approximately 1.5 m of unlaminated fine sandy clay resting on at least 4 m of fine sand (upper part laminated, lower part unlaminated) with remains of marine fauna (fragments of molluscan shells, tests of foraminifers and spines of echinoids). About 3.25 m from its top the fine sand stratum contains a 0.30 m-thick layer of rust-coloured pebbly gravel (see also text-fig. 9).

The second sedimentary unit of the Holocene deposits contrasts markedly with the first, consisting of horizontally-bedded interstratified sands and gravels that form a broad, low ridge extending southwards from near the mouth of New Abbey Pow for

a distance of more than 1 km (text-fig. 8). The deposits of this unit are well exposed in a low cliff at location NX 985657 near the mouth of New Abbey Pow, and it is there also that the relationship between the sands and gravels and the fine-grained carse deposits can be seen : shell-bearing laminated fine sands and silts underlie horizontally-bedded gravels and gravelly sands. Levelling established that the uppermost (approximately) two metres of the carse deposits at location NX 98326579 occur at the same altitude as the sands and gravels that form the ridge to the east of Ingleston (text-figs. 8 and 9). The gravel ridge, in fact, constituted a baymouth bar between the headlands of Airds Hill and Ingleston Hill about the time of the maximum of the main Holocene marine transgression.

Southwards from the cliffs at Craiglebbock Rocks, for a distance of approximately 800 metres, the Holocene raised coastal sediments consist largely of angular gravel-sized fragments of Lower Palaeozoic rocks forming a low terrace backed by cliffs consisting of till. South of a relict Holocene headland at location NX 987631 (see also text-fig. 8), the tract of raised coastal deposits broadens and, as far south as Drum Burn, distinction can be made between two sedimentary units. A minor one, of gravel, forms low ridges adjacent to the merse area that flanks the present shore. The bulk of the sediments, however, are typical fine-grained carse deposits, and they form a long relatively-flat terrace extending southwards for a distance of approximately three kilometres to the mouth of Carse Pow at location NX 984603. In a ditch at location NX 98496242, 300 m east of South Corbelly, and in the bank of Nimbly Burn at location NX 98226020, 0.6 to 1.0 m of gravel overlie micaceous silty fine sand (carse deposits), suggesting a relationship between the two sedimentary units similar to that established to the north, near the mouth of New Abbey Pow.

From the mouth of Carse Pow southwards to the rocky cliffs at Hogus Point (NX 996588), the area of carse deposits broadens to a width of more than 1 km between the village of Kirkbean and the present sea shore north of Hogus Point. This broad area of Holocene deposits is bounded on the east, close to the present coast, by a discontinuous high, narrow ridge of orange-red stratified sand and gravel that extends from Hogus Point northwards to the village of Carsethorn (text-fig. 8). North of Carsethorn, a broader and more subdued topographic swell extends from the village to the southern bank of Carse Pow near its mouth. The narrow ridge of sand and gravel between Hogus Point and Carsethorn is an esker on both sides of which carse deposits accumulated during the Holocene marine transgression. In contrast, the low gravel ridge north of Carsethorn is a composite marine gravel bar; near the mouth of Carse Pow the gravel may be seen to rest on carse-type deposits and, at locations NX 985603 and NX 986601, small elongate hollows in the ridge suggest that the north-western end of the ridge comprises at least two partially-coalescent bars (see also text-fig. 8).

The thickness of the carse deposits in the area south of Craiglebbock Rocks varies markedly from place to place. Throughout much of the narrow tract north of Carse Pow the deposits appear to be up to about two or three metres in thickness, and in places they may be seen to rest on dull red sandy till. On the flanks of the basin that occurs between Kirkbean and Carsethorn the carse deposits are thinly developed also; at the Barracks (NX 99385964) at the southern end of Carsethorn village, the sediments — grey silty clays here — are less than 1.15 m in thickness, wedging out

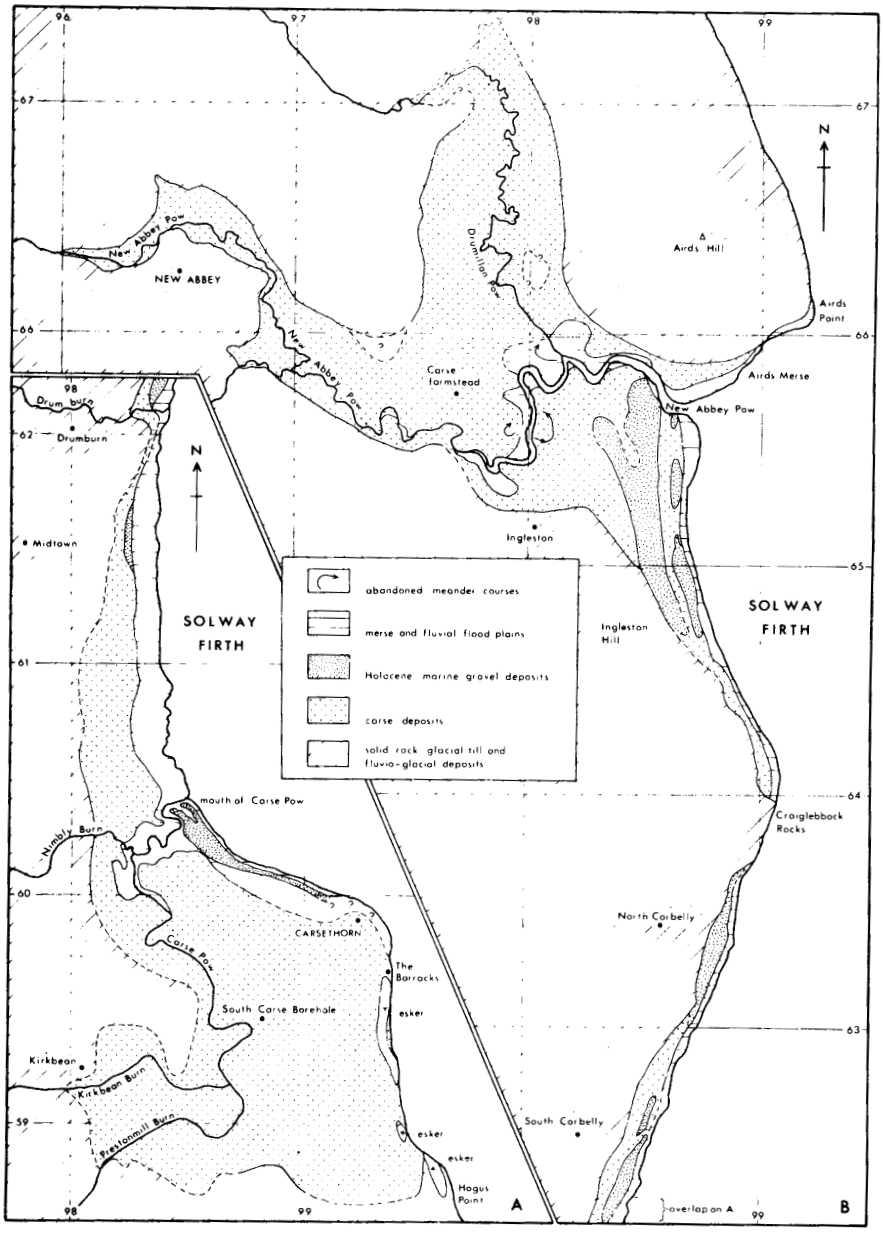

Fig. 8

A. Map of the area in the vicinity of the village of Carsethorn, showing the locations of sites mentioned in the text and the maximum extent of the sea during the Holocene epoch (indicated by the boundary between the carse deposits and other rocks). B. Map of the area east and south-east of the village of New Abbey, showing the locations of sites mentioned in the text, and the maximum extent of the former Holocene embayment that existed in that area (indicated by the boundary between Holocene marine deposits and other rocks). The numbered lines, spaced at 1 km intervals, are those of the Ordnance Survey National Grid.

against the sands and gravels of the late-Pleistocene esker already mentioned. Similarly, in the southern bank of Kirkbean Burn, at location NX 98345930, the carse deposits comprise as little as 0.38 to 0.46 m of grey silty clay resting on dark-brown to black organic detritus which in turn rests on sandy clay till.

The thickness of the carse deposits, however, increases rapidly towards the centre of the basin between Kirkbean and Carsethorn. Several metres of the sediments are exposed discontinuously in the banks of Carse Pow downstream from Pow Bridge and, in a borehole sunk at location NX 98835944 (**South Carse Borehole**), more than 11 m of carse deposits were found to rest on stiff red clay, believed to be glacial till. Details of the sediments and faunal content of the borehole are given by Jardine (1975, p. 178, fig. 3). In summary, 1.22 m of silty loam in which no faunal remains were found overlie sand and fine sand containing fragments of bivalve shells (frequent), tests of foraminifers (frequent to abundant), valves of ostracods (occasional), spines of echinoids (occasional) and spicules of sponges (rare to occasional). A 0.15 m-thick layer of brown organic detritus, indicative of brief interruption in marine conditions, occurs at 1.07 m above the base of the carse deposits (text-fig. 9).

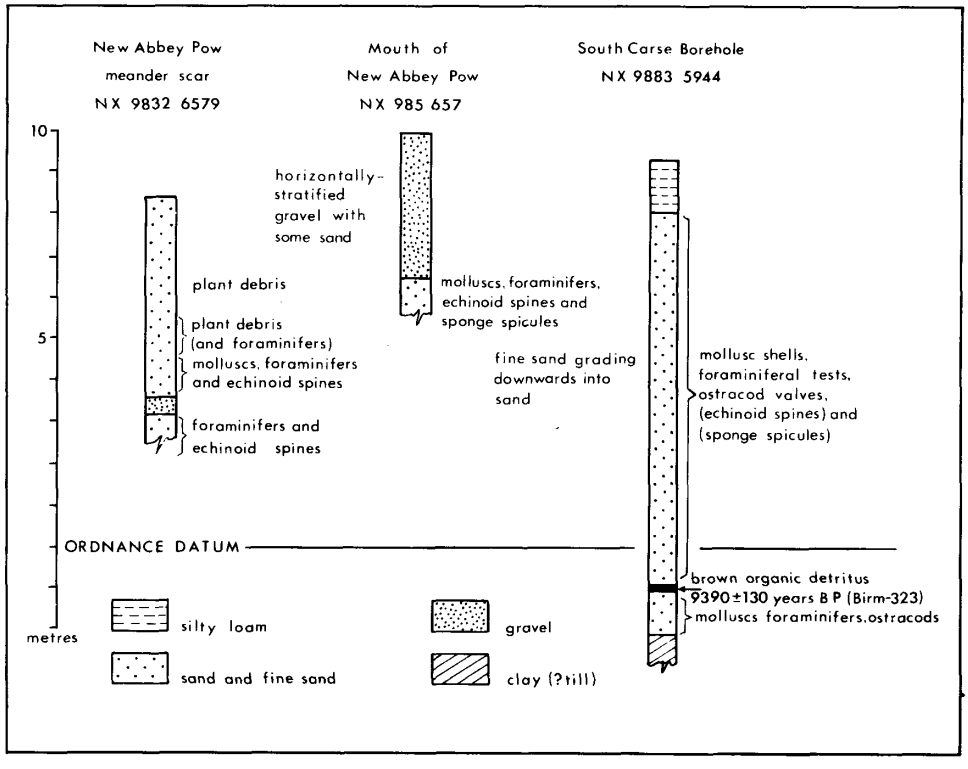

Fig. 9
Simplified sections of the sedimentary successions in South Carse Borehole (near Carsethorn) and at two sites within the marine embayment that existed formerly in the New Abbey area.

The sedimentary environment

The environment of accumulation of the carse and associated deposits of the area between New Abbey and Carsethorn consisted essentially of two embayments separated by a narrow discontinuous coastal stretch (text-fig. 8). The northern embayment, comprising two arms situated to the west of a line between Airds Merse and Ingleston, was the basin into which several large watercourses flowed from the slopes of Criffell (summit at 569 m A.O.D.) and lower ground to the north. Probably as a result of this, the carse deposits of this area, although typically fine-grained, in places also contain layers of coarse-grade sediments. Indeed, at location NX 98466586 on the southern bank of New Abbey Pow, horizontally-arranged trunks of several large trees occur within a thick gravel layer and within the carse deposits immediately above the gravel layer.

In contrast, the southern embayment, located between Kirkbean and Carsethorn, drained a relatively-small area on the south-eastern flank of Criffel together with a rather restricted low area to the south of Kirkbean. It may have been because of this that few coarse-grained sediments were interstratified with the carse deposits that accumulated in this embayment. The floor of this basin in places consisted of red till, in places of fluvio-glacial sands and gravels. Where it was the latter deposits that were flooded by the transgressive sea in which the carse deposits accumulated, thin lenses of gravel were interstratified occasionally with the carse deposits, as at location NX 985591 a few hundred metres east of Kirkbean.

The waters in which the carse deposits accumulated in the two embayments (and, inferentially, contemporaneously along the narrow connecting coastal tract) were fully marine for much of the period of sedimentation. Evidence of this is provided by the presence of shells of marine molluscs, tests of foraminifers, valves of marine ostracods, spines of echinoids and spicules of sponges in the sediments of both embayments. In detail, there is evidence that initially marine conditions existed in the Kirkbean-Carsethorn embayment for a brief period only, being followed by a short period during which terrestrial conditions existed at least locally before the sea once more flooded the central part of the basin and fully-marine conditions persisted whilst up to *c.* 9 m of carse deposits accumulated (text-fig. 9; see also Jardine 1975, pp. 177-179).

In the northern embayment the basal layers of the carse deposits are not exposed and no boreholes have been sunk through them. As a result, both the nature of the floor of the basin which was flooded by the transgressive Holocene sea and the nature of the transgression — whether interrupted *c.* 9390 ± 130 years B.P. (see text-fig. 9) as in the southern embayment, or continuous — are unknown. The presence of marine fauna in the profiles exposed in the bank of New Abbey Pow at location NX 98326579 and location NX 985657 (text-fig. 9) demonstrates that fully-marine conditions existed at the time of maximum penetration of the embayment by tidal waters.

Towards the end of the main Holocene marine transgression there was a marked difference between conditions in the southern and northern embayments. In the southern basin, fully-marine conditions were replaced by brackish-water conditions. A thickness of *c.* 1.25 m of fine-grained sediments accumulated during the latter

phase of aqueous sedimentation. In contrast, in the northern embayment the last stages of the period of marine transgression were marked by development of a composite sand and gravel bar, tied to the contemporaneous coast *c.* 800 m north of Craiglebbock Rocks, and extending northwards to the vicinity of Airds Merse (text-fig. 8). The bar is breached now near Airds Merse by New Abbey Pow but in a small exposure on the northern bank of the stream, at location NX 984659, gravel and sand appear to overlie carse deposits (the relationships are rather uncertain because of the presence of domestic refuse). This suggests that either the composite bar was continuous or, more probably, the position of the gap in the bar varied through time because of shifting of the positions of the channels of the watercourses that drained into the embayment and thence found outlet to the contemporaneous Solway Firth.

Holocene sedimentation along the narrow coastal stretch extending between the southern and northern embayments combined some of the features of sedimentation of both basins. The carse deposits are thinly developed in this area, measured thicknesses seldom exceeding 3 m. Where the basal deposits are exposed they are seen to rest on red till, but no interstratification of gravel lenses with the basal layers of the carse deposits has been observed. Northwards from location NX 982614, approximately 500 m east of the farmstead of Midtown, the carse deposits are overlain in places by long, low, discontinuous ridges of gravel that occur at approximately the same altitude as the large composite gravel bar that blocked the mouth of the northern embayment towards the end of the main Holocene transgressive phase. At that time this coastal stretch may have been an area along which shallow lagoons lay between the 'mainland' coast and low offshore gravel bars.

The small composite gravel bar that occurs north of Carsethorn near the mouth of Carse Pow (text-fig. 8) may be younger than the other gravel bars discussed above. The evidence for this is that, although gravel forming an integral part of the bar rests on carse deposits near the northern extremity of the bar, the level of the crest of the bar is approximately the same as that of the surface of the main outcrop of carse deposits 250 m south-west of the gravel bar. Also, the gravel bar appears to rest on an approximately-horizontal eroded surface that was cut in the carse deposits at a time after the maximum of the main Holocene marine transgression. In effect, in this area the eroded surface of the carse deposits is the morphological equivalent of the merse, and this particular gravel bar therefore is a comparatively-late depositional feature, post-dating at least some of the merse areas of eastern Galloway.

VI. HOLOCENE SHORELINES

The positions of former Holocene shorelines in Dumfriesshire and eastern Galloway are readily determinable along much of the present seaboard. At some locations two or more distinct shorelines are distinguishable : a higher or highest (the main Holocene shoreline) marking the maximum position of marine transgression during the Holocene epoch; a lower or several lower shorelines marking temporary halt positions in regression of the Holocene sea from the maximum to its present position (*cf.* Jardine 1971, pp. 106-107).

(a) The main Holocene shoreline

At the (local) maximum of the Holocene marine transgression, a substantial part of the northern shoreline of the Solway Firth was located a few decametres inland from the present coast. Elsewhere, as in the area near Newbie, the Lochar Gulf, the areas bordering the River Nith south of Dumfries, the embayment near New Abbey, the small embayment south of Carsethorn and the larger area between Southerness Point and Southwick Bank (text-fig. 1), the former shoreline was located several hundreds of metres or more inland from the present coast.

The main Holocene shoreline was sited in a variety of rocks; a few were resistant solid strata, the bulk were late-Pleistocene till, glacial outwash or ice-contact stratified deposits. The steepness of the coast was largely independent of the nature of the rocks that formed the shore : steep cliffs occurred in solid rock, in fluvio-glacial deposits and (rarely) in till; subdued cliffs occurred in glacial till, in fluvio-glacial deposits and in solid rock covered by a veneer of glacial till. Where the shore was located in fluvio-glacial deposits the origin and, therefore, morphological form of the deposits had some influence upon both the configuration of the coastline and the steepness of the coast. Thus, where the main Holocene shoreline was located in pro-glacial stratified deposits, as in the vicinity of Nether Dargavel (NY 019755), 4 km east of Dumfries (text-fig. 5), the coastal configuration was simple and the physical feature marking the former coast is relatively subdued. In contrast, where the main Holocene shoreline was located in ice-contact stratified deposits, especially esker ridges, as in the vicinity of Newbie Cottages (e.g. at NY 168649) near Annan (text-fig. 3), and at Sandyknowe Bridge (NY 017776) 4 km ENE of Dumfries (text-fig. 5), the coastal configuration was intricate and the former coastal feature is high and steep.

High, steep cliffs in solid rock occurred in the extreme south-west : near Southwick Bank (e.g. SW and NE of location NX 915561) and discontinuously between Powillimount (NX 991565) and Borron Point (NX 998580) where Silurian rocks outcrop. Other locations where short stretches of steep cliffs were formed by Lower Palaeozoic strata were near New Abbey : at Airds Merse (NX 988658) and Craiglebbock Rocks (NX 990639), and perhaps near Kirkconnell (at NX 984680), the probable main Holocene shoreline at the last-mentioned location now being coincident with a late-Holocene coastline (text-figs. 8 and 10). More-subdued cliffs may have been formed by New Red Sandstone rocks on the western side of the Lochar Gulf between Bankend and Caerlaverock (e.g. at Woodend, NY 028677, Text-fig. 5).

Many stretches of the long, intricate shoreline of the Holocene sea were located in late-Pleistocene deposits. The form of such parts of the coast appears to have been determined largely by the nature and orientation of the pre-existing Pleistocene sedimentary bodies, the transgressive Holocene sea having little erosive effect upon the landmass being inundated. In most cases where glacial till formed the shore, cliffs were not produced because the local terrain consisted of a gently-undulating till-plain or, occasionally, low drumlins. Similarly, where the advancing Holocene sea invaded areas of ice-melt deposits the surfaces of which were gently inclined — for example south-west of Dumfries near Crooks (NX 960708, text-fig. 10) — coastal relief was very subdued.

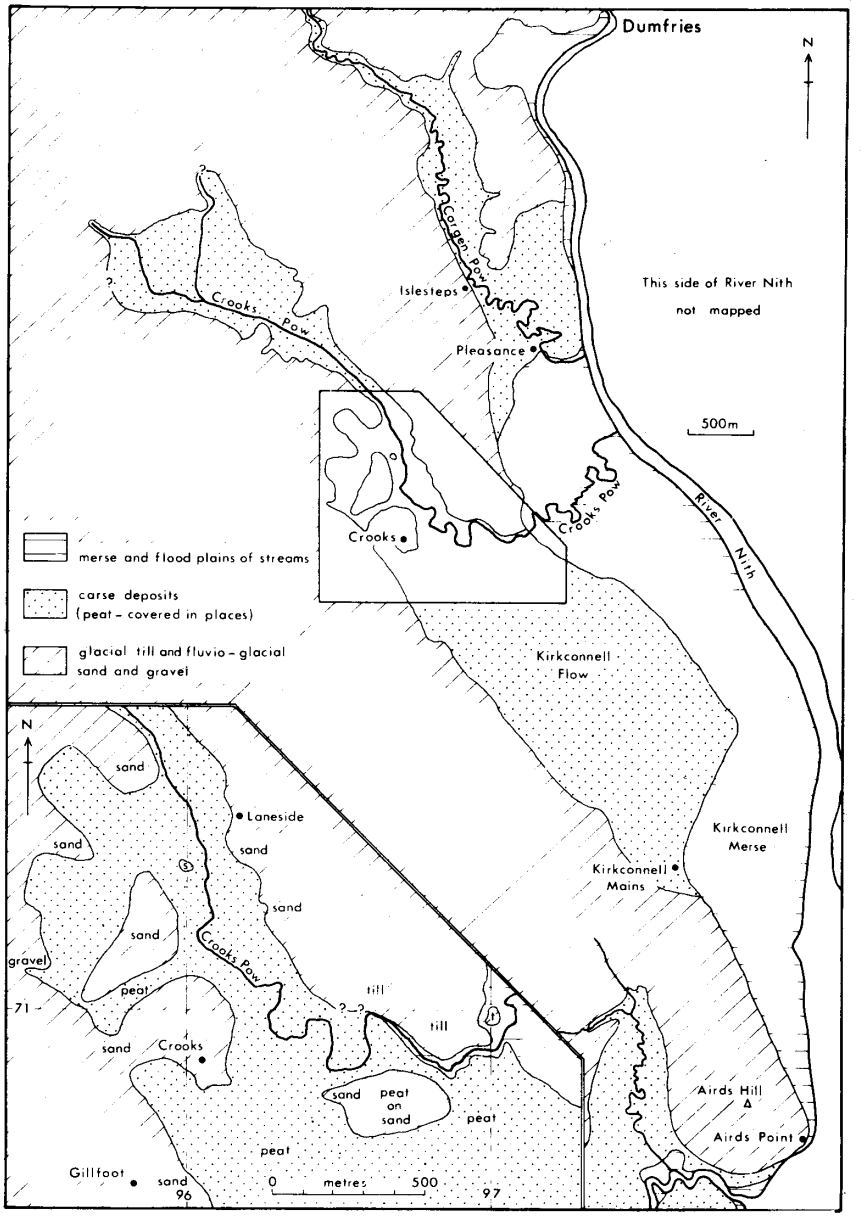

Fig. 10

Map of the area on the western side of the River Nith south of Dumfries, showing locations mentioned in the text and the distribution of Holocene carse deposits and merse deposits. Between Pleasance and Kirkconnell Mains the boundary between these deposits is marked by a low cliff. Inset: detail of the lateral distribution of Pleistocene till and fluvio-glacial deposits and Holocene carse deposits in the vicinity of Crooks farmstead. The nature of surface exposures of the Pleistocene deposits (till, sand etc.) is indicated at a number of locations. The presence, in places, of a peat cover on the carse deposits, also is indicated.

The numbered lines, spaced at 1 km intervals, are those of the Ordnance Survey National Grid.

In contrast, in the few areas where the coast of the encroaching Holocene sea — either the 'mainland' coast or that of one of the many small islands that were present during the Holocene marine transgression — was located along the side of an esker ridge, or was formed at the margin of remnants of kame-terraces, the coast was steep and comparatively high. In addition to the examples of this type of coast near Newbie Cottages and at Sandyknowe Bridge cited above (p. 40), the former coast was formed by parts of an esker ridge south of Carsethorn (e.g. at location NX 993594, text-fig. 8), by part of an esker system at Whinny Rig (NY 005790), 4 km north-east of Dumfries, and in the same area by the flat-topped, steep-sided Tinwald Isle (NY 006793) and Glenclair Hill (NY 011789) that appear to be remnants of kame terraces (text-fig. 5) (*cf.* Jardine & Masters 1977, p. 58). The steep bank forming the main Holocene shoreline between Southwick Home Farm (NX 938568) and West Preston (NX 958558) probably is another example of the edge of a kame-terrace or related ice-marginal feature controlling the limit of the transgressive sea (text-fig. 11).

The last example illustrates well the influence of the orientation of fluvio-glacial deposits on the trend of parts of the Holocene coastline. The position and alignment of the main Holocene shoreline between Caulkerbush and Southerness (text-fig. 11) was pre-determined in late-Pleistocene times when ice, occupying the valley of the Southwick Water north of Caulkerbush, and extending east-south-eastwards by Cowcorse and West Preston to Southerness, melted to produce a series of elongate terraces and ridges of sand and gravel. Somewhat similarly, to the east and north-east of Dumfries it was the (approximately) north-west to south-east trend of ice-melt deposits that determined the intricate pattern of the main Holocene shoreline in that area (*cf.* Jardine 1971, p. 108 and fig. 4; see also text-fig. 5).

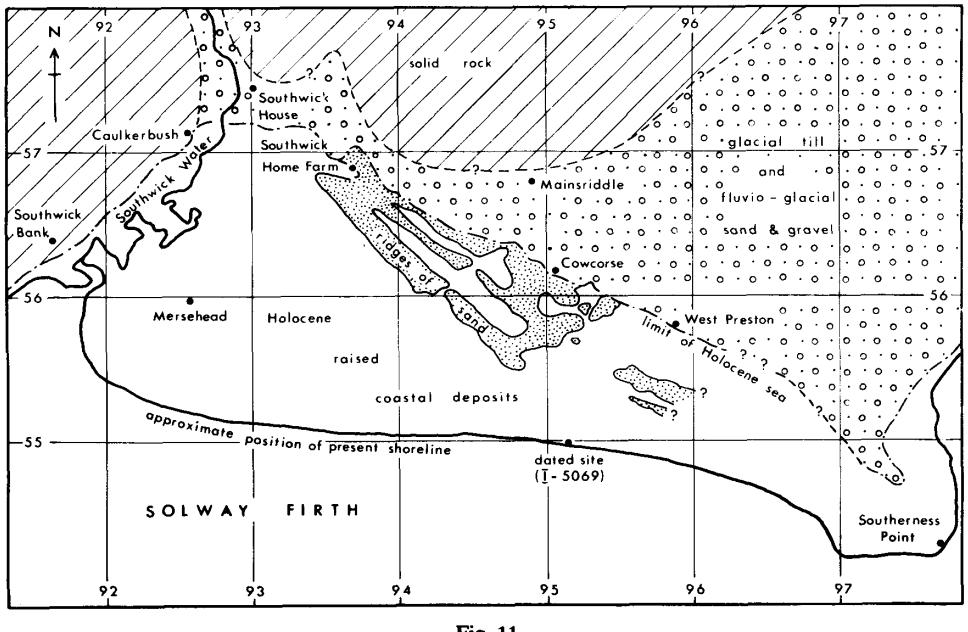

Fig. 11

Map of the area between Southerness Point and Southwick Bank, showing the locations of sites and deposits mentioned in the text. The numbered lines, spaced at 1 km intervals, are those of the Ordnance Survey National Grid.

Another factor having some influence upon the nature of the main Holocene shoreline was the depth to which any one area of fluvio-glacial ridges and mounds was submerged by the transgressive sea. For example, in the northern part of the valley of the Lochar Water east of Dumfries, steep-sided fluvio-glacial deposits abut against later marine deposits, whilst in the central part of the valley the gentler slopes of the upper parts of the ice-melt deposits are juxtaposed with the Holocene marine deposits, and in the south (as proved in boreholes) the Pleistocene sand and gravel mounds are completely buried below the flat Holocene carse-lands.

The siting of the main Holocene shoreline in different kinds of rocks raises the question of the extent to which the shoreline was located along the line or lines of a former coast or coasts. Some areas now occupied by Holocene coastal deposits were land surfaces immediately prior to *c.* 7700 radiocarbon years B.P. (*cf.* Table 1). This is proved by the presence in such areas of a layer of (radiocarbon-dated) organic detritus and underlying A_2 and B_2 podsolic soil horizons directly beneath the transgressive Holocene marine deposits. Clearly, in these areas the now-recognisable shoreline at the landward margin of the Holocene marine deposits is a shoreline first formed in the course of the Holocene marine transgression rather than a coastline inherited from an earlier period of marine activity.

It is possible, however, that the limit of the Holocene sea elsewhere in Dumfriesshire and eastern Galloway was determined by the position of a former shoreline. Until recently it was claimed that former sea cliffs and shore platforms in solid rock at levels close to present sea level were formed in western Scotland during the last (Ipswichian) or an earlier interglacial interval (*cf.* McCann 1968, pp. 27-29) it being argued by McCallien (1937, p. 197) that the Holocene transgressive sea was ineffective in the cutting of such features in solid rock. Recently it was suggested by Sissons (1974a, pp. 44-45) that the low-level shore platform and associated cliffs certainly of the Oban area (and possibly of much of western Scotland) were produced around 11,000 to 10,000 radiocarbon years B.P. in severe periglacial conditions that existed then in the parts of Scotland outside the limit of the glaciers of the Loch Lomond Readvance. Corrie glaciers are thought to have existed at this time in the Merrick-Kells hill-ranges of Galloway (Sissons 1974b, fig. 1) and fossil ice-wedges occurring in late-Devensian fluvio-glacial sands and gravels at location NY 153656 on the present coast near Powfoot probably also date from this time (Jardine & Peacock 1973, p. 56). It follows not only that the steep, high cliffs and minor rock platforms that occur near Southwick Bank and elsewhere in eastern Galloway (p. 40 above) may have been produced then, but contemporaneously it may have been possible for some marine trimming of till and fluvio-glacial landforms to have taken place.

On the other hand, there is no positive evidence of the northern limit of the eastern part of the Solway Firth having been located farther inland than the present coast prior to the beginning of the Holocene epoch, 10,000 radiocarbon years B.P. (Jardine 1977, pp. 107-108), although it is possible that the vast area of the Lochar Gulf was occupied by marine waters for a considerable length of time before the narrow inlet extending northwards from the vicinity of Racks (NY 029744) by Sandyknowe Bridge (NY 017776) was penetrated by the sea shortly after 7400 radiocarbon years B.P. (Jardine 1975,p. 182).

On balance, it seems probable that the steep, high cliffs at Southwick Bank were inherited from an earlier period of marine erosion (of unknown age), but the configuration of other parts of the main Holocene shoreline of Dumfriesshire and eastern Galloway was determined largely by late-Pleistocene fluvio-glacial sedimentary events as discussed above, minor local fashioning of the coast being produced by the transgressive Holocene sea.

(b) Late-Holocene shorelines

Traces of a late-Holocene shoreline or shorelines are to be found at a number of locations in Dumfriesshire and eastern Galloway (text-figs. 3, 5, 8, 10 and 13). In broad terms, the low cliff-feature marking the remains of a former shore position at any given location represents a stage in the recession of the sea from the main Holocene shoreline in the vicinity of the given location to the present coast nearby. Along most of the length of the present seaboard the situation is simple in terms of morphology, and only one distinct low cliff can be identified. Commonly it ranges up to *c.* 2 m in height and frequently it occurs at the boundary between the carse deposits of the main Holocene marine transgression and the area that locally is termed the merse (p. 4). Good examples are to be found east of the mouth of Lochar Water as far as the headland at Netherton Cottage (NY 125649; see also text-fig. 1) and on the western side of the River Nith from the vicinity of the farmstead of Pleasance (NX 970723) southwards to the vicinity of Airds Point (NX 992660) (text-fig. 10).

The situation, however, is not simple always, phases of erosive activity by the receding or stationary sea having been interrupted by depositional activity so that in places 'cliffs' and 'benches' are partly covered by late-Holocene marine deposits. Examples are recorded in depositional and morphological features that occur in the vicinity of Redkirk Point (text-figs. 12A and 12B). The events that occurred at a site near the Ordnance Survey triangulation station (NY 30216509) are not difficult to infer (text-fig. 12A), but the coastal history was more complex a few decametres to the west of Redkirk Point (text-fig. 12B). There, erosion produced in the carse deposits an approximately vertical 'cliff' about 0.75 m in height and a 'bench' that declines *c.* 1.5 m seawards in a distance of *c.* 15 m. The truncated surface of the carse deposits is overlain directly, at the seaward end of the section, by pink clay, *c.* 100 mm thick, in which occasional pebbles are embedded. The clay in turn is overlain by a layer of gravel or sandy gravel which varies in thickness but which, in general, decreases in thickness landwards from a maximum of *c.* 150 mm. The uppermost sediments — merse or warp deposits similar to those of most of the merse areas bordering the shores of Dumfriesshire and eastern Galloway — also decrease in thickness landwards from a maximum of *c.* 0.37 m. It is suggested that, at this location, erosion of the carse deposits was followed (after a time interval of unknown length) by storm conditions in which the pebbly clay and layer of gravel were deposited. The return to more normal conditions is represented by the merse deposits. It should be noted that were the relationship between the surfaces of the merse deposits and the carse deposits seen only near the shoreline notch it might readily be assumed that the situation resembled that of the 'normal' late-Holocene

shoreline mentioned above (p. 44). This suggests that the 'normal' late-Holocene shoreline of the area, apparently a product simply of somewhat protracted erosion during a pause in marine recession, frequently in reality may be the complex product of erosive and depositional processes in combination.

The most extensive development of late-Holocene shoreline and associated morphological features in Dumfriesshire and eastern Galloway occurs between the mouth of Lochar Water and Mid Locharwoods (NY 045672) (text-fig. 13). Nearby, the situation is relatively simple : adjacent to the present shore between the mouth of Lochar Water and Caerlaverock Castle carse deposits form the higher ground (*c.* 8 to 10 m A.O.D.), being separated from the merse to the south by a cliff that commonly is steep although it seldom exceeds 2 m, and commonly ranges between 1.0 and 1.5 m in height. In contrast, along the course of the Lochar Water, more than one terrace can be distinguished on either side of the watercourse. The terraces are labelled I and II in text-figure 13, where their positions and approximate extents are shown. The terraces are distinguishable on the basis of either the low cliff or more-subdued break in slope that separates them from each other or from the area of carse deposits into which the meandering channel of the Lochar Water cut during late-Holocene times. Terraces labelled II are thought to be approximately contemporaneous with each other. They occur at slightly higher altitudes than the terraces labelled I (the present floodplain areas of Lochar Water), which are thought to be approximately contemporaneous with each other and slightly younger than the terraces labelled II. Downstream from location NY 054663, the terraces labelled I are seen to be the equivalent of, or to constitute, the merse. It may be inferred that during an intermediate stage in the relative fall of sea level from its maximum during the Holocene marine transgression to its present level, the fluvial terraces labelled II merged downstream with an earlier level of the merse. It is interesting to reflect that during the intermediate stage the terraces labelled II would have been the contemporaneous floodplain areas of Lochar Water, whilst the level of the corresponding merse (the floodplain of the Solway Firth) would have been slightly higher than now although contemporaneously the position of the junction of the merse with the dissected carse deposits between Caerlaverock Castle and the mouth of Lochar Water may not have been markedly different from the position of the present junction of the modern merse and the carse deposits.

This tendency for two or more late-Holocene shorelines of slightly different ages to occupy the same position resembles the relationship between late-Holocene shorelines and the shoreline formed at the maximum of the Holocene marine transgression at some locations. An example of the latter case occurs in the area south of the town of Annan (text-fig. 3). On the eastern side of the River Annan, a phase in the recession of the Holocene sea to its present position is marked by a cliff, *c.* 2 to 3 m high, located in the carse deposits north-west of Annan Hill, whereas on the western side of Annan Hill the shorelines of both the 'carse sea' and the 'merse sea' are located in glacial till and essentially they are coincident.

In the area between Southerness Point (NX 977543) and Southwick Bank (NX 916563) there occur only a few traces of a late-Holocene shoreline that is distinct from the earlier shoreline that existed at the maximum of the main Holocene marine

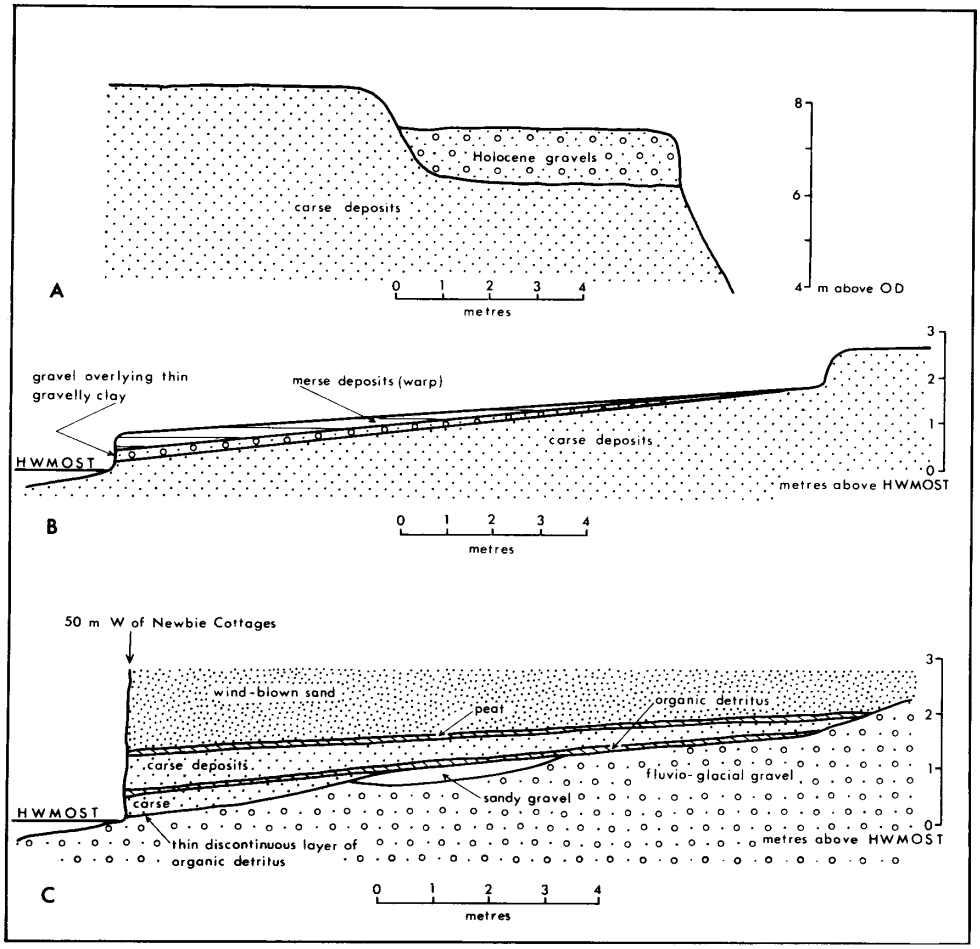

Fig. 12

A. Idealised section of Holocene deposits exposed in April 1970 near the Ordnance Survey triangulation station at National Grid Reference NY 30216509 at Redkirk Point. B. Idealised section of Holocene deposits exposed in April 1970 a few decametres to the west of Redkirk Point (National Grid Reference NY 30086511). C. Idealised section of carse deposits and associated sediments exposed in the coastal cliff section at location NY 167649, *c.* 50 m west of Newbie Cottages.

transgression. To understand the reasons for this it is necessary to examine briefly the sedimentary conditions in this area during the Holocene epoch, bearing in mind that little detailed investigation of the area has been made and that the area is one that is especially difficult to interpret because of its unusual features. To the north of a steep, high bluff in sand and gravel deposits extending discontinuously from Southwick Home Farm (NX 938568) east-south-eastwards to beyond West Preston (NX 958558), the ground never was inundated by the Holocene sea. South of this line, a number of long discontinuous ridges, varying in height between *c.* 2.5 and 5 m above the surrounding flatter areas, and varying in width from *c.* 80 to 150 m, extend

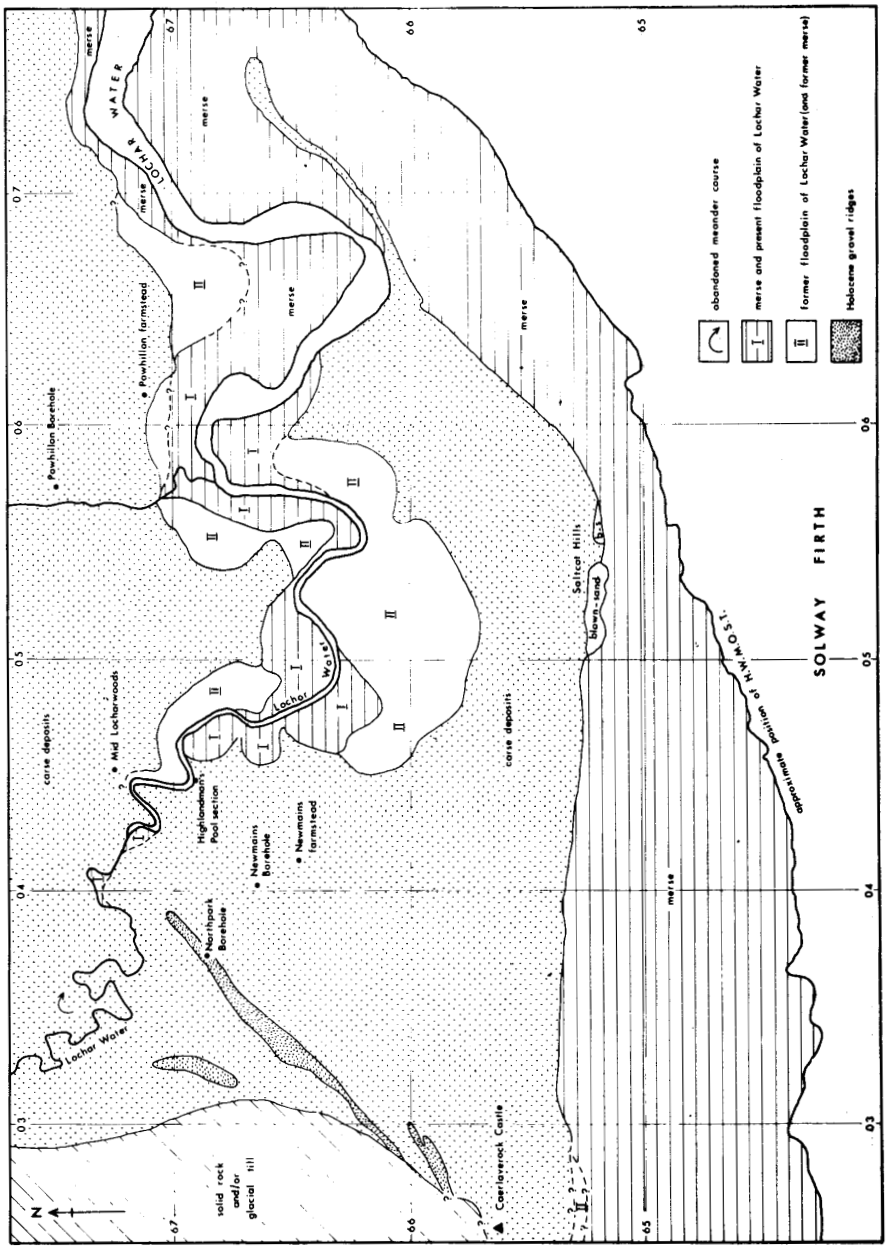

Fig. 13

Map of the seaboard of Dumfriesshire near the mouth of Lochar Water, showing the distribution and extent of the merse and present and former floodplain terraces of Lochar Water. The numbered lines, spaced at 1 km intervals, are those of the Ordnance Survey National Grid.

sub-parallel to the bluff between Southwick Home Farm and West Preston (text-fig. 11). The uppermost layers of the ridges consist of at least 1 or 2 m of sand, commonly golden-brown in colour, and the sand grains are sub-rounded or sub-angular in shape. The ridges, therefore, appear to possess a cover of blown sand, but it is not known whether the ridges consist entirely of aeolian material or their cores consist of either marine or fluvio-glacial material. The surface deposits of the low, flat areas between the ridges consist for the most part of sand, but in places peat constitutes the surface sediments. Digging and augering at a number of locations widely distributed over the areas between the ridges and to the south of the ridges showed that commonly the sequence of deposits on the 'flats' comprises, from the top downwards: up to 2 or 3m of (blown) sand; 1 to 2m of peat; at least 1m of sand in which rare to occasional tests of foraminifers and occasional spines of echinoids occur. It therefore may be deduced that marine waters penetrated this area in Holocene times, to be followed by a period of recession of the sea, peat formation and, finally, deposition of aeolian sand (*cf.* Jardine & Morrison 1976, p. 192). It is not known whether penetration of the sea was confined to the flat areas between the low ridges (if the cores of the ridges are fluvio-glacial in origin) or the areas of the ridges also were covered originally by marine waters, the ridges either being coastal bars developed during a late phase of marine transgression or low sand dunes developed after recession of the sea.

The thin cover of blown sand present over much of the area south of the low ridges masks the shape of the surface of the Holocene marine deposits that occur in this area. The interface of the blown sand and the underlying peat, however, falls gently southwards; e.g. at location NX 95665548 the junction of peat (above) and marine sand (below) is at *c.* 9.55 m A.O.D., whereas at location NX 94505557 the same junction is at *c.* 5.51 m A.O.D. and at location NX 95255530, on the present shore of the Solway Firth, is at *c* 5.25 m A.O.D. Because of the cover of aeolian sand, it is not known whether recession of the sea in this area was a gradual process, or was interrupted by a pause during which a small 'cliff' was formed at a position of the shoreline. In the west, where the meandering course of Southwick Water is present, it is possible to distinguish an area of merse that, in this case, is essentially the combined floodplain of the watercourse and the adjacent part of the Solway Firth. The boundary between this area of merse and the area of slightly higher ground around Mersehead (NX 925559) is ill-defined, suggesting that indeed there may have been a gradual rather than pulsatory withdrawal of the sea in this area from the maximal position during the Holocene epoch to the present position.

VII. HOLOCENE COASTAL SEDIMENTS IN RELATION TO ADJACENT PLEISTOCENE DEPOSITS

The relationships between the Holocene coastal sediments and the underlying Pleistocene deposits of Dumfriesshire and eastern Galloway were discussed briefly above where certain of the sedimentary environments were considered. It is instructive to examine these relationships more fully.

In broad terms, where the two are in contact within the area, a Holocene coastal deposit occurs in unconformable relationship with the adjacent Pleistocene deposits because even the youngest of the latter sediments is either glacial or fluvio-glacial in origin, whereas the oldest of the inorganic Holocene coastal deposits — the carse deposits — are marine in origin. Two situations occur. 1. A layer of (Holocene) organic detritus intervenes between the Pleistocene deposits and the Holocene inorganic sediments. 2. The Holocene coastal sediments rest directly on the Pleistocene deposits. At several locations these two situations occur in close proximity to each other. Where such is the case, commonly the thin layer of organic detritus occurs on the floor of a hollow but the layer does not extend more than a short distance up the sides of the hollow, whereas the carse deposits cover the floors of the hollows and at least part of the sides of the hollows.

Examples of the first situation were considered in discussion of the environments of deposition of the carse deposits that are present between Redkirk Point and Annan Waterfoot (pp. 9-10) and between Annan and Powfoot (pp. 23-24). The second situation is observable at a few locations widely separated from each other. For example, on the western side of the River Nith about 5 km south of Dumfries near the farmstead of Crooks (NX 960708), low mounds consisting mainly of sand (presumed to be fluvio-glacial in origin) are surrounded by flatter areas of carse deposits (text-fig. 10). Digging shows that the carse deposits (mainly of grey or mottled orange and blue-grey clay or silty clay in this area) rest directly on light-brown sand or, occasionally, on a 20 to 30 mm-thick layer of organic detritus which intervenes between the sand and the carse deposits. Further, in a shallow (kettle-hole) hollow in the Pleistocene deposits at location NY 17106472, *c.* 400 m south-east of Newbie Cottages, a thin bed (up to *c.* 1 m in thickness) of carse deposits rests on late-Pleistocene fluvio-glacial deposits. The details of this section, exposed between 1964 and 1967, are given in text-figure 14. Over limited lengths of the section a thin layer of organic detritus overlies pink-grey stony sand or clayey sand that probably represents the A_2 and B_2 horizons of a former podsolic soil profile developed in the uppermost part of the Pleistocene deposits. Along most of the length of the section, however, the thin organic layer is missing and the carse deposits rest directly on the pink-grey podsolised Pleistocene deposits. It must be presumed that at least a thin layer of organic detritus was present originally in these parts of the section also, but that the organic detritus was removed by erosion prior to, or in the course of, deposition of the carse deposits.

A good example of a site where, within a distance of a few metres, carse deposits rest directly both on Pleistocene deposits and on a layer of organic detritus that covers the Pleistocene deposits is in a dissected kettle-hole 140 m south-east of Newbie Cottages (*cf.* pp. 13-14). There the thickness of the carse deposits decreases laterally from a maximum of *c.* 1.5 m to zero in a distance of *c.* 15 m. At their thickest part, the carse deposits rest on *c.* 0.30 m of brown organic detritus which in turn rests on Pleistocene fluvio-glacial sand and gravel (p. 14). The top surface of the Pleistocene deposits rises rapidly on the side of the kettle hole and the layer of organic detritus wedges out within a distance of a few metres on the lower part of the sides of the hollow. As a result, the lower layers of the carse deposits overlap the

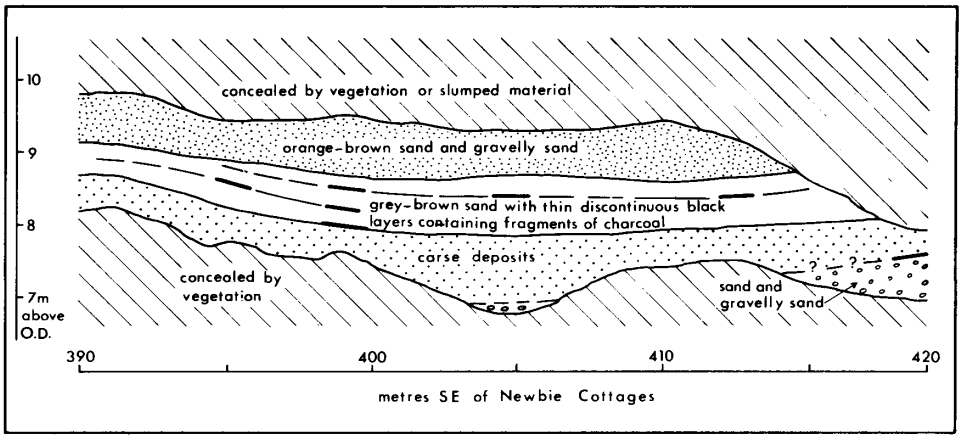

Fig. 14
Simplified representation of the section exposed in the coastal cliff at location NY 17106472, based on measurements of stratal thicknesses and other observations made at 391 m, 395 m, 399 m, 405 m, 409 m, 413 m and 419 m south-east of Newbie Cottages.

layer of organic detritus and successive strata of the upper layers of the carse deposits overlap each other on to the rising surface of the Pleistocene deposits.

Within the carse deposits exposed in the hollow at 140 m south-east of Newbie Cottages, a thin layer of plant debris occurs about 1.1 m from the top, indicating that there was at least one short period of interruption in inorganic sedimentation in the course of accumulation of the carse deposits at that location. Similar, or more protracted, interruptions are suggested when the carse deposits and adjacent Pleistocene sediments at a location on the present shore of the Solway Firth *c.* 50 m west of Newbie Cottages are examined (see the detailed profiles, pp. 16-18). As shown in simplified form in text-figure 12C, the lower of the two layers of carse deposits that occur at this location rests on a discontinuous layer of organic detritus that covers low-lying parts of the undulating surface of Pleistocene gravel deposits. Noteworthy features of the lower layer of the carse deposits are that the marine sediments are wedge-shaped in section and that they are overlain by a thin layer (*c.* 20 to 100 mm in thickness) of organic detritus, mainly plant debris, that extends *c.* 8 m beyond their feather edge to rest on Pleistocene sediments. This (middle) layer of organic detritus is overlain by the upper layer of carse deposits which thins from *c.* 0.6 m to zero over a distance of *c.* 12 m. The upper layer of the carse deposits in turn is overlain by a layer of organic detritus or peat above which occur alternate layers of wind-blown sand and peat (see p. 17 for details). The section illustrated in text-figure 12C perhaps indicates that, after the lower layer of the carse deposits at this location had been deposited, there was a period (of unknown length but probably comparatively brief) during which marine waters were not present in this area, i.e. there was a minor marine regression (*cf.* Jardine 1975, pp. 173-174). This period was followed by renewed marine transgression and overlap of the sea beyond the point to which it previously had penetrated at this location. At the beginning of this (minor) marine transgression the sea spread over an area covered by a thin veneer of organic detritus to impinge on Pleistocene gravel which, at the time of the transgression, formed the shore at this location. The transgression was followed by a recession of

the sea, formation of peat on the land surface thus produced, and conditions of alternate formation of peat or humified land surfaces and deposition of wind-blown sand (see p. 24).

It is interesting to note that the middle layer of organic detritus at this location is the same layer that can be traced continuously from *c.* 30 m west of Newbie Cottages westwards as far as *c.* 190 m west of the Cottages (p. 16). The whole of the thickness of carse deposits exposed in the section between 30 and 50 m west of Newbie Cottages, in fact, is part of the upper of the two sedimentary units that may be distinguished in the carse deposits exposed in the cliff section between Newbie Cottages and the mouth of Muir Beck (p. 16). Combining the evidence of the presence of an unconformity within the upper unit of the carse deposits at the location 380 m WNW of Newbie Cottages (p. 21), the possible presence of an unconformity at the base of or within the upper sedimentary unit at the location 170m west of Newbie Cottages (p. 22) and minor regressions and transgressions within the upper sedimentary unit at the location 50 m west of Newbie Cottages, it may be concluded that the final episode in the main Holocene marine transgression in the Newbie Cottages area was a phase of marked interruption in marine sedimentation. The presence of the unconformities, which may be ascribed to the movement of gullies in the contemporaneous tidal flats (p. 23), is consistent with the presence within the upper unit of the carse deposits of thin layers of organic detritus which accumulated when local regressions occurred because of shifts in the positions of the gullies and possibly also because of shifts in the positions of the main channels of the contemporaneous Solway Firth. The major marine transgression, however, did not cease until the uppermost part of the carse deposits (e.g. the upper layer of carse deposits in text-figure 12C) had accumulated and the sea withdrew, to be replaced by terrestrial conditions of peat formation and blown-sand accumulation.

The relationships between the carse deposits and the underlying Pleistocene sediments at many of the locations discussed throughout this paper lead to interesting suggestions concerning conditions along the northern coast of the eastern part of the Solway Firth at the time that the main Holocene marine transgression was initiated at any given location. The basal layers of the carse deposits rest, in many places, on a layer of organic detritus that protected the underlying Pleistocene sand and gravel deposits from erosion by the transgressive sea, a fact that may explain the comparative scarcity of clasts larger than sand grade in the lower layers of the carse deposits at most locations (*cf.* p. 4). The effectiveness of a layer of organic detritus in protecting the underlying deposits against storm erosion (and the penetration of the Holocene transgressive sea although quiet for the most part must have included occasional storms) was demonstrated by a severe storm in 1967. The peat layer that *overlies* the carse deposits along much of the cliff section between Newbie Cottages and the mouth of Muir Beck withstood erosion and protected the underlying carse clays, whereas the overlying wind-blown sands and interstratified peat layers were destroyed in the course of one exceptional flood tide. Comparison of the two events, the one modern, the other occurring in early or middle Holocene times, is highly relevant. Although the layer of organic detritus that covers the Pleistocene sand and gravel deposits is compact now, its compaction is largely the result of the super-

TABLE 1

Approximate chronology of Holocene coastal events in Dumfriesshire and eastern Galloway

Date, in radiocarbon years B.P.	Lab. No. of dated sample(s)	Location and National Grid Reference of dated sample	Coastal event
1850 ± 95	I-5069	West Preston shore NX 951549	Prior to this date, withdrawal of sea to approximately its present position
5630 ± 116	Birm-220	66 m W of Newbie Cottages NY 167649	Termination of main Holocene marine transgression in eastern part of Solway Firth
6470 ± 280	Birm-324	Midtown borehole NY 118657	Commencement of peat formation in Lochar Gulf after construction of gravel bars on western and eastern sides of entrance to gulf
6645 ± 120	Q-638	Nether Locharwoods NY 056680	
c. 7200			Along northern coast of eastern part of Solway Firth, marine waters reached their maximum lateral extent for the whole of the Holocene epoch (see text-fig. 1)
7426 ± 136	GU-65	Sandyknowe Bridge, borehole B11 NY 017776	Approximate date of initiation of marine conditions in inlet extending northwards from Racks village on shore of Lochar Gulf
7694 ± 99 (see Table 2b)	Birm-222	170 m W of Newbie Cottages NY 166650	Probable date of re-establishment of marine conditions in hollow to NE of Newbie Cottages and initiation of marine conditions at sites between Newbie Cottages and mouth of Muir Beck
	GU-375	Newbie Mains borehole NY 171651	
7812 ± 131	GU-375	Newbie Mains borehole NY 171651	Interruption in marine conditions in hollow to NE of Newbie Cottages Marine occupation of hollow NE of Newbie Cottages prior to this date
8135 ± 150	Q-637	Redkirk Point NY 302651	Earliest record of inundation by marine waters in eastern Dumfriesshire is after this date
9390 ± 130	Birm-323	South Carse borehole, Carsethorn NX 988594	Earliest record of presence of marine waters in Dumfriesshire and eastern Galloway is prior to this date

incumbent mass of the carse deposits resting upon it for thousands of years. At the time of initiation of the marine transgression in the course of which the carse deposits accumulated, the layer of organic detritus would be uncompacted and not dissimilar to the peat layer that now overlies the carse deposits.

Another interesting feature of the relationships between the Holocene coastal sediments and adjacent Quaternary deposits is that of the nature and origin of the modern shore sediments. A detailed study of modern shore sediments was not made in the course of the present project, but it was noted that sediments comprising clasts larger than sand grade are comparatively scarce along much of the coast of Dumfriesshire. Beach sediments of this type do occur, however, along most of the present shore between Annan Waterfoot and Powfoot (text-fig. 1), including the stretch between Newbie Cottages and the mouth of Muir Beck where the relationships between the modern beach sediments (of gravel) and the carse deposits and Pleistocene deposits are shown in text-figure 3 (inset). The sources of the gravel forming the modern beach along this coastal stretch, and elsewhere within the area, are the ridges and mounds of fluvio-glacial sand and gravel that are being attacked by the sea at present between Powfoot and Newbie Mains farmstead. In this respect there is marked contrast between conditions along this shore at present and those that existed during the main Holocene marine transgression. Clearly, the main difference is the absence now of a cover of organic detritus protecting the lower parts of the fluvio-glacial deposits from direct attack by the sea in times of exceptionally high tides in storm conditions.

VIII. CHRONOLOGY AND SYNTHESIS

The evidence presented above suggests that on the northern seaboard of the eastern part of the Solway Firth during the Holocene epoch marine transgression and regression accompanied by major changes in coastal configuration and accumulation of a variety of coastal sediments occurred. The approximate chronology of the main events is summarised in Table 1, the Holocene history of the seaboard of Dumfriesshire and eastern Galloway presented there including minor amendments to a detailed account of the chronology of Holocene marine transgression and regression in south-western Scotland presented elsewhere (Jardine 1975, pp. 176-180).

The amendments to the earlier version of the suggested chronology are based on statistical treatment of previously published data, two formulae being used :

1. No age difference can be established between two radiocarbon ages when

$$\Delta A \leq 2\sqrt{\sigma A_1^2 + \sigma A_2^2}).$$

2. The calculated mean of the radiocarbon ages of two organic samples is given by the formula

$$\frac{\frac{A_1}{\sigma A_1^2} + \frac{A_2}{\sigma A_2^2}}{\frac{1}{\sigma A_1^2} + \frac{1}{\sigma A_2^2}} \pm \sqrt{\frac{1}{\frac{1}{\sigma A_1^2} + \frac{1}{\sigma A_2^2}}}$$

The results obtained by the use of these formulae are given in Table 2. In summary, two main amendments to the earlier version of the chronology are necessary.

1. It was suggested formerly (Jardine 1975, p. 180) that initiation of the marine transgression represented by the basal carse deposits at three locations, 380 m (Birm-325), 170 m (Birm-222) and 50 m (GU-64) west or west-north-west of Newbie Cottages, may have occurred slightly later than the interruption in marine sedimentation in the hollow to the north of Newbie Cottages (Newbie Mains Borehole, GU-375). No age difference, however, can be established between the radiocarbon age of the organic layer interstratified with the carse deposits in the Newbie Mains borehole and the radiocarbon age of Birm-222, the sample from the organic layer that underlies the carse deposits west or west-north-west of Newbie Cottages that yielded the oldest radiocarbon age (Table 2a). There therefore is no validity in the suggestion made formerly.

TABLE 2

Results of using two formulae on pairs of radiocarbon ages of organic samples from Holocene coastal deposits of Dumfriesshire and eastern Galloway. Radiocarbon ages, in years B.P., and Lab. Nos. quoted are those given in *Radiocarbon*.

(a) No age difference can be established between :

Gu-64	(7254 ± 101)	and	GU-65	(7426 ± 136)
Birm-222	(7540 ± 150)	and	GU-65	(7426 ± 136)
Birm-222	(7540 ± 150)	and	Birm-325	(7400 ± 150)
Birm-222	(7540 ± 150)	and	GU-64	(7254 ± 101)
Birm-222	(7540 ± 150)	and	GU-375	(7812 ± 131)
Birm-325	(7400 ± 150)	and	GU-64	(7254 ± 101)
Q-637	(8135 ± 150)	and	GU-375	(7812 ± 131)

(b)

radiocarbon ages of two samples		calculated mean
Birm-222	7540 ± 150)	
	)	7694 ± 99
GU-375	7812 ± 131)	

2. The fact that radiocarbon assay of the uppermost layers of the bed of organic detritus that underlies the carse deposits at altitudes of 2.95 m, 5.60 m and 5.79 m A.O.D. at three locations (170 m, 380 m and 50 m) west of or west-north-west of Newbie Cottages gave ages respectively of 7540 ± 150 years B.P. (Birm-222), 7400 ± 150 years B.P. (Birm-325) and 7254 ± 101 years B.P. (GU-64) (text-fig. 4) is not necessarily significant; statistically no age difference can be established between any pairs of these dates (Table 2a).

In synthesis, the Holocene coastal history of Dumfriesshire and eastern Galloway was as follows. Shortly before 9390 ± 130 years B.P. the coastal configuration of eastern Galloway differed from the present form because at that time marine waters occupied a shallow hollow, *c.* 1 km ^{2} in area, located between Kirkbean and Carsethorn. Brief interruption of marine conditions in the hollow around 9390 ± 130 years B.P. was followed by the initial stages of a long period during which the sea occupied the embayment and sediments up to 9 m in thickness accumulated. Contemporaneously, the remainder of the present seaboard of the area, with the possible exception of the Lochar Gulf to the south-east of Dumfries (which already may have been in existence as an arm of the sea), was dry land consisting mainly of late-Pleistocene glacial tills and fluvio-glacial sands and gravels the surface layers of which were affected by podsolic soil formation under a cover of organic detritus.

Probably the first part of the present seaboard of Dumfriesshire to be inundated by the sea in the course of the main Holocene marine transgression after 8135 ± 150 years B.P. was a small area at Redkirk Point near the eastern end of the Solway Firth. By around 7812 ± 131 years B.P., however, the floor of a hollow between esker ridges and broader expanses of fluvio-glacial deposits in the vicinity of Newbie, west of the town of Annan, also had been flooded by the transgressive sea and, after brief interruption in marine sedimentation in the hollow, the sea occupied both the large basin to the north of esker ridges at Newbie Cottages and a number of individual kettle holes associated with the eskers in the vicinity of the Cottages. In this area, at the maximum of the marine transgression a number of small islands of late-Pleistocene sand and gravel deposits lay offshore from an embayment bounded on the north and west by other late-Pleistocene fluvio-glacial deposits. Contemporaneously, several narrow inlets to the north of Lochar Gulf, including one extending for 7 km from Racks to Locharbriggs, were occupied by the sea. Evidence, unsubstantiated by radiocarbon dating, suggests that at the same time, i.e. when the main Holocene marine transgression was at its maximum extent, probably around 7200 years B.P., the coastline lay inland from its present position in the vicinity of Islesteps 3 km south of Dumfries, in the vicinity of New Abbey and between Southerness Point and Southwick Bank, in addition to the areas at Redkirk Point, Newbie and Carsethorn, already mentioned (text-fig. 1).

In contrast with the comparatively simple configuration of the present shoreline and that in existence at the beginning of the Holocene epoch, the coastline at the maximum extent of the Holocene marine transgression was intricate, largely because it was located in, and its orientation was determined by, late-Pleistocene sedimentary masses. The conditions of sedimentation, however, within the area occupied by the sea at its maximum extent resembled broadly those in existence at

present in the eastern part of the Solway Firth : much of the margin of the area was uncovered completely during ebb tides and to a lesser extent at times of neap high tides; water was confined to the main channels of the Firth at times of low tide and the tidal flats, submerged or partially submerged at times of high tides, were traversed by sinuous gullies that changed their positions with time. At least one surface of unconformity exposed in the upper part of the carse deposits near Newbie Cottages probably represents the remnant of a former tidal-flat gully.

The precise chronology of the events that occurred between the time when the maximum extent of the Holocene sea had been attained and the time when the sea finally began to recede to its present position in the eastern part of the Solway Firth is not clear, but instability of conditions during this period of transition is indicated by the formation of a number of (storm-produced) gravel bars which, although not necessarily precisely contemporaneous with each other, belong to the same broad period. The gravel bars concerned are those at the south-western and south-eastern sides of the mouth of the Lochar Gulf (they may be the earliest, and perhaps they were formed around 6645 ± 120 to 6470 ± 280 years B.P.), the bar extending from near Newbie Mains farmstead to Annan Waterfoot and the composite bar extending across the mouth of the former embayment near New Abbey.

Perhaps further indications of unstable conditions during the latest phase of the main Holocene marine transgression are the presence of thin but laterally-extensive layers of plant debris within the upper part of the carse deposits and overlapping relationships between successive layers of the upper part of the carse deposits. Both these features are present in the vicinity of Newbie Cottages.

Withdrawal of the sea from the Lochar Gulf began around 6645 ± 120 years B.P. and had been completed by *c.* 5410 ± 160 years B.P., by which time the level of the water table in that area had fallen sufficiently low for peat formation to have commenced over almost the whole area of the former gulf. Elsewhere along the (present) seaboard of Dumfriesshire and eastern Galloway the shoreline may have altered little in position from that in existence at *c.* 7200 years B.P. until around 5600 years B.P., when the sea began to withdraw towards its present position.

The details of marine regression in the area are poorly known because the events of a regression are more difficult to identify and date than those of a transgression. Nevertheless, there are indications of intermediate phases in the recession of the shoreline to its present position and in the relative drop of sea level to its present level at Redkirk Point, near the mouth of Lochar Water, in the vicinity of Kirkconnell Merse, near the mouth of New Abbey Pow, at Carsethorn and near Southwick Bank (text-fig. 1). In most of these areas a cliff *c.* 1 to 2 m high marks the old shoreline formed by the sea during a pause in marine regression. In the lower reaches of Lochar Water two phases in the recession are indicated by river terraces that merge downstream into areas of merse that represent, respectively, the former and present floodplain of the Solway Firth. At Carsethorn a composite gravel bar dates from a time slightly later than erosion of a bench in the carse deposits, the bench being the equivalent of the merse of other tracts of the eastern Galloway coast. The chronology of formation of the several areas of merse that flank the present northern coast of the eastern part of the Solway Firth is uncertain, and it is probable that the merse varies

in age from one location to another. In the coastal tract between Southerness Point and Southwick Bank, peat deposits dated 1850 ± 95 years B.P. (I-5069) rest on sand that probably either is the equivalent of, or is younger than, the merse deposits near the mouth of Southwick Water. In broad terms, the pause in marine regression preceded 1850 ± 95 years B.P. Probably the pause dates from approximately the same time as the pause that has been dated at *c.* 2000 years B.P. in western Galloway on the basis of radiocarbon ages of 2290 ± 95 years B.P. (I-5068, unpublished) and 2027 ± 108 years B.P. (GU-374, Ergin *et al* 1972, p. 324) of shells forming part of constructional, depositional areas which are part of the merse near Wigtown and Creetown (Jardine 1975, p. 187).

ACKNOWLEDGEMENTS

It is a pleasure to thank numerous persons who, for periods of variable duration, assisted in these investigations, which extended over a period of 15 years : preliminary mapping of part of the area, Mr (now Dr.) A. D. Gibbs; mechanical drilling and hand augering, Mr A. McCracken, Dr. A. D. Gibbs, Mr A. Smith and Mr J. Stark; laboratory analyses, Mrs Pauline MacLean, Mr A. Smith and Mr J. Stark; precise levelling, Miss Alison Jardine, Mr D. Jardine and the late Mr Henry Jardine. Commercial bore-logs were supplied by Mr A. G. Short of Geotechnical and Concrete Services Ltd. on the advice of Mr J. Robertson, O.B.E., and the late Mr R. J. Little, and by George Nicholson & Co. (Mineral Borers) Bathgate, by permission of the South of Scotland Electricity Board. Mr Short also kindly supplied several samples that were used for radiocarbon dating and faunal analysis. Professor F. W. Shotton, F.R.S., and his colleagues in the Department of Geology, University of Birmingham, and Dr. A. Walton and his colleagues in the Department of Chemistry, University of Glasgow, generously provided the majority of the radiocarbon ages of dated organic samples. Radiocarbon assay of two samples by Teledyne Isotopes was financed by a grant from the Carnegie Trust for the Universities of Scotland. Maps and sections of parts of the sub-peat surface of the Lochar Gulf area, together with other data concerning the peat of Lochar Moss, were supplied by Mr R. A. Robertson and Mr P. J. Jowsey of the Macaulay Institute for Soil Research, Aberdeen. The text-figures were drawn by Mrs Margaret Leeper and the plate prepared by Mr D. MacLean. Mr A. Morrison, Dr. A. D. Gibbs, Dr. J. Mangerud and the late Mr R. J. Little contributed to fruitful discussions in the field and elsewhere. Special thanks are accorded to Professor T. Neville George, F.R.S., for his constant encouragement over the long period of research, for numerous stimulating discussions and his painstaking reading of several versions of the typescript. **Publication of this paper has been made possible by a financial contribution from the University of Glasgow and a grant from the Carnegie Trust for the Universities of Scotland towards the cost of printing the illustrations.**

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SALTMARSH

Its Accretion and Erosion at Caerlaverock National Nature Reserve, Dumfries

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Introduction

The rapid accretion and subsequent erosion of the merse (salt-marsh) at Caerlaverock has interested various authors and all have illustrated the development by producing a map with various high-water marks drawn on it.

This standard mapping method of coastal changes produces a confusion of lines in which lines of accretion and erosion appear on the same map. This study therefore attempts to illustrate the 'flow' of accretion of the merse and the subsequent pattern of erosion by using one map for accretion and one for erosion.

The mechanics of the merse development have been thoroughly documented by Marshall 1961 and therefore no attempt will be made to describe, other than in broad terms, the physiographic development of Caerlaverock merse but rather the following maps illustrate and up-date the findings of Marshall.

As this study relied on old maps the first requirement was to look at the quality of material available and to appreciate the mapping techniques and capabilities of early map-makers. The following maps not only demonstrate the merse development but also show the improvement and increasing sophistication of mapping techniques.

The boundaries of salt-marsh are most difficult to define with precision. Eroding salt-marsh is straightforward as a sharp edge is produced but accreting salt-marsh may have many edges. The seaward boundary of salt-marsh may be considered to be where the continuous vegetation ends, where the larger clumps of colonising vegetation end, or where the first tiny growth of a pioneer salt-marsh plant is found. Alternatively the edge may be defined by the high-water mark or low-water mark of one particular tide in the tidal cycle.

Apart from the topographical or botanical factors the surveyor must also be considered. He is usually concerned with mapping urban, agricultural, or industrial areas and rarely comes into contact with a salt-marsh. What is shown on the map is therefore one surveyor's interpretation of a salt-marsh edge. This interpretation may be different from that of a surveyor on the adjoining plan although they would ensure that adjoining maps fit together. The degree of accuracy will also depend on the hazards to be faced. A surveyor faced with a rising tide, a maze of creeks, and soft mud is obviously not as concerned with exact measurements as he would be on dry land.

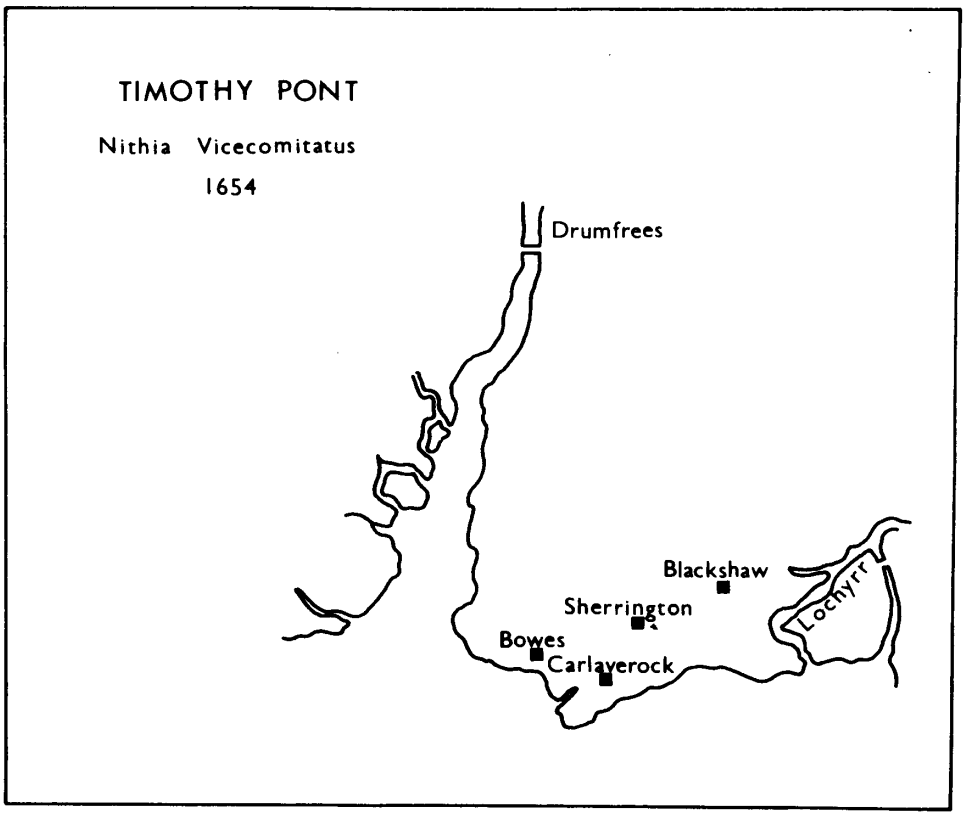
The above comments emphasise that, until the advent of air-photography, all mapping of salt-marsh must be treated with caution and often only broad conclusions can be drawn from the lines on early maps. Clearly the definition of the seaward edge of salt-marsh on any map is open to misinterpretation. In this study the seaward edge of the accreting merse surveyed in 1976 was considered to be the edge of the larger clumps of colonising vegetation.

Method

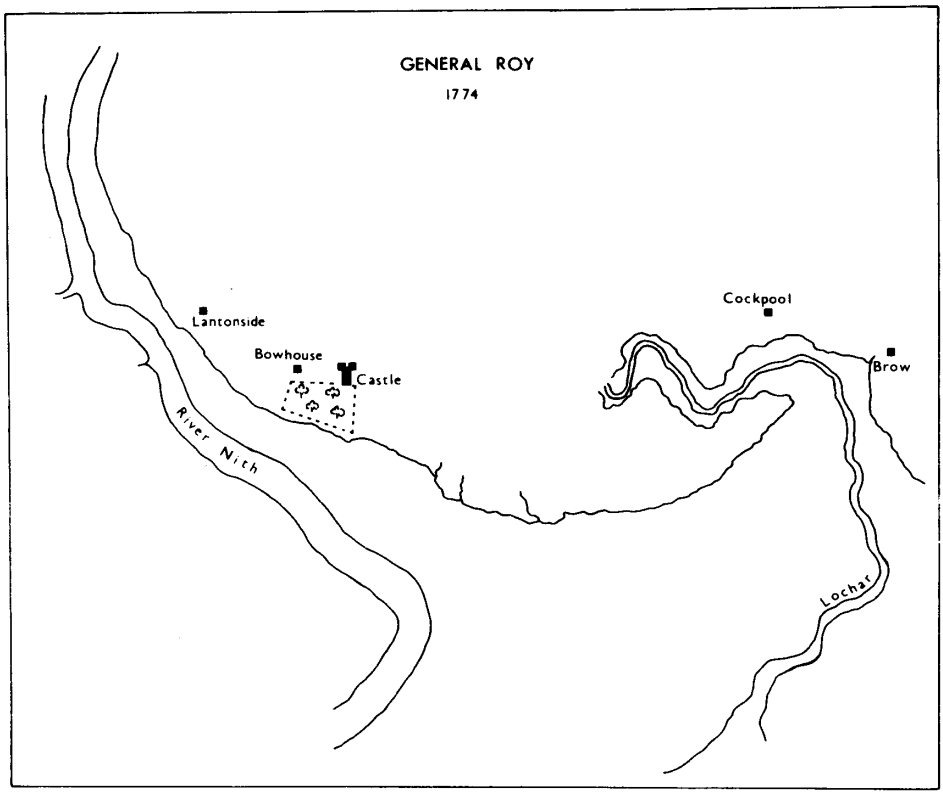
A total of 8 maps and 3 sets of air photographs were investigated. They were as follows :—

1654	Timothy Pont for Johan Blaeu's Atlas Novus
1774	General Roy's map
1804-1828	Crawford's map
Ordnance Survey maps	
1850	1:2500
1856	1:10560
1898	1:2500
1898	1:10560
1968	1:2500
R.A.F. Air photographs	
4.5.1946	1:9,960
26.5.1955	1:20,000 (approx.)
Meridian Air maps	
9.4.1973	1:10,000

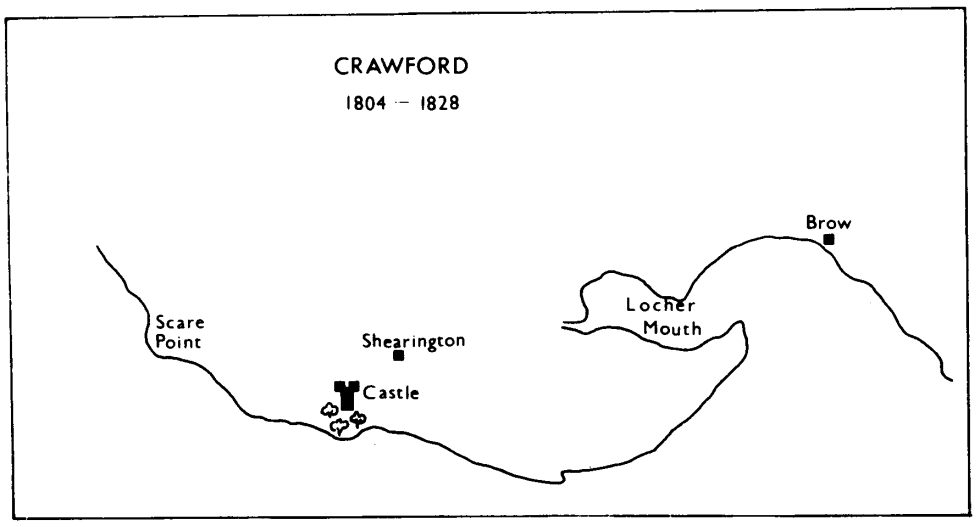
Detail to 1976 added by author.



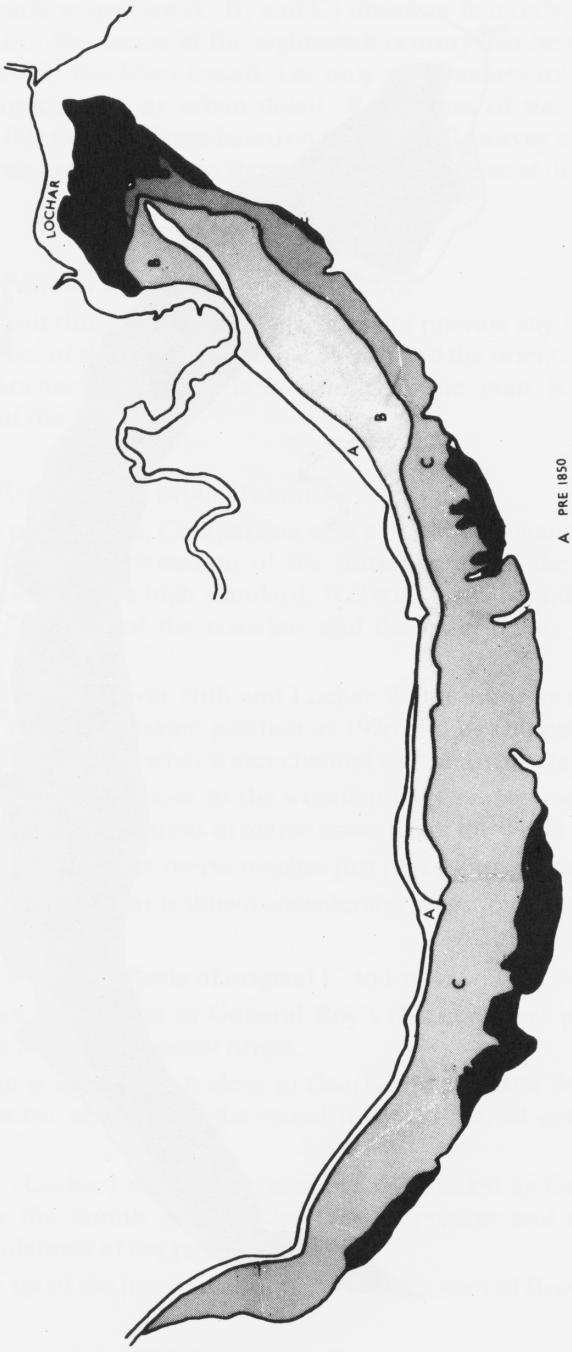
MAP A


GENERAL ROY
1774
Lantonside
Bowhouse
Castle
River Nith
Cockpool
Brow
Lochar

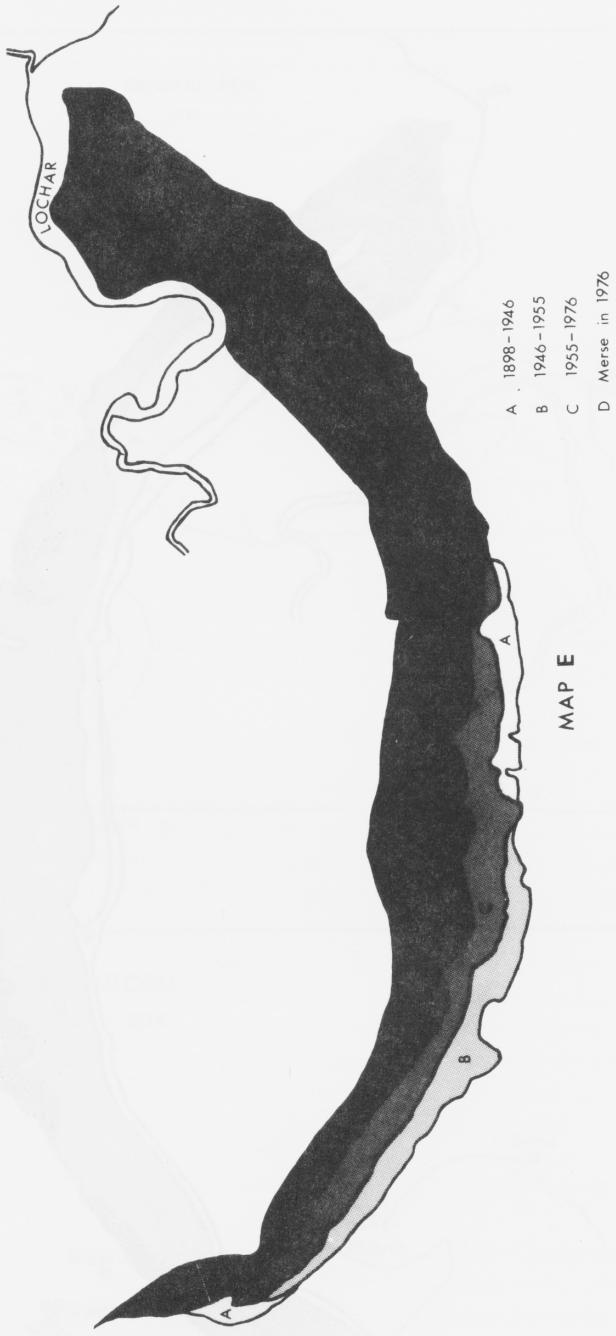
MAP B


CRAWFORD
1804 – 1828
Brow
Locher
Mouth
Scare
Point
Shearington
Castle

MAP C



MAP D



MAP E

The three early maps (see A, B, and C) illustrate that only broad conclusions about the extent of the mersé in the eighteenth century can be made. Only detail relevant to the study has been traced, i.e. only place names to assist location are shown but no agricultural or urban detail. Reductions of the Ordnance Survey 1:10,000 to 1:25,000 (see D, E) are based on the 1:2500 Resurvey of 1968. On maps D and E stippling has been applied to show the extent of merse at different periods.

Results

Map A

1654 Timothy Pont for Johan Blaeu's Atlas Novus.

This map about three miles to the inch does not provide any information on the merse. The channel of the River Nith is not shown and the orientation of Blackshaw and Lochyrr (Lochar) illustrates how unreliable the map is for drawing any conclusions about the coastline.

Map B

1774 General Roy. Scale of original about 1½" to 1 mile.

This is an excellent map. Comparison with a current Ordnance Survey 1:50,000 map will show that the orientation of the settlements and the interpretation of topographical details is of a high standard. It is with some confidence that one can accept the interpretation of the coastline and the main points of interest are as follows :

1. The channels of the River Nith and Lochar Water are shown. The River Nith is in approximately the same position as 1976 and by comparison with Map D the undulations in the Lochar water channel west of Brow are much shallower.
2. The coastline is drawn close to the woodland at Caerlaverock Castle showing that there were no large areas of merse seawards of the wood.
3. The easterly extent of the merse reaches just past south of Cockpool.
4. The mouth of the Lochar is shown considerably wider than at present.

Map C

Crawford 1804-1828 Scale of original 1" to 1 mile.

Although not as detailed as General Roy's this map does provide additional evidence that the merse is of recent origin.

1. The coastline is again shown close to Caerlaverock Castle Wood. If there had been any merse seaward of the wood it would almost certainly have been shown.
2. The Locher (Lochar) mouth although not as detailed as General Roy's map again shows the mouth much wider than at present and also confirms the shallow undulations of the river.
3. The easterly tip of the merse is about 1 mile south west of Brow.

1850-1860

During this period the Nith Navigation Commission straightened and confined the channel of the River Nith to enable shipping to reach Glencaple, three miles upriver from Caerlaverock Castle. A rubble wall was constructed along the west bank of the River Nith and the confining effect on the channel had a dramatic effect on the adjoining mudbanks as subsequent maps reveal.

Map D

Accretion

The first Ordnance Survey map shows an area of salt-marsh corresponding to Area A. Area B is shown as below High Water Ordinary Spring Tides but with a vegetation symbol and the annotation 'Inks'. This annotation 'Inks' is not in the Scottish Dictionary and is not used on any subsequent map. It presumably referred to accreting merse.

The accretion of salt-marsh therefore began east of Bowhouse Scar (600 metres south of Caerlaverock Castle) just prior to construction of the river wall. Bowhouse Scar is an outcrop of red sandstone which breaks the force of waves on the flood tide.

It is interesting that the area shown as A can be seen on Air photographs of 1946, 1955 and 1973. Area A is about 8 inches higher than merse where A and B meet and shows up on air photographs as a lighter area, presumably as it is better drained. The photograph testifies to the accuracy of the 1850 survey as the lighter area on the photographs agrees closely with the 1850 survey.

Area C 1898

This large new area of salt-marsh demonstrates the dramatic accumulation of material to form such an extensive area in the forty-eight years since 1850. The area directly south of Area B is above High Water Mark but the area west of Castle Wood is below High Water Mark and still accreting.

Area D 1946

It is unfortunate that the intervals between surveys should coincide with the maximum extent of the merse. Morss (1927) stated that the merse was still accreting west of Castle Wood in 1923 but that by 1927 when his work was published the merse had begun to erode.

Although area D is shown as accreted merse, as its extent is greater than area C, the seaward edge is actually an eroding edge. The actual extent of merse cannot be shown as there are no maps from the 1920's to show the maximum extent.

Area D is an accurate representation of the total accretion in the centre and east of the merse.

Area E 1976

Accretion is still occurring on the merse edge away from the effects of the channels of the River Nith and Lochar Water. The amount of accretion is minimal and does not compensate for the acreage lost by erosion.

Map E

Erosion

The River Nith Channel wall built in the 1860's had collapsed by the 1920's and although in 1976 the remains still confine the channel at Glencaple it had progressively less effect on the channel in the Caerlaverock area.

The flood tide of the River Nith channel meets the merse edge at an acute angle and erosion is rapid. With a south-westerly gale the sea pounds against the merse edge producing in places a cliff seven or eight feet high by ripping away chunks of merse. For a more detailed description of the mechanics of erosion see Marshall (1961).

Because there is no map available of the merse at its maximum extent in the 1920's the area shown as A is therefore not the total area eroded. There might have been a considerable area seaward of A which accreted and then eroded and went unrecorded.

Area B shown as the area eroded 1946-1955 was the last major area to be accreted and the area eroded 1927-1946 could be as large again as B.

Area C is a continuation of the effects of the River Nith channel except for the easterly tip which was due to a sudden westward shift in the Lochar channel in 1960.

It is interesting that the erosion on the western edge of Caerlaverock merse is due entirely to wave attack on the flood tide and contrasts with the undercutting on the ebb tide of the Lochar Water channel.

The Future

It seems likely that erosion will continue along the east bank of the River Nith and as this area is eroding at 25-45 ft per year there will be only a small area of merse south and west of the Castle in the year 2000.

The rates of erosion are not constant depending as they do on the angle of merse presented to the flood tide but the most extensive erosion was the 125 ft per year at Bowhouse, south west of the Castle, during the years 1946-1955. This area is now eroding at 25 ft per year on 1955-1973 and 1973-1976 measurements.

The most severe erosion at present is the 47 ft per year recorded 1973-1976 at the RAF Watchtower on Lantonside Merse. The watchtower provides a striking illustration of the rate of erosion as the 1946 air photograph clearly shows the tower in the centre of the merse whilst the tower is now, September 1976, perched on the edge with waves undercutting the concrete platform.

If the rates of erosion are assumed to have more or less stabilised after the dramatic inroads 1927-1955 then by the year 2000 all of the merse west and south of Caerlaverock Castle will have eroded back to the shore line of 1850.

The future of the merse east of Bowhouse Scar is much more difficult to predict as it is higher and protected by the sandstone outcrops of Bowhouse Scar. It seems likely that the accretion begun before the 1860 channel modifications will reach, through erosion, the area that would have accreted naturally. This level reached the merse, might be more or less stable with minor accretion and erosion produced by the shifting channels of the River Nith and Lochar Water channel.

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ACKNOWLEDGEMENTS

I am very grateful to Mr A. Truckell, Dumfries Museum, and Mr A. Adie, Estate Factor Norfolk Estates, for the loan of Maps. Mr E. T. Idle supervised and encouraged the study and provided constructive comments on an earlier draft.

THE INVERTEBRATE FAUNA OF A TIDAL MARSH AT CAERLAVEROCK, DUMFRIESSHIRE

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1. Introduction

Studies on the invertebrates of salt marshes have usually been directed towards the marine fauna; as a result insects have received less attention than their abundance merits. Green (1968) produced an interesting account summarising the biology of estuarine animals. The present study carried out between 1970-2 aimed to produce a qualitative description of invertebrates from the merse at Caerlaverock and to compare it with results obtained by others elsewhere in Europe.

2. The Locality

The study area was on the salt marsh at Caerlaverock National Nature Reserve on the Solway estuary about eight miles south-east of Dumfries. Its physical features have been described by Marshall (1961) while its vegetation falls into the Marsh B group of Adams (1978) being essentially grass dominated. Marshes in this group are found in western and southern Britain and from SW Sweden to the Netherlands. They occur on sandy sendiments and have a long history of grazing.

The merse is important as a winter feeding and roosting area for waders and wildfowl, especially barnacle geese. On the landward edge of the merse are ponds supporting a large population of natterjack toads which have been investigated by Bridson (1977-8).

Sample Area

A 300 metre transect was laid out from the tidal silt flats through the plant successions to the grazed field at Grid. Ref. NY 055649, south of the Wildfowl Trust development at East Park Farm. The merse rises gently to about 50 cms above the silty sand and then remains almost level until an old erosion face is reached 250 m from the merse edge. This forms an abrupt step of about 60 cms giving a marked change to the species composition of the flora.

The bare silt at the seaward edge is colonised by *Puccinellia maritima* which gives way to a mixed sward dominated by *Festuca rubra, Triglochin maritima, Plantago maritima* and *Glaux* with *Armeria maritima* and *Aster tripolium* less common. A zone dominated by *Juncus gerardii* lies below the erosion face and contains semi-permanent brackish pools up to 45 cms deep, which have steep banks supporting *Cochleria officinalis*. Above the erosion face there is a grazed field with a rich sward including *Festuca, Agrostis canina, Lotus corniculatus, Bellis* and *Carex* spp. Except in the *Juncus gerardii* zone the vegetation is closely grazed. In addition there are a number of deep creeks running through the merse which provide a refuge from the wind and hold a number of insect species characteristic of such habitats.

Tidal inundations of the merse

Theoretically the merse below the erosion step could be expected to be inundated by sea water about twelve times a year, but due to wind action piling up the water this number may be doubled. Flooding is liable to occur in any month of the year.

3. Methods

Sweep-netting was the chief method of sampling from May 1970 to October 1972 when visits were made to the merse mainly during the summer months. Sweeping was carried out in the main vegetation zones along the transect viz the *Puccinellia,* the *Festuca rubra,* the *Juncus gerardii* zones and the grazed grassland. In May 1971, however, lines of five pitfall traps 6.5 cm diameter were placed along the same transect line in the main vegetation types. The traps, containing water and a small quantity of detergent, were emptied daily at dusk and dawn for a week. In addition a limited amount of general collecting and stalking of the more evasive species was carried out, particularly in the creeks which by their nature did not favour other collecting methods.

4. The Invertebrate fauna of the merse

One hundred and two species were identified from the sample material and, with the exception of a single snail, all were arthropods of which eighty four were insects. This preponderance of insects may be partly a reflection of the collecting methods but insects are undoubtedly very abundant, perhaps more so in terms of individuals than species. A complete list of all species taken, with details of their occurrence, is given in the appendix to this paper. The more interesting species are commented upon in the following account. Insect nomenclature follows Kloet and Hincks (1964-1978).

Crustacea

The sand hopper *Orchestia gammarella* was abundant where coarse vegetation afforded it some shelter. Eales (1961) states that it occurs on more rocky ground amongst weed and decaying refuse, but not submerged. *Corophium volutator* was locally abundant in silt in the bottoms of the larger creeks and is an important item of food for birds.

Arachnida

Of the fifteen species of spider taken on the merse only one *Pardosa purbeckensis* is confined to this habitat. It was quite the most abundant arachnid trapped and has an elaborate behavioural adaptation to periodic immersion in salt-water described by Bristow (1923).

Insecta

Many orders of insects were represented in the catch. The Hemiptera-Heteroptera of the sample area at Caerlaverock has already been studied by Kenward (1973). One bug not taken by him, the saldid *Chiloxanthus pilosa,* deserves special mention; it was caught only at the merse edge and on the bare silt beyond. According to Southwood and Leston (1959) it occurs sparingly in east coast salt marshes from Kent to Durham and similarly on the west coast from south Lancashire to Dumfries. It is scarce at Caerlaverock but was found on salt flats at Annan by Brown (1946) and at Powfoot and Gretna by Murray (1938) so it appears to be widely distributed, but local.

The caddis fly *Limnephilus affinis* is one of the few British species whose larvae are able to survive in brackish water. Specimens of adults were taken near the merse edge but it is not confined to brackish habitats. Few moths were taken but the Tortricid *Lobesia litoralis* occurred in the *Puccinellia* zone where its larvae feed on

the flower-heads, shoots and leaves of *Armeria maritima*. It is locally plentiful on suitable coasts.

Beetles formed a very significant part of the catch. Two carabids of the genus *Dyschirius* occurred together burrowing into the surface at the merse edge. *D. politus* was considered by Lindroth (1974) to be associated with fine sand not always near water while *D. salinus* is a sea shore species found in clayey rather than sandy places. A third species *D. globosus* found at the landward end of the transect is very widely distributed on moist ground in all kinds of country. *Bembidion varium* occurs on moist clay with patchy vegetation, chiefly in salt marshes but also near fresh water. *B. minimum* also occurs on moist clay soils near the sea eg. under seaweed..

The rove-beetle *Bledius germanicus* was considered by Steel (1955) to be widespread and found in salt marshes, banks of dykes and sandy, clayey and muddy areas near the sea where the surface is always moist, but only infrequently covered by water. It is a burrowing species and is probably the prey of *Dyschirius* spp. which occur with them. *Heterocerus flexuosus* is perhaps more strictly confined to salt marshes than the other beetles. It is recorded by Clarke (1973) from coastal mud flats and salt marshes where it burrows into soft substrates. The soldier beetle *Cantharis rufa* was a rather surprising find in the *Festuca rubra* zone, its status as a resident being confirmed by the capture of numerous larvae in the pitfall traps.

Three species of flea beetle of the genus *Longitarsis* were found, two common species on *Plantago maritima,* and a third *L. plantagomaritima* in pitfall traps but not on its food plant, which is also *P. maritima.* The latter beetle is a rare species collected from the Solway by D. Sharp, on the shore near Kirkconnell Moss in 1868 and near Glencaple in 1867.

Hymenoptera were poorly represented in the collections though more work is required on the micro-hymenoptera. The abundance of the sawfly *Dolerus taeniatus* in the *Juncus gerardii* zone was unexpected as it is a southern species. Benson (1952) associates it with salt marshes but its larvae and food plant are unknown.

Diptera (two-winged flies) were the most numerous group of insects taken in the survey, as was found by Foster and Treherne (1976) who give an analysis of the insect fauna of salt marshes taken from a number of published lists. The tipulid *Erioptera stictica* was abundant on the merse, agreeing with Edwards (1938) who also found it inland but less commonly. Females were found oviposting near the merse edge. The biting midge *Culicoides circumscriptus* has been recorded from other Scottish salt marshes by Campbell and Pelham-Clinton (1960). The chironomid *Halocladius varians,* recorded by Coe (1950) from estuaries around Britain, was found breeding in salting pools around which adults were occasionally very abundant. The soldier fly *Nemotelus uliginosus* was numerous in the study area and its larvae were trapped on the merse edge sward. Rozkosny (1973) records larvae living among vegetation near the surface of standing water often by the seashore. Two very small empids normally associated with the seashore were captured, *Drapetis curvipes* and *Chersodromia cursitans.* Both have reduced wings and the latter species is found on wet sand and silt down to the water's edge. It also occurs inland in Scandinavia on the shores of streams and lakes but has only rarely been taken in Britain. Two larger species *Rhamophomyia simplex* and *Hilara lundbecki* both regarded by Collin (1961) as essentially salt marsh species were very abundant, the former in the *Juncus gerardii*

zone and the latter flying rapidly over water surfaces in creek bottoms and less frequently on the merse proper. As dolichopodids are a feature of marshy localities, it was not surprising that a number of species were present on the merse, including several species extremely uncommon in Britain; *Syntormon filiger* was found at the merse edge and *Dolichopus latipennis* was swept mainly from the sides of creeks. Adults of three species abundant in the study are a *Dolichopus nubilus, Porphyrops consobrina and Hydrophorus oceanus* have been reared by Dyte (1959) from larvae found in intertidal estuarine mud. Another interesting fly found was the trypetid *Paroxyna plantiginis* whose larvae feed in and deform the flower heads of *Aster tripolium*. *Melieria cana* also occurred at the merse edge and has been found on other salt marshes though nothing is known of its biology. The sphaerocerid *Leptocera fuscipennis* was common on the muddy bottoms of creeks and has been recorded from similar habitats by Richards (1930). Two predatory flies *Scathophaga litorea* and *Lispe litorea* were both common in the creeks and are locally abundant round the coast of Britain.

Vagrant species

A comparatively small number of species were taken which clearly do not belong to the salt marsh fauna. At the landward end of the transect species appeared which are at the limit of their range on the merse, such as weevils, most staphylinids and strong-flying hoverflies and bees. Some species such as the lace wing *Kimminsia subnebulosa* appear to have been blown on to the merse. The effect of wind was clearly shown on 28 May 1970 when many live insects of terrestial origin were seen up to 400 m beyond the merse, stranded on the surface of wet silt. The species noted included the shield bug *Pentatoma rufipes* (L), dung beetles *Aphodius* spp. and many flies, the largest and most obvious of which were the bibionid *Bibio marci* (L) and the empid *Megacyttarus crassirostris* Fln.

Diurnal Activity

As the pitfall traps were emptied at dawn and dusk some information was gained on the periods of activity of trapped invertebrates. Most species were markedly more active during the daylight hours but two species *Orchestia gammarella* and *Pachygnatha clerki* were more active at night.

5. Discussion

Among the few studies that have been made on the insect fauna of tidal salt marshes are those of Paviour-Smith (1956), Davis and Grey (1966), Heydemann (1967) and Stebbings (1971). The first two papers deal with salt marshes in New Zealand and Carolina and are not directly relevant to the British fauna. Stebbings provides an account of the invertebrates of a tidal marsh in Cornwall but his list contains few characteristic salt marsh species. The reason for this is not obvious but possibly reflects the upper estuarine situation of his transect. He found that the number of species taken increased inland from the seaward edge of the marsh but this was not so obvious at Caerlaverock. Heydemann's account is extremely detailed but only deals with a limited portion of the fauna. He investigated the spiders, beetles, bugs and ants and gave results for the lower and upper *Puccinellia* and the *Festuca rubra* zones. At Caerlaverock it was not possible to divide the *Puccinellia* zone but the species recorded at Caerlaverock show considerable similarity to those in

Germany. Thus over 70% of the spiders and 33% of the beetle species taken in this survey also occurred on the German salt marsh. In view of its continental situation more species should undoubtedly occur on the German marsh but further species common to the two faunas would probably be added if trapping were done at Caerlaverock in the autumn. Heydemann found that on moving inland species became more abundant but at Caerlaverock a number of species were taken only at the seaward edge of the merse. There is considerable similarity between the Caerlaverock fauna and the species recorded from Spurn Point, Yorkshire by Hincks et al (1951-4), but direct comparison is difficult because a greater variety of habitats were investigated at Spurn. It is interesting that over 50% of the species found at Caerlaverock also occurred at Spurn.

Most of the species found in this survey are widespread around the British coast. Comparatively few are restricted to salt marshes and many can be found in other coastal habitats. Other species may also be found in freshwater marshes occassionally some distance from the coast. This is explained by the wide range of conditions tolerated by the immature stages, a feature characteristic of many insects and especially flies.

From a distributional point of view there is no evidence of northern or even north western elements in the fauna. A number of southern species were recorded at the northern limit of their known distribution such as the bug *Chiloxanthus pilosus,* the sawfly *Dolerus taeniatus* and the flies *Dolichopus latipennis, Syntormon filiger* and *Chersodromia cursitans.*

The relative importance of the habitats for insects is difficult to assess but the merse edge is outstanding due to the concentration of uncommon and intersting species to be found there. The creeks give shelter from the wind and provide habitats for the rare flies *Dolichopus latipennis* and *Rhaphium consobrinum* and are also important as feeding places for birds such as lapwing and redshank. On the merse proper there is little evidence of birds feeding on invertebrates though most are active in daylight and presumably at risk.

This study was not as comprehensive as originally intended and further work will no doubt reveal additional species on the merse. Perhaps the most obvious gap in our knowledge relates to the biology of the species recorded which generally is little known. In addition to its specialised fauna the salt marsh habitat provides a refuge for some insects forced from the land by habitat destruction. At the same time the habitat provides a reservoir of species able to colonise less permanent sites especially marshy ones in the hinterland.

Throughout the world salt marshes are under pressure not only from direct reclamation but more insidiously from pollution. The Solway merses have largely escaped these influences thus considerably increasing their importance for wildlife conservation.

Acknowledgements

I would like to thank Dr D. S. Ranwell and J. McCarthy for the interest they took in this project at its outset. Invaluable assistance with identification was obtained from a number of people. Dr S. Smith Mollusca; Dr S. McGrorty *Orchestia;* J. Parker, Aranea; Dr M. L. Luff, Carabidae; P. M. Hammond various families of Coleoptera; Mrs S. L. Shute, *Longitarsis;* Dr R. A. Crowson, Curculionidae; J. Quinlan, Symphyta; K. G. V. Smith *Chersodromia,* and E. C. M. Assis Fonseca who provided a list of species he collected at Caerlaverock and helped with the Dolichopodidae.

Much help was obtained from the Nature Conservancy Council wardens, E. Langley Roberts and Robbie Bridson and Colin Campbell of the Wildfowl Trust who also maintained an interest in the survey. Finally I am most grateful to Dr D. S. Ranwell, Miss N. Gordon, A. J. Kerr and A. E. Stubbs for their help with the manuscript.

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Appendix

	Puccinellia zone	Festuca rubra zone	Juncus gerardii zone	Grazed field	Creeks
Mollusca					
Oxyloma pfeifferi (Rossmassler)			++		
Crustacea					
Orchestia gammarella (Pallas)		+++	+++	++	
Corophium volutator (Pallas)					+++
Arachnida					
Pardosa purbeckensis F.O.P. — Cambridge	++	+++	++	+++	
Pirata piraticus (Clerk)	+	++	++	++	
Pachygnatha clercki Sundevall		++	++	++	
P. degeeri Sundevall				++	
Walkenaera kochi (O.P. — Cambridge)			+	+	
Oedothorax fuscus (Blackwall)				+	
O. retusus (Westring)		+		++	
Silometopus ambiguus (O.P. — Cambridge)	+	+	+	++	
Perimones britteni (Jackson)		+	+		
Savignya frontata (Blackwell)			++	++	
Diplocephalus permixtus (O.P. — Cambridge)		+		+	
Erigone dentipalpis (Wider)		+			
E. atra (Blackwall)				+	
E. longipalpis (Sundevall)	++	++		+	
Agyneta decora (O.P. — Cambridge)			+	++	
Insecta					
Hemiptera					
Chiloxanthus pilosus (Fallen)	++				
Saldula pallipes (Fabricius)	++				
Arctorthezia cataphracta (Olafsen)			++	+	
Neuroptera					
Kimminsia subnebulosa (Stephens)				+	
Trichoptera					
Limnephilus affinis Curtis	+				
Lepidoptera					
Lobesia littoralis (Humphreys and Westwood)	++				
Coleoptera					
Dyschirius globosus (Herbst)			++	++	
D. politus (Dejean)	++	++			
D. salinus Schaum	++	++			
Bembidion bipunctatum (Linnaeus)		++			
B. varium (Olivier)					+
B. minimum (Fabricius)		++			+
B. aeneum Germar		++	+		
Pterostichus strenuus (Panzer)				+	
Ochthebius dilatatus Stephens		++	++	+	
Micropeplus porcatus (Paykull)		+			
Bledius germanicus Wagner	+	++			
Xantholinus longiventris Heer			+	++	
Philonthus varius (Gyllenhal)				++	
Tachyporus pusillus Gravenhorst			+	++	
Oxypoda brachyptera (Stephens)				+	
Heterocerus flexuosus Stephens	++	++			

Species occurrence + = scarce ++ frequent +++ very abundant.

	Puccinellia zone	Festuca rubra zone	Juncus gerardii zone	Grazed field	Creeks
Insecta (contd.)					
Coleoptera (contd.)					
Dryops ernesti des Gozis			++	++	
Agriotes lineatus (Linnaeus)				++	
Cantharis rufa Linnaeus		++		+	
Chrysolina staphylaea (Linnaeus)		+			
Apion virens Herbst				++	
Longitarsis plantagomaritimus Dollman	+	++	+	+	
L. membranaceus (Foudras)		+			
L. pratensis (Panzer)		++			
Phyllobius pyri (Linnaeus)			+	+	
Polydrusus chrysomela (Olivier)		+		++	
Sitona puncticollis Stephens		+			
Notaris bimaculatus (Fabricius)				++	
Ceuthorhynchidius troglodytes (Fabricius)	+				
Limnobaris pilistriata (Stephens)			+		
Hymenoptera					
Dolerus taeniatus Zaddach		+	+++		
D. picipes (Klug)		+		+	
Selandria serva (Fabricius)		+			
Halictus calceatum (Scopoli)	+				
Bombus lucorum (Linnaeus)	+				
Diptera					
Erioptera stictica (Meigen)	++	++	+	+	
Culicoides circumscriptus Kieffer	++	++			
Haloclaadius varians (Staeger)		++	++		
Dilophus febrilis (Linnaeus)				+	
Nemotelus uliginosus (Linnaeus)	++			++	
Drapetis curvipes (Meigen)		+	+		
Chersodromia cursitans (Zetterstedt)	++				
Microphorus holosericeus (Meigen)				+	
Rhamphomyia simplex Zetterstedt		++	+++	++	
Hilara chorica (Fallen)					+
H. lundbecki Frey	++	++	+	+	+++
Dolichopus clavipes Haliday	++	+		++	+
D. nubilus Meigen				++	
D. plumipes (Scopoli)				++	
D. sabinus Haliday	++				
D. diadema Haliday					++
D. latipennis Fallen				++	++
Hydrophorus oceanus (Macquart)	++	++			+++
Rhaphium consobrinum Zetterstedt		++		+	+++
Syntormon filiger Verrall	++				
S. pallipes (Fabricius)	++		++	+	
S. tarsatus (Fallen)				+	
Campsicnemus armatus (Zetterstedt)	++			+	
Helophilus hybridus Loew	+				
H. pendulus (Linnaeus)			+		
Eristalis abusivus Collin					+
Paroxyna plantaginis (Haliday)				++	
Melieria cana (Loew)	++				

Species occurrence + = scarce ++ frequent +++ very abundant.

	Puccinellia zone	Festuca rubra zone	Juncus gerardii zone	Grazed field	Creeks
Insecta (contd.)					
Sepsis cynipsea (Linnaeus)		++			
Copromyza similis (Collin)		+		++	
Leptocera fuscipennis (Haliday)					++
L. coxata (Stenhammar)			++		
L. clunipes (Meigen)	+				
Hydrellia griseola (Fallen)	+				
Scatella sp.					++
Eriothrix prolixa (Meigen)				+	
Scathophaga litorea Fallen	+	+	++	++	++
Hylemya variata (Fallen)				++	
Paregle cinerella (Fallen)				++	
Pseudonupedia intersecta (Meigen)				++	
Helina duplicata (Meigen)			++	++	+
Lispe litorea Fallen					++
Coenosia tigrina (Fabricius)	+			++	+
Total number of species caught at each station	33	41	31	55	17

Species occurrence + = scarce ++ frequent +++ very abundant.

A ROMAN BURIAL AT HIGH TORRS, LUCE SANDS, WIGTOWNSHIRE

By David J. Breeze and J. N. Graham Ritchie

Summary

In 1931 Ludovic Mann undertook the rescue excavation of a small cairn at High Torrs, Wigtownshire, recording the presence of a cremated burial accompanied by fragments of two samian vessels of later second-or early third-century date, a finger-ring with a nicolo intaglio and a number of iron objects, which he interpretated as weapons. Re-examination of the material suggests that the iron-work did not include any weapons, and the military nature of the burial is thus lessened. The finds are catalogued in detail for the first time and the nature of the burial discussed.

Introduction

In 1975 the authors assisted in the excavation of a cist burial with iron weapons at Camelon, Stirlingshire, and in the accompanying report discussed the problems of suggesting the 'nationality' of the buried warriors (Breeze *et al.* 1976). Recent field-work in the Luce Sands, Wigtownshire, now in the Wigtown District of Dumfries and Galloway Region, by members of the Central Excavation Unit of the Scottish Development Department brought to the authors' attention a burial excavated in the 1930s where similar problems exist, and this supplementary note is designed to examine these aspects of this unusual site. Several of the finds have been discussed since Ludovic MacLellan Mann's initial publication, in his Presidential Address to the Glasgow Archaeological Society (Mann 1933, 146-51; cf also, *The Glasgow Herald,* 20 March 1931), notably by Curle (1932, 375-6), Robertson (1970, Table vii) and Henig (1969, 104-7; 1974, 36, no. 235). The iron objects found in the grave, however, have not been examined for forty years and misconceptions about their identifications have persisted, particularly as no detailed finds-catalogue has previously been prepared. Although Mann described and illustrated several pieces as fragmentary weapons, re-examination of the objects has demonstrated that this is not correct. The finds are described below and illustrated on Fig. 1 and Pl. II.

The circumstances of the discovery and excavation in 1931 are these.

A large number of rough undressed boulders (*The Glasgow Herald,* 20 March 1931) forming a cairn were found some 200m west of a grassy mound in the dunes known as Horse Hill in Torrs Warren (*NGR* NX 141556). Some impression of the size of the boulders may be gained from the fact that Mann describes the smallest of the stones as requiring two men to move it, and each of the others as weighing about a quarter of a ton. These stones covered a deposit of calcined bones, charcoal, burnt stones and a number of artefacts including a small bronze ring, pieces of an iron vessel and other iron fragments (Mann's weapons), iron nails, fragments of samian and coarse ware vessels, and an iron finger-ring with onyx intaglio. Mann (1933, 147) felt that 'the cremated remains had been gathered together and buried on the spot', and then covered by the boulders; he considered that it was the burial of a Roman warrior, its remoteness from known Roman military works suggesting that the body was that of a sailor of the Roman fleet. Curle and Robertson include the objects in their discussion of Roman objects from native sites, thus implying a non-Roman

context for the burial. Henig, on the other hand, prefers Mann's view that the deposition is of Roman origin and suggests that it was the burial of a Roman auxiliary soldier (1969, 106-7; 1974, 36). However, such discussions have taken place under the assumption that some of the iron objects were weapons (a sword and two spears); re-examination of the small finds has shown conclusively that all are civilian in character, but it is possible that the surviving fragments represent only part of the original deposit.

The Finds

1. Onyx set in an iron finger-ring (Pl. II). The ring has an external breadth of 28mm and an internal breadth of 17mm; the width across the bezel is 17mm and at the narrowest part is 4mm. It has a wide hoop at the bezel which narrows from the shoulders, in order to allow free movement of the finger joints. The intaglio is of nicolo (an onyx with a light blue upper surface on a very dark ground); the upper layer is thin and wear has been considerable, part of the surface being chipped and almost all of it rubbed. The intaglio measures 15mm by about 13mm (the bevelled upper surface being 10.5mm x 8mm). The subject is Minerva wearing a belted peplos

Plate II
A Roman Burial at High Torrs, Luce Sands, Wigtownshire: the intaglio

and a crested helmet, standing front and facing left; she holds a Victory clutching a wreath in her right hand and a shield and spear in her left. (Henig 1969, 104-7, pl x, right; 1974, 36, no. 235).

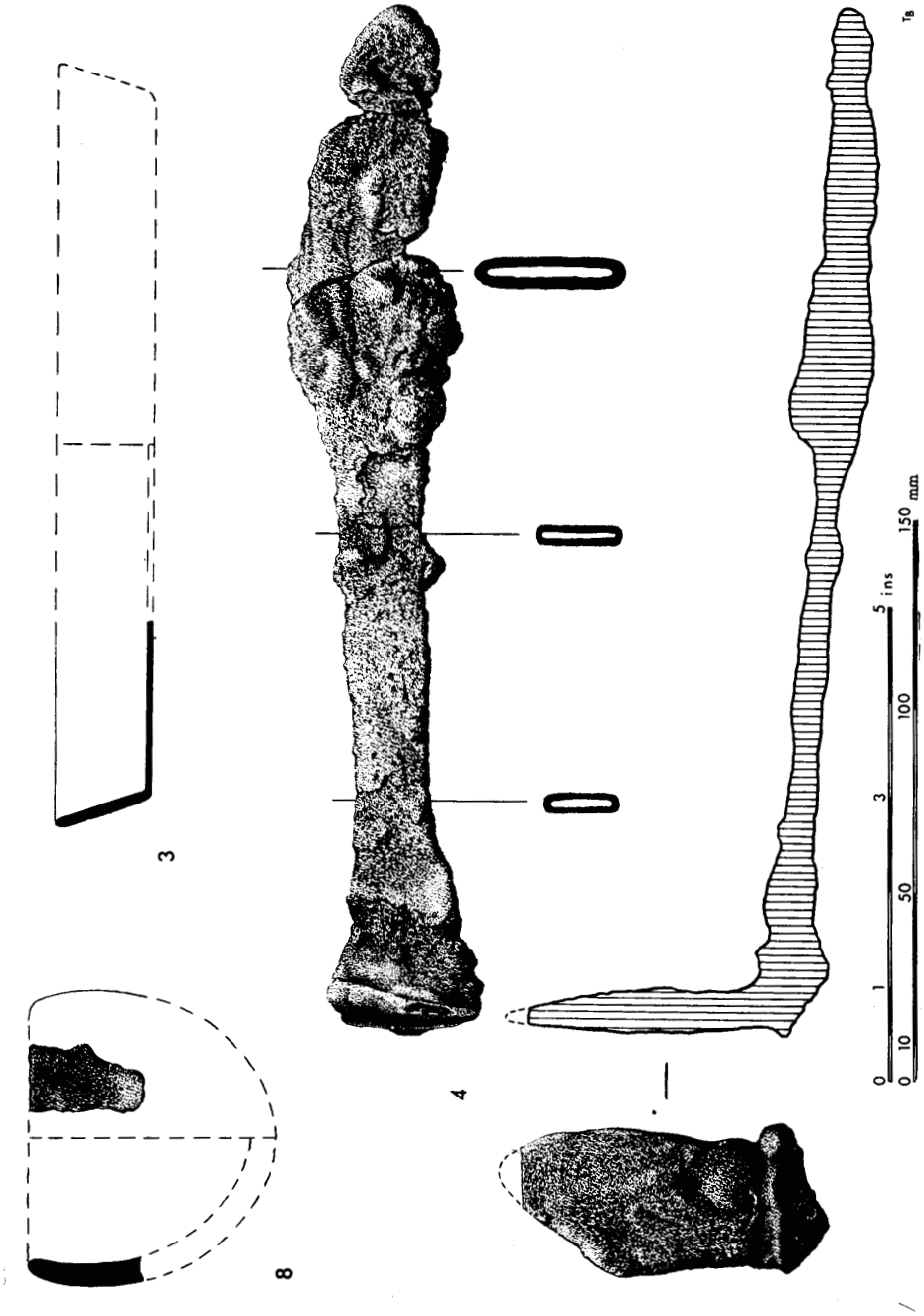

Fig. 1
A Roman Burial at High Torrs, Luce Sands, Wigtownshire: the artefacts.

2. Tiny fragment of bronze 6mm long, rectangular section (1mm x 0.7mm); possibly part of a ring; Mann records that 'the major portion of a small plain ring of bronze' was recovered (1933, 147) and he illustrated rather less than half of the ring. This small portion is apparently all that has survived.

3. Fragments of an iron dish (Mann's 'plating') with a base diameter of approximately 185mm and side-walls approximately 25mm high (Fig 1).

Dr. W. H. Manning has kindly commented on this object:

"Certain identification of a fragment such as this is impossible, but the height of the wall suggests that it is more likely to have come from a pan or dish than from an open lamp, which would be the obvious alternative. The form of iron pan which is most often found in Roman contexts is the frying pan, although they are far from common. They usually have a hinged handle which could be folded across the body of the pan when it was not in use. In shape the pan can be oval or round. The sharp angle of the junction of the wall and base is characteristic of these vessels, as is the sloping wall, and although certainty is impossible it appears extremely probable that this fragment is from such a pan. They are found in iron and bronze. Iron examples are known in Britain from London (Wheeler, 1946, 118, fig. 41.1), Colchester (Hull, 1958, 247), the Appleford hoard, Berkshire (Brown, 1973, 199; no. 30), Usk Legionary Fortress (National Museum of Wales, Cardiff), Icklingham, Suffolk (British Museum) and ?Rushall Down, Wiltshire (British Museum)."

4. Bent iron object (Mann's fragments of two spearheads, one bent, and fragmentary sword blade), 275mm long with an additional 70mm bent, varying in width from 20mm to 46mm; the metal has rusted away, leaving only the corrosion, as indicated by the sections on Fig. 1. X-ray shows no sign of fracture on the bend.

Dr. W. H. Manning comments:—

"The form of this piece strongly suggests that it was the corner binding of a chest of some form. The expanded ends of the arms are found on pieces of this type as well as on U-shaped hinges; in this case it seems almost certain that we are dealing with a binding. Small examples of this general type were found on a wooden chest excavated at the Bradwell, Bucks., Roman villa (*Antiq J*, 57 (1977), 330, fig. 4)."

5. Two hob-nails, 18mm long.

6. Two round nails, two square ?nails and five unidentifiable fragments of iron. All these pieces were X-rayed, but no further information came to light.

7. Slag by Elizabeth Slater

A sample of porous, vitrified material, weighing 77 g, generally brown in colour. It was non-uniform in colour and density and therefore five samples were taken for analysis, the samples chosen to cover the visible variations. These samples were examined using X-ray diffraction and electron probe microanalysis. The main constituents were iron, iron oxides and silicates, with their proportions varying between samples. This is a composition similar to that of the slag produced during iron smelting.

8. Rim fragment of a crucible with a diameter of approximately 700mm, thin-walled (5mm thick), whitish fabric with a slag-like deposit on the outside (Fig. 1).

9. Five tiny scraps of pottery, often with only one surface present.

Samian ware by B. R. Hartley

10. Nine small fragments from a Central Gaulish jar of Dechelette form 72. Most examples of this form and its East Gaulish equivalents in the Ludowici VS range have so-called 'cut-glass' decoration (Oswald and Pryce 1920, pl lxxvii). This particular jar has the simplest form of over-all faceting (Oswald and Pryce 1920, no. 4). Form 72 was introduced at Lezoux *c.* A.D. 150 and continued in use until the end of the second century.

11. Form 37, East Gaulish. The tongueless ovolo (Ricken-Fischer 1963, E66) is one used at Rheinzabern occasionally by Comitialis, and it was also used by Mammilianus. Both potters worked in the period. It is interesting to have another example of late samian from a civilian context in Scotland to add to the list in Hartley 1972, 54. *c.* A.D. 180-220.

12. Cremated bone by Mary Harman

The deposit, weighing 140g, contains several fragments (few over 20mm square) of well calcined bone, many of them from long bone shafts. Some bits of tooth enamel (probably from a cattle molar) and of horn core (from cattle or sheep/goat) were recognised, together with a few pieces with parts of articular surfaces on them, but not enough for identification. While there is no positive evidence of the presence of anything other than animal remains, it is possible that the deposit may also include some human remains.

13. Charcoal by Camilla A. Dickson

The identified charcoal, all of which could have come from nearby woodland, comprises :

Alnus (alder), Betula (birch), Quercus (oak), Salix (willow) and Ulmus (elm).

The Burial-Rite

The mounding together of the stones to form a cairn leaves little doubt that this was a burial-deposit even though, as in a number of other burials, the bones are too comminuted to provide positive evidence for the identification of human remains. The stone cairn may be seen to echo the practice of earlier centuries as the highland counterpart of the lowland round barrow of Roman Britain (Dunning and Jessup 1936; Jessup 1959) or of the masonry mausolea found throughout the Roman world. Other cairns have been found in Roman Britain. Of particular interest here are the four masonry-built tombs, three square and one round outside the fort at High Rochester in Northumberland (Bosanquet 1934,246-51, fig. on 272; Richmond 1940, 104 for plan). The round tomb contained a cremation accompanied by pottery, glass vessels and a coin of Severus Alexander (222-235). As at High Torrs, the body had been cremated on the spot and the tomb built round the pyre (Mann 1933, 247). Single cremations were not always marked by a cairn, as for example the funeral pyre of a Roman soldier a little south of the fort at Beckfoot in Cumbria (Hogg 1949). Here the weapons which accompanied the cremation were a spear head, bent sword, arrow head and possibly part of a shield boss.

The body at High Torrs was accompanied by personal effects and by vessels which apparently contained food for the after-life (cf. Liversidge 1968, 468-99, for general discussion). Animal bones were found amongst the burnt debris in the cremation area at Trentholme Drive, York, and the excavator considered that they 'had unquestionably been buried deliberately with the dead' (Wenham 1968, 106). In

addition, bones of game-birds were found in five pots, egg-shells in four pots, while the molar of an ox and another of a sheep or goat had almost certainly been placed in another jar (Wenham 1968, 105). A first-century inhumation at Guilden Morden in Cambridgeshire contained four mutton cutlets placed on a plate (Liversedge 1968, 487). In Barrow no. 4 at Bartlow Hills in Essex, the metal and pottery vessels were accompanied by the bones of a bird, probably a chicken, placed in a second-century samian dish (Dunning and Jessup 1936, 49). The deposition of food in a burial is not, of course, a Roman prerogative; at Burnmouth, Berwickshire, for example, an Iron Age inhumation was accompanied by a number of pig bones (Craw 1924, 143).

The Deceased

The precise date of the burial at High Torrs is not known. However, the fragments of two samian vessels indicate a date in the later second or early third centuries, that is after the withdrawal of most Roman troops from Scotland at the end of the Antonine period of occupation. Samian sherds sometimes appear in later contexts as isolated finds (*cf* Alcock 1963, 22-5) but as the High Torrs fragments were found with other Roman material there is no reason why the date should not be accepted at face value.

The burial may be compared to a number of native burials in Scotland and Ireland containing Roman objects, even though this area was well away from the main lines of communication and would have been little influenced by Romanisation at any time. For example, an inhumation in a cist, found at Airlie in Angus in 1885, was accompanied by a glass cup probably dating to the third or fourth century (Curle 1932, 386-7, no. 65). An empty cist in a cairn, excavated at Cairnhill, Monquhitter in 1894, included part of an armlet, an intaglio (Henig 1974, 30, no. 178), two small glass balls, a bead and a medallion (Curle 1932, 389-90, no. 73; Stevenson 1967) as well as a collection of over forty natural stones, including fossil sea-urchins and pebbles which may have had magical associations, though this should perhaps be regarded as a cache rather than a burial deposit. At Waulkmill, Tarland, six playing-men, a bronze cup and a silver penannular brooch, which were found in 1898, were probably associated with one or more interments (Curle 1932, 390-1, no. 74). Further north, in Westray, Orkney, a cist found in 1827 contained fragments of a glass cup of the same type as that found at Airlie (Curle 1932, 395, no. 88).

In Ireland, long-cists at Bray Head, County Wicklow, discovered in 1835, contained skeletons each accompanied by one or two coins, including a number said to be Trajanic and Hadrianic (Bateson 1973, 30, 45, Warner 1976, 275). More unusual is the burial from Stoneyford, County Kilkenny, where a cremation deposit protected by stones was found within a rath; the burial was contained within an urn of light green glass and was accompanied by a glass unguent bottle and a circular bronze mirror, which had been used as a cover for the cinerary vessel (Bateson 1973, 30, 72). Dr. D. B. Harden examined Sir Wollaston Franks' sketches of the glass, which is now broken, and suggested a late first to second century date (Jope and Wilson 1957, 88, note 12; see *Antiq J*, 2 (1922), 380.)

The use of cremation, however, at High Torrs indicates Roman influence on the burial-ritual. Local practice in Scotland at this time was generally inhumation; the Romans, however, cremated their dead. Inhumation as a form of burial became popular in Rome under Hadrian but it took some time for the practice to spread to

Britain, where the earliest inhumations date to the late second century (Breeze *et al.* 1976, 80). Roman cremation-burials have been found in Scotland near Cramond, at Newstead where the deposits dated to the late first century (Curle 1911, 19) and at Croy Hill, where the burial is of mid-second century date (*DES* (*1976*), 29). The inclusion of a coin with each interment at Bray Head, near Dublin, also points to Roman influence.

Bateson (1973, 29-30) has suggested a number of motives which might have caused the import of Roman finds to Ireland, and the same motives can be applied to Scotland: the objects might have been brought home by natives returning from raids or after service in the Roman army; they could have been introduced by Romans on campaign, in the course of trading, on religious missions or simply while travelling or exploring; refugees from the empire may have brought Roman objects with them. The Roman influence as reflected in the burial practice at Stoneyford and High Torrs seems to rule out the possibility that the deceased were raiders; it is also unlikely that they were Roman army veterans. The Roman army drew their recruits from beyond the frontier from the first to the fourth century AD. Of particular relevance to Britain is service of Free Germans in the Roman army. It is interesting to note that in the scanty available sources there is no reference to the return of any German, or indeed other barbarian, to his homeland on completion of his army service. It may be assumed that, like most other army veterans, they settled on retirement in the village or town outside their fort. It would seem unlikely, therefore, that these are the burials of army veterans.

There is no evidence that Roman soldiers ever set foot on Irish soil, nor, however, is there any evidence that they did not. Soldiers travelling by ship could have been blown off course, army detachments may have chased bandits or brigands to Ireland or gone there on diplomatic missions or simply on journeys of exploration. Nevertheless, it is perhaps unlikely that a soldier would have wandered as far inland as Stoneyford. High Torrs, on the other hand, is on the coast, in an area within the Roman sphere of influence. The grave could well be of a Roman soldier, as Mann suggested, or of a trader, a missionary, an adventurer or explorer.

The concept of refugees fleeing in front of the Roman advance has for long been favoured by some archaeologists, providing, as it does, an understandable mechanism for the transmission of ideas or objects over long distances. One example is a burial from Donaghadee, County Down, of a person who, from the accompanying grave-goods, appears to have little in common with the local cultural milieu. Jope and Wilson (1957) suggested that this burial, possibly by cremation, is perhaps most likely to be that of a refugee from southern England.

Trade may seem to be the most straightforward way in which glass and bronze vessels and objects would find their way into northern Scotland and Ireland. Thus their appearance as grave-gods in burials should occasion no particular surprise, though it may be asked which persons in the local Iron Age society would purchase or acquire glass vessels. The affinity of the cremations at High Torrs and Stoneyford to Roman burial-practices, however, implies that these are the graves not of natives but of Romans. It seems reasonable to suppose that traders would be more numerous than missionaries, travellers, adventurers or refugees. Soldiers may well have found their way into south-west Scotland, but less likely to the interior of Ireland.

The only hint from the artefacts at the occupation of the deceased lies in the appearance of slag and part of a crucible among the material in the cremation. These objects may suggest that the deceased was an itinerant smith. Such men are considered to have existed in earlier centuries, but evidence for their existence in Roman Britain is lacking, though smith's shops and hoards are known (Liversidge 1968, 187-90).

There are perhaps only two objections to Mann's view that this was a Roman passer-by (Mann 1933, 148). First it must have taken some time and effort to erect a cairn consisting of stones, the smallest of which took two men to move. Secondly a considerable quantity of wood would be required for the cremation; the allowance of wood for the cremation of Indian soldiers during the First World War was one ton (Davidson 1952, 65). The cremation of the dead and the erection of a burial cairn was clearly a major undertaking. It may be questioned whether a merchant would go to so much trouble and expense. A soldier is perhaps more likely than a merchant to have had travelling companions prepared to give him a decent burial: the lack of weapons is not relevant in a consideration of the identity of the deceased as Roman soldiers were rarely buried with their weapons or armour (Breeze *et al.* 1976).

The objects in the burial at High Torrs are not the only Roman artefacts from Luce Sands. Other finds from the area include two trumpet brooches, two 'safety-pin' brooches, the handle of a key, a buckle considered to be Roman, two melon beads and two fourth-century coins. However, as Professor Robertson's distribution maps demonstrate (Robertson 1970, figs 1-4), this is not a particularly strong density of finds, even compared with areas outside the province. It therefore seems unlikely that those casual finds have any relevance to the discussion of the burial.

In summary, the use of Roman burial-practice at High Torrs implies that the deceased was a Roman traveller rather than a Romanized native. The deceased is perhaps most likely to have been a sailor or soldier as Mann (1933, 148) suggested, or a merchant, possibly a smith.

Acknowledgements

The writers are indebted to many colleagues who have helped with the preparation of this short account. Miss Helen Adamson, Glasgow Art Gallery and Museum, gave permission for the objects to be studied and took X-rays of the iron fragments to help with their identification. Mr Tom Borthwick, Scottish Development Department (Ancient Monuments), kindly drew the recognisable iron objects and the crucible fragments (Fig. 1) and Mr G. B. Quick, Royal Commission on the Ancient and Historical Monuments of Scotland, photographed the intaglio (Pl. II). Dr. J. Close-Brooks, National Museum of Antiquities of Scotland, advised on the crucible fragment; Mr B. R. Hartley, Department of Archaeology, University of Leeds, contributed the section on the samian ware. Dr. W. H. Manning, Department of Archaeology, University College, Cardiff, kindly commented on the ironwork. Mrs Camilla Dickson, Department of Botany, University of Glasgow, identified the charcoal, and Miss Mary Harman examined the cremated bones: Dr. E. Slater, Department of Archaeology, University of Glasgow, kindly examined the slag and at short notice produced her report. Dr. D. V. Clarke, Dr. B. Dobson, Mr A. MacLaren and Mr H. G. Welfare read the completed paper and made many helpful comments.

The Society is indebted to the Scottish Development Department for a grant towards publication of this paper.

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WHY THEY SACKED JOHN FRASER

by Duncan Adamson

Were there a biographical dictionary of seventeenth century schoolmasters, it might contain an entry such as this :—

> Fraser, Mr John. Born c. 1642. Appointed, 1667, rector of Dumfries Grammar School, session clerk, and precentor of Dumfries parish church. Lost church positions shortly after Revolution, but continued as schoolmaster. Pronounced satisfactory by Presbytery, 1691; criticised by some members of Presbytery, 1695; dismissed by Presbytery, 1697, on grounds of incompetence.
>
> Married, (1) Helen Young, dau. Patrick Y. of Auchenskeoch — 1674, — (2) Barbara Ferguson in Kirkmahoe — 1683, — (3) Margaret Grierson, dau. deceased James Grierson of Larglanlie. Acquired estate of Nether Laggan, Dunscore parish. Member of Dumfries town council. Died 17th January 1726. (See *G. W. Shirley, Fragmentary Notices of Burgh School, These Transactions, IIIrd Series, vol. xxi)*[1]

Should the interested reader then consult Shirley's article, he would find some twenty five pages devoted to the period of Fraser's headmastership. He would find that Mr Fraser had been appointed after some years of confusion which had followed the dismissal of the strongly presbyterian, pro-Covenanting Mr William McJore, that his salary was £40 Scots per quarter (to which the boys' fees would be added); and he would find numerous extracts from town council, presbytery, and legal records. Finally, after reading an account of the events which led to Fraser's dismissal, he would read Shirley's conclusion :

'Had his dismissal taken place when the Episcopalian incumbents were being rabbled out (i.e. in 1689, following the Glorious Revolution) it would not have been so surprising ... it might have been ascribed more to mob passion than to personal shortcomings, but the Presbytery had accepted his services for eight years. The endorsement of his dismissal without protest by the Town Council compels the reflection that the private schools, the subject of so many petitions, would never have arisen had the Burgh School had a worthier head. On the other hand the dismissal cannot be disassociated from the Act of 1696 which gave the Presbytery full authority (over education)'.[2]

It can be seen from the above quotation that Shirley's position was a somewhat cautious acceptance of the official line — that Fraser was dismissed because he was incompetent. The purpose of this paper is to suggest a different explanation. We shall examine briefly some aspects of his headmastership, and then look at the points raised by Shirley. Why was he not dismissed in 1689? Why was he nearly dismissed in 1695? And why was he finally dismissed in 1697? The answers to these questions involve an examination of what we know about Mr Fraser, what we know about the town council, and of what we know about presbytery. It will be argued that he survived in 1689 principally because the right people were in the right places at the right time. Once he lost his friends in high places, an ex-pillar of the Episcopalian establishment was too incongruous a figure to be tolerated by the Presbyterian ministers. His teaching competence was quite irrelevant.

1. Pages 150-179. Hereafter referred to as 'Shirley'.
2. Shirley 171-172.

The reader may think it odd that Mr Fraser should be appointed headmaster when he was only about twenty-five years old. This was in fact in no way remarkable in the period. His best known predecessor, Mr William McJore was probably about the same age when he was appointed in 1650. Indeed, it does not even seem to have been considered essential for the rector to have a degree, which Fraser had (hence the 'Mr'). As well as Fraser there was one assistant, or 'under-teacher'. This was normal enough for a town of the size of Dumfries, although Linlithgow employed two assistants,[3] with much the same population as Dumfries. There must have been a large number of boys for the two teachers to look after, for the Grammar School of Dumfries was the only 'Latin' school for miles around. It was patronised by the landed gentry of the area, as well as by most of the merchants and tradesmen of Dumfries. I have not been able to find any statement of the actual number of pupils, but there must have been at least five hundred householders in and near Dumfries who had some pretensions to literacy,[4] and if the boys from all of these households had all gone to the burgh school, then there would have been an impossibly large number of boys for the two masters to deal with.

In one matter Mr Fraser hardly conformed to the national norm — his salary. In 1692 Perth claimed to pay their schoolmasters a total of £500. The rectors of Linlithgow and Stirling each received 400 merks (£267). Ayr and Montrose were also considerably more generous than Dumfries. In fact, Cupar and Jedburgh, both a good deal smaller than Dumfries, paid more than the £160 Mr Fraser had to accept. In the salary league for that year only Inverness, among towns equivalent in population, came below Dumfries.[5] Mr Fraser, therefore, was not a well paid schoolmaster, and we know from the testament of his wife that after twelve years in the post he was not a wealthy man,[6] although it would seem that the addition of pupils' fees more than doubled his salary.[7]

Mention of his first wife brings us to one aspect of Mr Fraser's life for which we have an abundance of evidence — his friendships. Helen Young was a member of one of the most powerful families — or 'kin groups' — in the area. Her father was Patrick Young of Auchenskeoch, through whom Fraser became connected with the Youngs of Gullihill (in Holywood), with William Neilson (dean of Dumfries — that is to say, a prominent town councillor), with the Johnstones of Clachry, and with the provost of Dumfries, William Craik. He must have been related, too, to Thomas Richardson, the town treasurer, who was married to a Janet Fraser who is, in turn often found in association with John Fraser.[8] Although Helen died in 1679, he remained part of the family group. In the register of baptisms, for example, (which was kept, incidentally by Mr Fraser himself, as part of his duties as session clerk), we find Thomas Richardson, William Craik and other leading townsmen acting as witnesses to the christening of his children, but one name appeared among the

3. Linlithgow Town Council Minutes.

4. For households see Adamson, 'The Hearth Tax' TDGNAS, Vol. XLVII 147-177. For literacy, perhaps the best source is the Oath of Allegiance, signed by 72 tradesmen of Dumfries (Town Council Minutes 26.9.1693).

5. Linlithgow Town Council Minutes, and 'State ... of Every Burgh Within the Burgh of Scotland', in Scottish Burgh Record Society, misc., 1881, pp. 49-157.

6. For a full summary of the testament of Mr Fraser and his wife, Helen Young, see Adam 'History of the Douglas Family' p. 746.

7. For some evidence of the receipts from fees see Shirley p. 159 and p. 165.

8. For relationships of Young family see Adam, op. cit. The relevant chapter was written by R. C. Reid. For connection between John and Janet Fraser see, for example, Dumfries Kirk Session Minutes 4.11.1698, where they are jointly allocated a seat in St. Michaels. Joint allocations almost invariably went to members of the same family.

witness with unfailing irregularity, that of William Neilson, who was married to Helen Young's sister, Grisel Young. Now William Neilson also had a large family. On one occasion only did John Fraser act as witness for him, for it was the custom of the day to ask those of one's friends who held the highest social status. Neilson was a good witness for Fraser, but not vice-versa. In Neilson's case, the regular witness was William Craik.[9]

This brings us to the answer to the first of our questions. William Craik (later Craik of Arbigland) dominated Dumfries politics for the best part of quarter of a century, first becoming provost in 1674. Fraser, therefore, could expect protection from the most powerful figure in the town. We shall return to this point when we consider the Revolution, but perhaps it should first be explained why one might have expected Fraser to have been 'rabbled out' in the first place.

At a time when the great divide was between Episcopalian and Presbyterian, Mr Fraser was probably the single person most closely identified in the Dumfries public's eye as Episcopalian. The minister himself was a newcomer to the town. Mr Fraser was in the job in the first place only because he was an Episcopalian: William McJore, who still lived in the locality until the Revolution had been dismissed for being too Presbyterian. For over twenty years Mr Fraser as precentor had led the praise in the Episcopal church. When parents with Covenanting sympathies, out of fear for the consequences, had their babies baptised by the Episcopalian minister, it was John Fraser to whom they gave the details for entry in the register. Likewise it was he who recorded their marriages, and their burials. Furthermore most of his associates were also identified with the Episcopalian church: William Neilson conformed;[10] Thomas Richardson was for a number of years the treasurer of the church as well as of the town.[11] If anyone was to be 'rabbled' in Dumfries, it was surely Mr Fraser.

Among Fraser's Episcopalian associates had been William Craik. For, throughout the Covenanting years Craik had given every outward sign of conforming with the established church. Nonetheless, he had, like many others, fallen out with the government in the 1680's. Consequently we have what at first sight appears to be a paradox, that immediately after the Revolution, when it seemed that presbyterianism had come into its own, not only was William Craik elected provost (albeit after a disputed election),[12] but a number of other councillors were also ex-Episcopalians. They at once conformed, as did John Fraser, with the new Presbyterian Church. There were, of course, a number of Presbyterians on the town council, but while Craik and his allies controlled the key posts in the Council, and while the Council controlled education, Fraser was safe.

In order to understand why Mr Fraser, having survived in 1689 was sacked in 1697, we shall have to look at another element in the story — the Presbytery of Dumfries.

9. Registers of Baptisms.

10. Register of Baptisms. Strict Presbyterians did not have their children baptised by the Episcopalian minister between 1678 and 1682. Nor did they take the 'Test' in 1682.

11. Kirk Session Register. He was treasurer for eleven years, from March 1675.

12. Reid, 'Edgar's History of Dumfries 1746' pp. 78-79. James Keenan, according to Edgar, won the popular election, but the heritors had the election overturned in favour of Craik.

The Church of Scotland has been presbyterian since 1689, and it is easy to feel a sense of inevitability about their triumph after the Revolution. However, if we look at the local records of the period we can see that the Presbyterian victory came only after a hard struggle. On the one hand they had to fight the supporters of Episcopacy. On the other they had to fight the supporters of Mr John Hepburn (the 'Hebronites') and of other Covenanting extremists. Mr Fraser's dismissal could be seen as incident in this struggle.

Oddly enough, there is no evidence that at first Presbytery had any animosity towards Mr Fraser. In 1691, for example, the school was visited by three ministers (Mr Campbell, of Dumfries, Mr Paton of Caerlaverock, and Mr Somerville of Troqueer), who gave Presbytery 'ane satisfieing account'.[13] Then in 1693 Dumfries Town Council suggested to Presbytery that Fraser should be appointed to the then vacant posts of precentor and session clerk in St. Michaels Church.[14] At that time Dumfries was also without a minister, and the town council were anxious for Presbytery's help in trying to obtain one. In the circumstances they would hardly suggest Mr Fraser if they thought he was obnoxious to Presbytery. Presbytery's answer is not recorded, and it may be that the Council had second thoughts. Certainly he was not appointed. However, about the same time he appeared before Presbytery, under the name of 'Frissell' (a common variant of Fraser) as spokesman for himself and some other heritors in a dispute concerning the administration of Dunscore parish teinds.[15]

In these early years, during which good relations seem to have existed between Mr Fraser and the Presbytery, the latter body was dominated by a small group of ministers, and, to a lesser degree, by one elder. The uncrowned 'king' seems to have been Mr George Campbell, whose advice was constantly requested, even after he left Dumfries to become Professor of Theology at Edinburgh in 1691. Then there were Mr William McMillan of Holywood, Mr Hugh Clannie of Kirkbean, Mr Robert Paton of Caerlaverock, and Mr William Somerville of Troqueer. The elder, who regularly attended General Assembly as a Presbytery representative, was John Irving of Drumcoltran — a baillie of Dumfries. He was present at the Town Council meeting when Mr Fraser was recommended as session clerk, and in 1694 he was jointly responsible for a report to the Council in favour of Mr Fraser and against private chools.[16] A tremendous burden of presbytery work fell on these ministers, for at any given time in these years as many as half the parishes might well be vacant, which meant that the established ministers were constantly travelling the countryside on supply duties. For four years, for example, Hugh Clannie was acting as minister for Colvend and New Abbey as well as Kirkbean. Eventually Mr Robert Brown was appointed to Colvend, but he proved a doubtful asset to the presbyterian cause, for he was frequently rebuked for absence from Presbytery, and was accused of being so lax that he was almost dismissed.[17] Mr John Reid of Lochrutton was another

13. Presbytery Register 14.7.1691. Shirley did not notice this entry and wrongly states (p. 166) that the committee made no report.

14. Dumfries Town Council Minutes 13.3.93. Baillie Irving of Drumcoltran and George Johnstone were to take the recommendation to Presbytery.

15. Presbytery Register 24.10.1693.

16. Dumfries Town Council Minutes 6.1.1694.

17. See Presbytery Register 1699-1701 for inquiries into Brown's ministry. On 13th December 1699 he was recorded as having offered to demit is office, but he did not, and in 1702 he was transferred to Roxburgh — where he was deprived for Jacobitism in 1717 (Fasti, 2, p. 87).

infrequent attender, and also, it would seem, an ineffective minister. So, probably, was Mr William Ingles of Kirkpatrick-Durham. In Kirkmahoe was the much respected, but almost permanently incapacitated Mr Francis Irving. In effect, for most of these years there was no minister in Tinwald, Kirkmahoe, Torthorwald, Terregles, Kirkgunzeon or Urr, and there were long periods of vacancy in Dumfries, Kirkpatrick-Durham, and Dunscore. One reason for the vacancies was the inability, or unwillingness, of some parishes, such as Terregles and Dunscore,[18] to provide an adequate living for a minister. There were also parishes without a kirk-session to assist with the discipline of the church. With the exception of Dumfries, vacant parishes were also sessionless parishes, but even when they did have a minister there was no session in Lochrutton, Kirkpatrick-Durham or Kirkmahoe.[19]

This is not the picture of a flourishing church. Within a short time both Mr McMillan and Mr Somerville were to be dead.[20] It is possible that their continual journeys on church affairs may have helped to kill them. From Mr Fraser's point of view Mr Somerville's death was particularly unfortunate. Then Mr Clannie was accused of adultery and was suspended from Presbytery. Meanwhile, Mr Willie Veitch had come from Peebles to fill the vacancy left three years earlier by Mr Campbell's departure. In the same year, 1694, Mr James Guthrie, a young man with a very strong personality, was appointed to Irongray.[21] Then in 1696, Mr Paton moved from Caerlaverock to Dumfries, where he acted as second minister. Naturally this position would increase his influence in matters relating to the town — such as the grammar school. The sum total of these changes was that in the presbytery power game, three anti-Fraser men gained influence, while three pro-Fraser men disappeared.

Mr Fraser, however, was not Presbytery's chief concern at that time. The vacant parishes, and the absence of kirk sessions, created an opportunity for the enemies of the Church of Scotland. At first the strongest challenge came from ex-Episcopalian ministers who moved into vacant parishes, especially in the area east of the Nith. They preached, they conducted marriages, and they baptised children.[22] Presbytery found it hard to stop them, even when an act of parliament was passed against such practices, for without a kirk-session it was often difficult to gather information, and, furthermore, the act could only be enforced through the local magistrates, who were themselves often Episcopalian, or even Roman Catholic.[23]

However, by the mid 1690s Mr John Hepburn and his followers were presenting a much more dangerous threat than the Episcopalians. The Episcopalians were

18. For Terregles see Presbytery Register 26.8.1690, when Mr Robert Paton (elder) left because they could not maintain him. The inadequacy of the Dunscore Stipend was frequently complained of, and in 1698, this was a reason given for Mr Andrew Reid leaving Dunscore and moving (to replace Mr Clannie) to Kirkbean. On 16.3.1697 Mr Fraser was one of those who was said to be willing to increase Reid's stipend (Presbytery Register). This was not the Robert Paton who later became minister of Dumfries.

19. Presbytery Register : Elders from these parishes are virtually never found in sederunts. There is a reference to elders at Kirkmahoe on 17.5.1692, but presbytery's dealings with the parish make it clear that there was no active session. For Lochrutton see 5.7.92, Kirkpatrick-Durham 6.9.92.

20. McMillan last attended presbytery on 24.9.1696 (three weeks before the final attack on Fraser began). He died 12.2.1697 (Presbytery Register). Somerville died on 4.4.1696 (Dumfries Reg. of Burials).

21. Shirley confuses Mr Guthrie with Mr Alexander Guthrie, the deposed minister of Keir (p. 169). For his personality see his dispute with his eading elder, John Welsh of Cornlie (Presbytery Register, 1700). On July 24, it is said that Welsh told him that he was so proud he was resolved to be 'an arbitary king'.

22. Presbytery Register — frequent complaints.

23. The most obvious example is the Earl of Nithsdale, but at this time John Brown of Nunland was most actively obstructive. Sharp of Hoddam and Copeland of Colliston — in key posts also seem to have been Episcopalians.

never anything but a minority, although a minority which included a high proportion of the local gentry. The Hebronites, by way of contrast, threatened to become a mass movement. Mr Hepburn himself was virtually the unofficial minister of Urr. He had from an early time a considerable following in Kirkgunzeon and Kirkpatrick-Durham. Then it grew rapidly in Lochrutton, where Presbytery had to confess that because 'schism' was so rife, it was impossible to form a kirk-session.[24] Soon after there seems to have been a crisis in Troqueer, where Mr Somerville reported that he was greatly discouraged, and it looked at one time as if the kirk-session might break up.[25]

The Hebronites were able to make great play with the shortcomings of the established church, for the obstructive attitude of some of the authorities, the lack of ministers, and the absence of kirk-sessions, meant that fornication, adultery, and sabbath breaking often went unpunished.[26] This was considered at the time to be a scandalous situation, and it is not surprising that Presbytery became extremely sensitive to Hebronite criticism. This is best illustrated by a case which occurred not long after Mr Fraser was dismissed. A Mr Kincaid had been the Episcopalian minister of Terregles before the Revolution. He then went to England, but some years later he asked if he might be accepted as a Presbyterian minister. Presbytery, as always, were desperately short of ministers. Inquiries were made, and nothing could be found against him from the short period during which he had been minister (and it may indicate that the Episcopalians too had had their difficulties in providing a manse in Terregles, when we read that he had lived in Dumfries at the time). Despite the blameless report, Presbytery turned him down, and the minutes explicitly state that the only reason was that they were afraid of what their critics would say if they employed an ex-Episcopalian.[27]

Well, of course, Mr Fraser too was an ex-Episcopalian, employed in a vital post — although not directly employed by Presbytery. There can be no doubt whatsoever that the Church of Scotland, both nationally and locally, regarded education as important. There are frequent references to it in kirk-session and Presbytery records. When Presbytery visited Lochrutton,[28] for example, they noted with regret the absence of a parish school. On several occasions Presbytery allowed the baptism of illegitimate children only after undertakings had been given that the child would be educated.[29] A particular interest in education was shown by Mr Somerville, who left a large legacy for the purpose of establishing a school in Troqueer parish. Presbytery exercised a degree of control over educational standards, even in the burgh school of Dumfries, where it was the Town-Council who were responsible for paying the schoolmasters' salaries. There is no mention at all in the Town-Council minutes of the 1690s of any inspection of the school, but we have already seen that Presbytery inspected it in 1691, and again in 1695 Mr Fraser asked Presbytery for a visitation.

24. Presbytery Register 28.5.1695.

25. Ibid 18.6.1695. Mr Somerville said that many people did not attend church, and he wished to demit, but he was persuaded not to. For eight months in that year there was no Troqueer elder at Presbytery.

26. A typical case was the irregular marriage of John Johnstone of Clachrie to Margaret Fingas. Both belonged to leading local families. Presbytery could do nothing.

27. Presbytery Register 11.7.1699. Presbytery referred to the 'lamentable divisions in the country' which had increased and 'grown to a greater flame since Mr Hepburn's return' and thought it would be 'a stumbling to the people' to do anything for Mr Kincaid.

28. Ibid 5.7.1692. This is only one of many examples which could be given.

29. Ibid 12.8.1690; 15.3.92; 3.1.93 etc.

Why he asked, we do not know; perhaps he suspected trouble was brewing. Anyway, five ministers were sent to inspect the boys — Mr Veitch, newly come to Dumfries, Mr Paton, still at Caerlaverock, Mr Somerville, Mr Guthrie, and Mr Clannie. According to their subsequent report, 'Some of them were well satisfied with those boys whom they examined ...', but the others were not. Now, 'some' implies at least two on each side, and since it is clear from later evidence that Veitch, Guthrie and Paton were against Mr Fraser, it can safely be assumed that Mr Somerville and Mr Clannie were his supporters. On the 15th of October Presbytery decided that because "the Representatives of Dumfreis having nothing to object against him, The Presbytery considers it meet yt he continue in his office."[30]

There are a number of interesting features of this episode. First, Presbytery assumed, even before the 1696 Act that it was within their power to remove Mr Fraser from his office, presumably by removing his license to teach. An oddity is the complete absence of any reference to the affair in the kirk-session book of Dumfries. One would have thought that they were the most obvious body for Presbytery to consult. Perhaps Mr Veitch did not consult them because he believed that Irving of Drumcoltran and others would take Mr Fraser's side. On the 3rd of October Drumcoltran had been appointed as the kirk-session's representative to the forthcoming synod, and if we are right in thinking that he was a pro-Fraser man (a view which is consistent with all the available evidence), then Fraser's position would be greatly strengthened, for he could appeal from Presbytery to the superior authority of the Synod. It is possible that in fact the session were consulted, but that the clerk did not wish to record their divisions. It is not clear who are meant by 'the Representatives of Drumfreis.' It could be the kirk-session's 'presbytery elders' (Thomas McBurnie till the start of October, Irving of Drumcoltran thereafter). But it more probably refers to the Town Council. There is no reference to the case in their minutes either.

Perhaps Mr Fraser had been lucky to survive in 1695. In 1696 the tide moved remorselessly against him. The act of Parliament which was previously referred to increased Presbytery's power in educational affairs. At a local level there was a series of events, whose significance in [illegible]t cases requires little explanation, so it may be as well to list them chronologically.

In January Presbytery recorded their frustration with the 'deficient' magistrates of Terregles and Troqueer, who would not enforce anti-Episcopalian legislation. On the same day (29th January) it was reported that the General Assembly had suspended Mr Hepburn from the ministry (for he was still technically a member of the Church). On the 30th, Dumfries kirk-session were informed that William Fraser, lately a captain of dragoons, had had an irregular marriage with Janet Maire, daughter of the former Episcopal minister of Troqueer. The matter was referred to Presbytery, and was to prove particularly troublesome and particularly shocking. In February Mr Paton became the second minister of Dumfries. On the 3rd of March Presbytery received a petition, possibly from Mr Fraser, against Mr James Hume, another former Episcopalian minister, who was said to keep a school within the burgh, to the great prejudice of the grammar school. On the 4th of April Mr William Somerville died. In May Dumfries referred another alleged irregular marriage to

30. Presbytery Register.

Presbytery — this time of the jailer, James Fraser,[31] to one Janet Johnstone. About the same time one of the ministers, Mr Andrew Reid went to preach at Urr. He found the church door barricaded; his horse was chased through the corn fields; he was robbed of his bridle and a stirrup; and he was accused of being a 'soul murderer'. Urr, of course, was where John Hepburn lived.[32] In July Mr Clannie was accused of adultery. On the 1st of August William Craik died.[33] On the 27th of October Mr Harie Stenhouse appeared before Presbytery. The heritors of Caerlaverock wished him to be the parish schoolmaster, so Mr Paton and Mr Guthrie were appointed to examine his ability to teach and his 'principles anent government'.

It is probably simply a co-incidence that the three male Frasers in the burgh should all be in trouble with Presbytery about the same time. The irregular marriages were significant, not principally because of the surnames of the two men, but rather because of the defiant attitude which was adopted by the Episcopalian ministers concerned.[34] This attitude, along with the extreme bitterness of Hepburn's supporters, produced an atmosphere of great religious excitement. At such a time it was particularly unfortunate for Mr Fraser that William Craik, his most influential protector, should die, and that power in Presbytery should have fallen into the hands of his opponents. The Stenhouse case shows Mr Paton and Mr Guthrie emerging as the Presbytery's education experts, a role they continued to play in the next few years, and it also indicates how teachers were to be judged. Not only must they be able to teach, they must also have sound political principles. At a time when most Episcopalians were Jacobites, Mr Fraser's background would surely fault him on the second count.

What it meant was that Mr Fraser had to go, and he went. On the 17th of November Presbytery regretted 'the palpable decay' of the grammar school, 'through suspicion of the Masters Insufficiency as the ministers of the place represent'. So Mr Veitch and Mr Paton had led the attack. He did not go without a fight, and the struggle lasted into 1697. But the essentials of the story, insofar as they concern this article have now been told. For the rest — how they criticised his 'mean' Latin style, how he wrangled with Presbytery, how he eventually had to apologise to Synod for causing a scene in church when Mr Veitch read the sentence of deposition against him, how he took legal proceedings against the town in an attempt to preserve his position, for these the reader is referred to Shirley's article. Only one incident I shall add, for Shirley omitted what may well have been the most spectacular happening in Mr Fraser's life. It must have been on Sunday 15th January that Mr Veitch read, in church, the sentence against Mr Fraser. Apparently Mr Fraser behaved 'very offensively', and frequently interrupted the minister. He continued to interrupt when Mr Veitch pronounced the blessing, and he then threw down 'instrument money' from the loft.[35] The only reference to the incident is in the Presbytery Register: once again the Kirk-session records are silent.

31. I can find no evidence of a connection between James Fraser and Mr John Fraser. He is generally referred to as James Fraser 'in Castle'. Janet Johnstone came from Kirkpatrick Juxta (Dumfries Kirk Session 23.4.1696).

32. Presbytery Register 19.5.96.

33. Dumfries Register of Burials.

34. Especially Mr John Willocks, deposed minister of Lochrutton — see, for example, Presbytery Register 31.12.96.

35. Presbytery Register 28.1.1697.

It is one thing to say that Mr Fraser's professional competence was irrelevant to his dismissal, it is another to assert that in fact he was competent, and that I am not prepared to do, for there is simply not enough evidence one way or the other. It is not difficult to dispose of the arguments that can be used against him, the allegations of Mr Veitch and Mr Paton, and the existence of private schools in the burgh. In an educational debate one would regard the support of Mr Campbell and Mr Somerville as more impressive than the criticisms of Veitch and Paton, both because of their close connections with education and because of their intimate knowledge of the town, [36] where they had both lived for a number of years. One might suspect, too, that they were more likely to be impartial. Veitch, after all, was a famous Covenanter, and Paton was the son in law of the Dumfries 'martyr', Baillie James Muirhead.

As for private schools, these were simply a sign of the times. It had become increasingly common for merchants and tradesmen to keep written accounts, so that to be illiterate was, for the town dweller, a disadvantage. The increased demand for education presented an opportunity to educated men, such as Mr Hume, an 'outed' Episcopalian minister, who was in charge of the most important private school. No doubt he would be prepared to undercut the fees charged by the town in order to attract more pupils. According to a petition which Mr Fraser and his assistant, John Maxwell, presented to the Town Council in 1694, Mr Hume was teaching boys to read the New Testament. This might suggest that Hume's was an elementary school, and that he was more likely to attract boys from Maxwell rather than from the 'Latin teacher', Mr Fraser. Maxwell, incidentally, was sacked along with Fraser, but he was soon re-instated.[37]

However, it is easier to criticise the critics than to bring positive arguments to suggest that Mr Fraser was actually a good teacher. What evidence is there? Apart from that which has already been mentioned, there are the surviving records of his work as session clerk. The records are neat, remarkably well kept by seventeenth century standards. One might wish that he had been at times less efficient, for the Kirk-session registers are almost devoid of the sort of gossip which gives colour to the period. He wrote briefly, in a business-like manner, straight to the point. But, of course, a man may be a meticulous secretary without being a good teacher.

Whatever his prowess as a teacher, Mr Fraser seems to have been quite a successful business man. His financial progress can be charted through the official records of the time. His first wife's testament suggests that his circumstances were very moderate in 1679. By 1690, however, the hearth tax lists him for two houses, both in the Townhead quarter.[38] He probably lived in the schoolhouse, which I assume to have been beside the school on Chapelhill (the rising ground beyond the modern Chapel Street). Living as a tenant in the other house was, Mrs Mair, mother of the Janet Mair who later married Captain Fraser. Mr Fraser was the proprietor. It may have been about this time that he acquired the estate of Nether Laggan in

36. Mr Campbell had been assistant to Mr Hugh Henderson of Dumfries before the Restoration, married Mr Henderson's daughter, and returned to Dumfries in 1687.

37. For Mr Hume see Shirley 170. He gave presbytery trouble by continuing to exercise ministerial functions (see, for example, Presb. Reg. 17.1.1693 and 6.2.1694). On 17th January 1700 a Mr Hume was to be appointed schoolmaster of Kirkmichael for 100 merks (Commissioner of Supply Records). Presumably this was the same Mr Hume. He died the following year (Fasti).

38. Dumfries Hearth Tax op. cit.

Dunscore parish; he certainly owned it by 1693. A few years later he was listed in the Poll Tax for Dumfries burgh, in 1698.[39] He was still living in Townhead quarter, and he was taxed as the owner of property, in town and country, worth between £200 and £500 valued rent per annum. This comes as a surprise, for Nether Laggan was itself worth only £75[40] per annum, and a tenement in the town would be worth a good deal less — so how do we come to £200? In 1696 he had won a court case to acquire the Templand Mill fishing rights, which were leased to Maxwell of Friars Carse for 279 merks per annum.[41] He may well have had other sources of income (and the Poll Tax calls him 'of Laggen', omitting the 'Nether'[42]), but those we know about probably totalled about £300 a year. In taxation terms this put him among the top forty men in the town.

When he died, thirty years after his dismissal, he was a wealthy man, worth more than £6,000, which went to his son, Hugh.[43] And so, it is a story with a happy ending, to which I would like to add a happy footnote — about what did **not** happen. Shirley mentions a case in 1695 when Mr Fraser sued John Maxwell of Carse for, among other things, one year's school fees (£6), and for board (£18 a quarter; pupils, like apprentices, often lived with their masters). These sums had been due since 1690.[44] However, in 1695 there began the series of bad harvests known as the 'Ill Years'. The ensuing hardship produced a mounting toll of debt cases in the burgh court. When one reads the bundles of legal processes in these years, it seems that just about everyone was taking part in a scramble to pursue their debtors. It seems inconceivable that a number of the townspeople did not renege on their school fees, yet not once in these years do we find Mr Fraser taking them to court.

39. Dumfries Poll Tax (in Scottish Record Office b 17/12/1).

40. See Valuation (1671) in Ewart Library.

41. He acquired the right before the Stewart Court of Kirkcudbright. This was an unusually large amount for fishing rights. Templand Mill was in Dalgarno Parish.

42. 'Laggan' is his usual designation in documents of this period.

43. Dumfries Register of Testaments, 3.11.1727.

44. This is the same man to whom he leased the fishing rights in 1696. Shirley p. 165.

45. It should be admitted that the surviving bundles are incomplete, but the great majority of cases are included.

APPENDIX

PUTTING THE RECORD STRAIGHT : MR FRASER & WILLIAM CRAIK

In my article about John Fraser I referred to Shirley's assertion that Fraser eventually became a member of the burgh council. This was not the case. There are, indedd, a number of references to 'Mr Fraser' in the Town Council sederunts of 1721, but these refer to his son, Hugh Fraser, who was elected in October 1720.

It is not only Shirley whose statements can, on occasion, be called in question. William Craik would be less than happy with my description of him as an Episcopalian. What I had in mind was that during the high Covenanting years of

1677 till 1680, Craik remained a conformist to the Episcopalian regime, and as provost of the town he publicly put his name to a declaration which stated that the National Covenant and the Solemn League and Covenant had been illegal documents. Further evidence of his Episcopacy may be that in 1683 William Craik and William Neilson began to officiate as collectors for the church. They continued to support the Episcopal Church in 1688, at a time when there was an alternative Presbyterian church available. In this latter connection, however, we run into the difficulty which bedevils research into the life of Craik. There were two William Craiks in the town, the other being a writer by profession, and the Kirk Session records do not specify which was the collector. It may well be that, as on so many other occasions, ex-provost Craik and William Neilson were acting in concert. Where one finds the one, one often finds the other.

On the other hand, on at least two occasions Craik is to be found supporting the same viewpoint as the Covenanters. In 1661, along with several others, he gave up his place in the Town Council rather than denounce the Covenants. Then in 1681 he again left the Council, of which he had been provost for several years, rather than accept the Test Act, which stated that the Crown was entitled to virtually limitless power. He did not return to the Council till the Revolution. For the last years of his life he was a member of the established Presbyterian church.

Craik's record may appear inconsistent. In fact he was consistent in doing whatever it was the moderate thing to do in terms of the religious politics of the time. The only exception would be if it were he who identified himself so far with Episcopacy as to take the collections. Looking at his life as a whole, the best label to put on him would be to call him simply 'a Conformist'.

HOLYWOOD (DUMFRIESSHIRE) KIRK SESSION MINUTES 1698 to 1812

by Harold Kirkpatrick, F.S.A.,Scot.

General

Some years ago there were discovered, within the Parish Kirk of Holywood, six volumes of the Kirk Session minutes extending over a period of approximately one hundred and fourteen years from 1698 to 1812. But, unfortunately, the minutes for the years between 1700 and 1720 were missing. The existence of these volumes seems to have been unknown for a very long time and at least in living memory. For some years after the discovery there seems to have been little, if any, attempt to transcribe them but they were eventually sent to the Scottish Record Office where they remain. However micro-film copies of the volumes are held in the Library of Edinburgh University and in Dumfries Museum. In transcription the minutes cover rather more than twelve hundred closely written foolscap pages, and so this paper is, necessarily, a very short summary of the salient features which, it is hoped, will provide a general picture of the period from the view-point of the Session.

It was, of course, the duty of the Session Clerk to record the business of each meeting and it was customary for the parish schoolmaster to be appointed Session Clerk; but schoolmasters came and went and successors were not always readily available. In the periods when there was no schoolmaster the work of Session Clerk was done, or perhaps not done, by deputities such as the parish Minister or one or

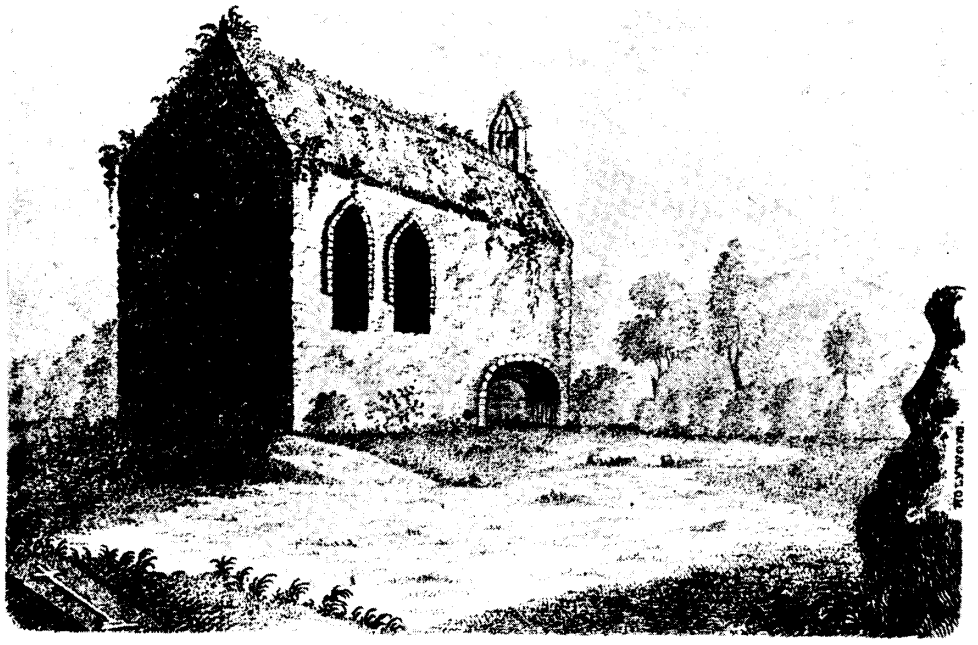

Plate III

View of the remains of Holywood Abbey when used as the parish church prior to its demolition in 1778 *Picturesque Antiquities of Scotland, by de Cardonell.* (Photo Nat. Library of Scotland)

other of the Elders or some other person to whom the office was temporarily delegated. The authors of the records are not always obvious particularly as the handwritings change frequently, sometimes in the course of the writing of a particular minute: and appointments of *pro tem* Clerks are not consistently recorded. The fairly frequent changes of Clerks makes the task of transcribing more difficult and such difficulties are increased by the erasions, alterations, abbreviations and blots made by the wielders of the quill pen, who, one has the impression, were reluctant to sharpen that instrument when needed. There was a common habit of the scribes to try to contain their writings within adequate space, particularly as they neared the foot of a page. Apparently the local Presbytery of Dumfries had occasion to be dissatisfied with the records kept by the Session and it is recorded, on 22nd February, 1747, that "Ye Presbytery had agreed .. all ye Session books within their bounds and that it would prefer a large book should be got for recording ye Session minutes, which are now only written hastily, and be so easily read". And "Ye Moderator is willing to take ye trouble of recording so many of ye minutes as he can till they get a proper Clerk". In November, 1751, a minute reads "As this book which contains ye minutes of ye Sessions since Mr Hamilton was ordained is now near filled up ... as they have no Session Clerk to do it the Session agreed to get a large book". Another new book, costing seven shillings, was acquired in October 1769.

In addition to the shortcomings indicated concerning the scribes, many blank spaces occur between minutes of different dates and also in the minutes themselves. These spaces suggest that possibly room was left by the Clerk to enable him to fill in after he had consulted the Moderator or another Elder concerning some matter he had omitted to make a note of or had not understood; and the spaces were never filled by reason of human failure. Other indications of omissions are many, such as the lack of comment in subsequent minutes on matters referred to Presbytery for advice; long intervals between the date of meetings (suggested by the need for frequent gatherings to deal with the ever present poverty and the necessity to deal with *supply* to the poor). If therefore several weeks elapse without any record of a meeting it is reasonable to assume that the record of a meeting has been omitted. It is true that the Minister and Elders had authority to dispense aid in cases of urgency but such cases were usually reported to Session shortly after such a dispensing.

The absence of any minutes for the period March, 1700 to August 1720 is unfortunate because of the very important happenings during those years. The Treaty of Union of 1707, which was widely and vigorously opposed in the area, and the Rebellion of 1715, which had some local support may have occasioned some reference in the minutes which seem to be lost, but if the lack of comment in 1745-1746 is of any guidance we have not missed much. Indeed the Session seems to have regarded comment on most national events as either unworthy of mention or outwith their province. It is significant that no minutes are recorded between 1st September, 1745, and 26th January, 1746, indicating either panic or discretion, or both. In fact the only references to the 1745 Rebellion are (1) on 9th April, 1746, when Joseph Hairstanes reported that his wife had a child needing baptism "and as his affairs had been delayed for some time by reason of ye disturbances in ye country, he, ye Moderator, called ye Session this night" and (2) on 11th March, 1750, when Session voted "one shilling to John McKay, a stranger, who had sufferred much in ye late rebellion." Even after January, 1746, seven meetings of Session up to 9th April, 1746, limited business to prayer and the poor.

Rarely were the minutes signed and usually there was no indication that they were read at the meeting following.

The Volumes. Having given some indication of the nature of the minutes it is desirable that we have a brief account of the six volumes we are now concerned with :—

Volume One commences on 2nd October, 1698, on which day the new minister, the Reverend Robert Blair "had sitten with them" for the first time. The volume ends in March, 1700, but there are a few brief entries relating to dates outwith the period.

Volume Two opens in August, 1720, following the gap of approximately twenty years already mentioned, and ends in 1725.

Volume Three commences on 7th August with a list of the Ministers of Holywood from the Reformation to the year 1725 when the Reverend Mr Scott was ordained minister, and here a reference is made to "Harbert Burges an old man past 80 who himself remembers the last seven in the list". The list is very largely identical with that shown by the Reverend Robert Kirkwood in his contribution — dated December 1837 — to the Second Statistical Account. This list will be referred to later. This volume ends at 3rd February, 1734.

Volume Four follows on from the previous volume and runs to 24th November, 1751, and at the end of the volume are numerous loose sheets being either original documents or copies of papers all relating to various matters dealt with by the Session from time to time over the whole period of these minutes.

Volume Five starts on 8th December, 1751, and continues to 27th August, 1769.
Volume Six opens on 3rd September, 1769, and closes on 27th November, 1812.

Throughout these minutes there is a general tendency to verbiage but, following the death of the Reverend Doctor Bryce Johnston in 1805 and the arrival of the Reverend James Crichton there is a marked change and a move to brevity, this being largely due to the discontinuance of long accounts of enquiries into the sexual irregularities of the population. One is tempted to ask "Where have all the sinners gone?"

The Poor

Reference has already been made to the constant state of poverty, indeed of destitution in many cases, within the parish. The need for enquiry into individual claims for *supply* occupied a great deal of the Session meetings and the time of the Elders around the parish. In addition to dealing with the individual poor a great amount of time and effort had to be devoted to the raising of income for the *Poors' money* and the wise investment of that money to produce as great an income as possible. Some notes anent Session meetings in 1737 and ensuing years serve to illustrate the situation around that time. In December, 1737, the problems associated with the poor were discussed at length and while recognition was given to the duty to maintain *supply* to those deserving of it, there was also a feeling that it was necessary to restrain vagrants and sturdy beggars and so concentrate resources within the parish. This meeting was followed by another in January, 1738, to which Heritors and heads of families were invited. Those who attended that meeting drew up a list of the parish poor and also decided to issue certificates "to those unable to support

themselves by their industry" such documents to show the names and ages and needs of the recipients "so that they may ask alms within the parish". The rest of the poor were to apply to Session for *supply* as and when need arose. A constable was nominated to enforce these decisions and a list of the poor was sent to "Gribton", i.e. Irving a local J.P. Later in the same month a further meeting decided that the need for *supply* must be verified by a *Means Test* but it was apparent that some would be unwilling to declare their possessions. It was also recommended that Heritors and tenants should "not let their cot-houses to such as will be burdensome to ye parish". Yet another suggestion made and intended to ease the situation was (in February, 1738) that as a condition of getting *supply* applicants should make assignment of their assets on death. That suggestion was not adopted but two years later the idea seems to have been in mind when Session was dealing with the death and burial of Marion Wallace (February, 1740) when it was agreed to pay for her *funerals* but to find out what gear she left; the result was that two of the Elders reported that the gear would more than cover the expense and it was agreed that any surplus should go to Roger Kilpatrick, a boy (her nephew). While some indication is given above as to the difficulties facing the Session and parish, only some details of particular circumstances can illustrate the straits in which so many lived and died.

March, 1740. "Some supply was approved for Agnes Pot, widow of the late beadle".

June 3rd, 1741. Decided, in view of the present state of the poor, to pursue debtors who were not paying their dues (i.e. interest or annual rent.) James Logan was the Kirk Officer (beadle or beddal) for a number of years and despite his office the following items serve to show how very poor he was. 28 June, 1741 he received 3/- Sterling because his wife was sick and a few weeks later he was given 2/- Stg "his children being sick". On 22nd November he was given one shilling and in the following August he was given one shilling and fourpence. On 9th January, 1743 he and his family got 2/- Stg because they were "in straits" and on 2nd October he "being in need" was given 1/4d Stg. In February, 1745 he was again in need and received 1/3d Stg. His neediness continued and he was given further assistance in January and February 1747 and twice in May of the same year. He died in September 1748 and one of his last actions was to make "a grave to Jean McMath, another to her child and for presenting ye child to baptism" for which he was paid 1s/6d in February, 1748. From time to time Logan had been paid small sums e.g. 8d Stg for making Marion Wallace's grave (1740), 8d for mending ye spade used on making ye grave (1742).

Other items which show the plight of the poor are "three shillings to Marion Thomson, one of the poor of the parish, as she proposes to go to some Well for her health". December, 1763,-two Elders were asked to try to find a home for Agnes Walker a poor woman. Almost at once Homer Rodden and his wife agreed to take her for six shillings a month, and at the same time Session authorised "ane ell of sacrament table cloth to the said Agnes" and in the following month (Jan, 1764) three shillings Stg was given for a pair of blankets for her. Some months later (August) Margaret Andrew, spouse of Homer Rodden, went to the Session saying that Agnes Walker was "in great need of some linen for four shifts and for two ells and a half of plaiding for a petticoat" and "Session agreed to give 7s6d Stg to provide

these things". But two months later Agnes Walker "is now dead and buried" and Elders were appointed to ascertain what effects she left and to clear accounts with Homer Rodden and his wife. The Session agreed to pay 5 shillings, the cost of her coffin, and also for the cheese "which was got for her funeral" (11th November, 1764.)

3rd May, 1751 — A letter from Mr Kirkpatrick, the Sheriff Depute, sent to Heritors, Ministers and Elders required them to meet "and make up a list of ye poor in ye parish," and on 22nd December of that year the parish Minister was "to desire the congregation in this time of straits to be more liberal than usual in their charity to the poor". John Clark, father of a large family was one of those fined for selling ale without license but because he was in "straitning circumstances" Session agreed to "give him the half of his fine which comes to their hands, viz 7s/6d".

1742 — A nurse was engaged to take care of a sick woman's child (5 Dec.) and a house to house collection was authorised to defray the cost, i.e. £15 Scots a half year; the collection realised £2.2s.6d sterling.

9th April, 1783. "... that in the present distressed situation of the poor and the situation of their funds they cannot make sufficient distribution to them without part of the interest due by Cowhill". ('Cowhill' was Dugald Maxwell, laird of Cowhill, to whom Session had loaned part of the "Poor's Money").

1783. 28th December. "The Session considering that Shuzanabill Culekin" (later rendered as 'McCutchin') "a widow at Bartoneway, a person on the poor roll, died on Wednesday last and left three young helpless children, the youngest one not two years old, they appointed James Walker and John Kirk ... to roup the whole effects ... in the house to pay off the funeral expenses and all other debts due by the defunct, and to lodge the ballance with the Session Treasurer, James Walker, for behoof of the said children. They agreed with William McMillan in Fourmerkland to keep the oldest girl till Martinmass for her work, the Session are to cloth her when she goes to him and he is to keep her in cloths while she is with him and to return her with her cloths in good order. He is also to allow her to go to the School two hours in the day for four months of the time, and the Session are to pay the School wages ... the nearest relative of the children will keep the two youngest children for a moderate board and if they will not, that all the Elders think and try who will keep them upon the most moderate terms". 1784. 7 January — "James Walker informed the Session that he and John Kirk had sold by roup the household furniture and other effects of the deceased S- McCutchin but that some small articles bought by sundries at the roup were not yet paid. He also informed them that several persons claimed some small debts which they say were due them by her, and that upon enquiry he has reason to believe that the most of them are just debts", The Session authorised Walker to proceed and "to settle with Mr Irvine of Gribton for the half year rent of the house to be due at Whitsunday on the best terms he can; to pay off all the funeral expenses and also Andrew Conchie's wife for waiting on the children and cleaning the furniture and to give in an exact account of the whole to next meeting of Session that the ballance may be lodged with the Session to be laid out on the children" ... He and the Minister informed the Session that they ... had on Wednesday last, 30th of December last boarded the two youngest children with Robert and Margaret Stot in Stielston for a year for £5 Sterling, that the Session is to cloth them ..." It was not

until 5th May, 1786 that James Walker, the Treasurer, settled accounts with the Session "relative to the money he had received and disbursed on account of Johan, Sturgeon and James Hairstanes, the three orphan children of the deceased James Hairsteins and S— McCutchin". He had received £5-7-3 Sterling for the household furniture sold by public roup, out of which he had paid the debts for the funeral expenses and clothes and boots for the children amounting in all to £6-9-11½ Sterling exceeding receipts by £1-2-8½ Sterling this being met by a guinea from the Moderator and 1s/8½d paid to him this day.

1812. 18th June. "intimation also having been given that any householder who in consequence of the present scarcity difficulted in providing meal for their families would give in their names to the Elders in their bounds and that their case might be considered. The Session having procured a small quantity of meal which they wish to distribute among the poor and such householders as may apply. The Session find that in consequence of the death of severals of late that only six persons remain upon the poors' roll." The six referred to are listed together with the meal and money amounts given to them on this date as follows:-

Elizabeth Colthard .....one stone and a half and three shillings
Elizabeth Walker .....one stone and five shillings
Ann Connel .....one stone and three shillings
Ann Spence .....one stone and three shillings
Jean Taggart .....two stones and five shillings
Margaret Dippie .....one stone and three shillings

This minute also records that "the oats which the Session have made into meal, viz 60 bushels — the produce of 78 stones of meal, 8 pecks of dust and 8 stones of seed." Further meal was provided on 9th July and again on 14th August it is recorded that £8 was collected as cash from householders that had received meal at a reduced price.

In the light of the foregoing sample of widespread poverty it is ironical to read of Fast Days such as the one appointed by the King in 1748 "upon account of ye War with Spain and ye French King" and of a Thanksgiving Day, also appointed by the King in November 1759 "for taking Quebec". The local Session fixed a Fast Day in November, 1751 "on account of ye bad harvest" and in February, 1763, there was read to Session an extract of a minute of Dumfries Presbytery referring to "great sickness and mortality ... in several congregations ... great straits of the poor labouring people through the late severe frosts and other causes ..." An appeal for help and also a day of prayer and fasting for the above "and also the abounding of sin and great decay of religion among us".

The greater part of the numerous references to the poor and 'poors' money' concerns the small sum meted out as *supply* i.e. to sustain life, but the end of life brought much distress to add to sorrow. These aspects of poverty and destitution are detailed throughout the whole of these minutes and the extent of the misery cannot be fully understood without much thought and understanding. Some examples of the tribulations associated with death and burial may excite realisation of the conditions ruling at this time, viz, 25th October, 1741 "to pay to Thomas Kirkpatrick, merchant in Dumfries, two shillings and seven pence and one half of a penny Sterling for three ells and a quarter of linnen bought from him to be a winding sheet to Elizabeth

Maxwell, spouse to William McMath", and on 22nd November "two shillings stg to be given to William McMath for buying cloaths to him." 1742, 25th April "to give John Aitkin one shilling and four pence stg for making a coffin to Alexander Wallace his grandchild", 1743, 15 January "to give a line to Jean McMath that she might get three ells of Scots linnen for a winding sheet to her father William McMath". 25th June — "one shilling stg to John Kirk for a coffin to Mary McClelland's child and four pence to James Logan making a grave." 1748, 11th March — "William Hoat has returned three shillings given to Mary Biggar before her death". 1742, 14th March — "to pay John Aitkin five shillings stg for making a coffin to William McMath's wife". 1749 "1s/8d stg given to John Cowand" (Kirk Officer) "to buy a spade for making graves, it being usual to allow this to ye officer." 1751 — five shillings stg to William Walker for making a coffin to Elizabeth Beck. 1755 — Samuel Gordon's funeral and other expenses to be paid by Session — his wife has no money. 1756 — The Officer "informed the Session that he had given three ells of the old sacrament linens . . . to some friends of the deceased Elspeth Renwick . . . to be a winding sheet for her . . ." 1764 — Marion Thomson died some weeks ago at Moffat; Mr Hunter, schoolmaster there, had arranged her funeral. Session considers her nearest relative ought to go to Moffat to deal with expense. 1771, 3rd February — Five shillings stg to James Hairstanes to help the payment of his wife's coffin. 1774, 10th June — "The Session resolved henceforth to pay only the sum of seven shillings and sixpence for poor folk coffins and John Kirk and William Walker" (both Elders) "promised, in presence of Session to make them at foresaid price . . ." 1775. 6th June — "The Session resolved that after this date no more shall be expended on the funerals of any of the poor than a coffin and a sheet and half a crown in money and in that case the household furniture of the deceased shall be sold by the appointment of the Session for the use of the poor, at least to the amount of what they shall have expended for the use of said persons."

Mortcloths.

It follows from the accounts just recorded that few could afford the Mortcloth (or funeral pall) as a family or personal possession. In December of 1742 a report was made to Session of steps taken for the provision of a mortcloth made of plush and lined with silk, the materials costing £6 Sterling, which sum was paid to 'Baily Gilchrist' and 6s/8d the cost of making by 'Francis Scot, tayler'."And further ye Session agreed that David Renwick, one of their own number, living near ye middle of ye parish should take care of ye mortcloth, that he should lend it out to any within the parish for a shilling to ye poor and to such as should borrow it out of ye parish at one shilling and four pence stg, and that ye said David is to account to ye Session for what he received and ye Session will make him some reasonable allowance for his trouble. Also ye Session ordered ye Treasurer to buy two skins and some tartan and get it made into a wallet for the mortcloth to be put into. It being represented that John Aikin's child had a little mortcloth to sell in a pretty good condition which might be usefull to ye parish it was agreed Francis Scot — look it and ye Moderator is to inform ye Session what is thought worth to them . . .". On 19th of that same month it was reported that the mortcloth was now made and that he (the Moderator) had paid four pounds Scots for making it and ten pence half-penny for some more serge to line

it . . .". The Treasurer said "that he could not get skins to be a wallet for ye mortcloth but Thomas Sturgeon has one which he promised to lend for it till another was gotten". In the following February the Moderator reported that "Francis Scott, tayler, had looked ye little mortcloth . . . and is of opinion that it is worth 10s/6d Sterling". The Session agreed to offer ten shillings and sixpence. Over the ensuing years several items appear for mending, putting in order and dipping the mortcloth. However in May 1792 a large new mortcloth cost £6-13-0 stg and 3s/2d for a bag for carrying it. The custody of the mortcloths passed from one person to another and details of the changes, the sums received for hire and the small rewards to custodians are recorded in the minutes.

Collections

There were various sources of income for the poors' money and for other Kirk purposes. In the ordinary course collections were made at the Kirk but non-attendance did not enable members to escape their share of the needs of the poor and the general financing of other outlays. There is shown (24 May, 1761) that the Elders made half yearly collections from door to door, each Elder having a specific area of the parish for which he was responsible. In addition to these regular collections there were collections for specific purposes, mainly charitable. There were also weekday sermons at various points in the parish and these were often the occasion of baptisms; collections were taken at these sermons, an example being recorded on 7th January, 1753, when the sum gathered was five pence stg and one tenth of a penny all of which was given to Mary Muirhead and Janet Hunter. The sums collected varied quite widely, as is to be expected, but a report on 8th September, 1808, gave the total over a period from 10th October, 1805, to the 4th instant (nearly three years) of £81-7-6¾, and the final minute in the last volume states that from 21st November, 1805 to this date inclusive (27th November 1812) £211-4-9 had been expended and the collections, ncluding 10th October, 1805 and the 22nd instant, amounted to £204-18-6½. Collections were also taken up at celebrations of the Lord's Supper which were usually held annually during summer or autumn at a time convenient for Minister and the community, and to fit in with agricultural conditions. But these sources of income would not of themselves enable the parish to function and the poor to be relieved. There was however a steady income from fines or mulcts levied on those members of the community who infringed the rules of the Kirk, these being from the guilty fornicators or adulterers, the drunks and the blasphemers, those who elected to be married in their homes instead of in the church and those who were *irregularly* married outwith the parish, often over the Border, whether by clergy of other denominations or by laymen. A very minor revenue was from the sums which were required to be lodged with the Session by any person making an accusation against another — such sums being a guarantee of good faith and forfeited if the accusation was found to be unfounded. Parts of fines levied on those who were discovered selling ale without licenses (13 April, 1762) were passed to the Session for the use of the poor, and in April 1744, £6 paid to the Session by way of the Justices of the Peace "for two vagrants ye constable in this parish had taken up" for service in the Armed Forces. A sequel to this particular source of income appears in the minutes of 3rd June, 1744, where it is

reported that the wife of one of the recruits has several children and is destitute; the Session gave her £3 "bounty". Donations and legacies were fairly frequent. John Haining, of Norwich, left money for the poor of his native parish (1724). John Young of Gulihill gave various sums for the benefit of the poor including "10 shillings stg to be given to the poor on ye occasion of his brother's burial which was Tuesday last." (October, 1748.) 'Cowhill' (i.e. Maxwell) made a donation for the poor because of his sister's (Janet Murray) death. (5 April, 1767.) Mrs Henrietta Fergusson of Isle left £6 to the poor (April, 1775.) The late Thomas Hamilton, erstwhile parish minister, left a legacy for the purchase of two Communion Cups which were made in Glasgow. 29 November, 1790, the brothers Walker, exiles in Birmingham, gave £20 to be invested and the interest to be used for the poor and in April, 1799 a legacy from one of the brothers is noted. In May, 1805 the Reverend Dr Bryce Johnston, late parish minister, left two guineas to the poor and his Executors gave three guineas to Session funds. Two years later (1807) it was reported that of the £20 left by the Reverend Johnston £1 was paid as "legacy tax." John Maxwell Lauder (a relative of the 'Cowhill' family) who died in May, 1810, left £20 for the poor. In 1804 there is mentioned a post-nuptial contract by William Aitkin and his late spouse, Catherine Alexander, by which she left £10 to the Minister and Kirk Session for the benefit of the school at the head end of the parish . . ."

Sums bequeathed or donated were usually invested and the interest or annual rents used for giving succour to the poor. In the main the capital sums were loaned to local men of substance who were deemed to be unlikely to default. Nevertheless the Session had, from time to time, some trouble in collecting the interest and even the capital was at risk on some occasions. The suitability of a borrower was usually decided on the knowledge of the Heritors and the Minister but they were not infallible. Sums were also invested with local (Dumfries) and Edinburgh merchants and latterly with the Bank of Scotland. On 13th November, 1781, the Minister told the Session "that in the present state of the country it would be proper that some steps should be taken in order to secure better the money belonging to the Session." The Reverend James McMillan, the Patron and one of the Heritors of the parish applied (13th June, 1806) to borrow Poor's Money and this was authorised to the tune of £260, the money being uplifted from the Bank of Scotland on 10th August. There seems to have been some dubiety and opposition to this transaction because it was thought improper for the Reverend gentleman to borrow the money, perhaps because he was also minister of Lochmaben parish. The investment of parish funds with the Bank was fairly recent and no doubt some thought the Bank more secure than local landowners.

Donors of sums to charitable objects and those who left legacies had the satisfaction of knowing that their generosity was recorded on the Mortification Board erected in the kirk: "Thomas Stot's name to be put on the Board as soon and cheap as possible" for his gift of £3 Sterling (25 August, 1732.) "On 7th June last . . . payd to William McGhie, painter, twelve shillings and threepence halfpenny for putting 59 letters in gold on the poor's board" (1769) "Paid John Fergusson for putting 103 letters upon the poor's board £1-2-0" this last being on 20th October, 1780, and it is noted that the lettering was not stated to be in gold this time. In

January, 1804, there is authorised " . . . to get a new additional board made and put up in the church . . ." All cash that came to the Session was not good money and in 1730/31, for example, there was much discussion concerning "ill-money" and its disposal. After some attempt to sell it to a chapman the disappointing sum of only ten shillings Sterling was realised.

It has been noticeable throughout these minutes that expressions of gratitude or condolence are conspicuous by their absence. It is remarkable therefore that in 1802 there was a *tribute* to James Walker who had resigned his office as Treasurer "as he is in bad health" and the Session records that they are "sincerely sorry for the weak state of health of their treasurer", this being as near a *tribute* as they felt they could get.

29th July, 1766. A notable resolution was passed on this date "that from now on Collections and Distributions be recorded in English money". The use of the two currencies had long been an inconvenience even before the Union of 1707 as passage across the Border had been increasingly easy following the Union of the Crowns.

Particular Collections and Distributions

Cash had long been in short supply, particularly for the poor, and it is therefore surprising to find that money was found for so many causes in and outwith the parish. A series of such donations etc. illustrates this aspect of the parish finances.

1726. "A public collection for John McKinnell whose barns at Mid Killilung were burned". The appeal was also directed to the Presbytery (23rd December) 1727. In October and November collections were made for John Thomson in Irongray parish because of his losses by fire. Also a beggar's child dies and 22 pence — the day's collection — was given for a sheet and a coffin.

1699, 26th November, "for the bridge of Lanarick . . . 3 lib to be given for that end."

1726. Homer Rodden, who features elsewhere with his wife as a caretaker of an old woman, suffered loss by fire at Nether Killilung in January of this year. Collections within and outwith the parish were authorised; three collections were made and up to 6th February, when the first one is recorded the total sum was £34-11-0 (probably Scots.)

1726. 28th August. "for a bridge over the Water of Dee near Braemar 14s/9d Stg was collected but of this the Session allocated only ten shillings to the bridge and the balance to the poor." "for the Infirmary or hospital . . . in Edinburgh" and for "the harbour of St. Andrews" collections amounted to £8-12-6 Scots and were allocated ten shillings Scots to the parish poor and the balance equally between the two stated purposes".

1737. 10 April — intimation of a collection "for ye orphan school and hospital of Edinburgh."

1744. Feb-March. Authorised collection for John Bell "as an object of charity" but only 7s/10d stg was realised, said to be low "because of snow" — another collection produced only 3s/7d more.

1742. 19 December. A house to house collection for a nurse to care for a sick woman's child produced £2-2-6 sterling.

Victims of fire were numerous and many collections were made for parish and other parishes sufferers.

1752. 5th November. A lighter note is here struck when "it was represented to ye Session that this day two weeks a certain person had in a mistake given a shilling instead of a halfpenny into ye collection for ye poor. The Treasurer is appointed to return eleven pence to ye person being all that was sought back."

Various contributions from parish funds etc. included "to Reformed German & French congregations in Copenhagen (1730); to S.P.C.K. (1736) "for dissenting protestant congregations in Great Salkeld and Plumpton in Cumberland" (1754) and for "the Colledge of New Jersey £1-5-2 of which £1-3-0 to New Jersey" (1754). For "the presbyterian dissenting congregations at Alston Moor in ye county of Cumberland" (1756). Collections to be made by Elders for two U.S.A. (Connecticut) Charity Schools — Later reported to have realised £7-13-1½ (1767). "Collection by appointment of Synod for Presbyterian dissenters in Workington to assist them in building a meeting house, 16/6d Sterling." 1752, 10 December, £1-12-2 stg collected "for ye relief of the protestants in ye British Colonys in Pennsylvania and North America" in accord with an Act of Assembly. In addition to these examples there were many acts of charity which may be briefly mentioned;— 25th April, 1762." The Moderator has applied to the Director of the hospital in Dumfries to get a girl admitted. This application "anent Binnie Hannah" was granted on 16th May and on 30th May it was reported that Session "had paid for making two shifts" for the girl. 1729 — A female child, about two months old, found abandoned at Dellawoodie. Robert Stot there, being "a widow" and having a local history of somewhat doubtful character, was the subject of rumour and after hearing of this he purged himself by oath on 28th September. The child was baptized and its education and maintenance undertaken by the parish and the treasurer was authorised to buy clothes for it and a house to house collection made which amounted to £22-14-0 Scots and £3 added from ordinary collections. However, in the following February Mary Allison, widow of Andrew Tait, has three small children, admits abandoning the child and names James Tod in Buittle as the father; he admits paternity and the child is reunited with its mother, and Tod "grants a Bill" in restitution of all expenses outlaid by Session. 1758 — "Agreed to pay to MrJames Hill, surgeon in Dumfries, one shilling and sixpence stg in behalf of James Neilson, a poor boy . . . to whom Mr Hill had come out to see . . ." 1755, 26th October — Session gave help pending consideration of the plight of three orphan children left by the death of Mary Holliday recently. 14th January, 1759 — The Minister reports receipt from William Irving of Gribton, upon the occasion of his daughter's marriage to Alexander Fergusson of Halhill of half a guinea out of which two shillings is allowed to the precentor and one shilling to the Kirk Officer, the rest to the poor. Also five shillings stg was given by Alexander Fergusson. 2nd March, 1760 — A contribution to help a man and his aged parents in Urr, he being unable to work as he "lately had lost a hand." 16 October, 1785 — a receipt from Alexander Wylie, treasurer to the Dumfries Infirmary, for £7-10-0 collected from this parish for Dumfries Infirmary. 31st October, 1797 — "Mary Anderson, supported by this Session, died in ye Infirmary on 13th October, had lodged £3-1-6". Decided to put this towards her board and lodging and funeral expenses.

Fines & Mulcts etc.

Irregular Marriages. Prior to 1735 the Minutes make no reference to such marriages, but as the century progressed they became increasingly common. There are many reasons for the changing attitude to the rules of the Kirk but it is not the purpose of this paper to discuss them. Most of these ceremonies conducted outwith the Church of Scotland were performed either in the neighbouring parish of Dumfries, where there seems to have been a steady stream of lay-men offering to marry couples who came into the town from the countryside, or by English clergy or lay-men in the small towns just over the Border and of easy access from Dumfriesshire. When the parties to an irregular marriage returned to their parish they seem to have lost little time in announcing the step they had taken and having done so they were soon cited to explain their conduct to the Session. But some just set up house or, more likely, continued in their employment and waited to allow their union to become public, usually by the arrival or anticipated arrival of a child. Having been summoned to meet the Session to explain their breach of the Kirk code, no doubt they gave some reason for their irregular behaviour but if they did so the reason was never recorded in the Session minutes. However, the Session having questioned them, they were rebuked at once and ordered to pay a fine or mulct, to publicly acknowledge their union in the Kirk before the congregation and to express their sorrow. It seems obvious that the great majority of such couples were far from sorry for what they had done and the expression of sorrow was a mere formality to satisfy the Kirk and to justify the public rebuke meted out to them. Defiance of the citation to the Kirk Session seems to have been rare but in one of the earliest recorded cases, 12th February, 1738, John Paterson and Sarah Edgar, having failed to compear to answer for their irregular marriage were found *contumacious*, but, it seems were not fined, probably because it would have been difficult to collect. On 14th December, 1760, it is recorded that Robert Welsh, eldest son of John Welsh of Craigenputtock and Menzies Irving, daughter lawful of William Irving of this parish are "to confess their irregular marriage". They both compeared before Session and confirmed their marriage in Dumfries on 15th Julie last ..." Welsh had given a guinea (or as written in the minute "a ginie") for the benefit of the poor. Mulcts for this offence ranged from £3 Scots in November 1742 to £4 Scots in 1757, to 6s/8d Stg in 1773 and to 9s/2d stg in 1779. In October 1765 William Johnston and Agnes Walker were fined 6s/8d Sterling for their irregular marriage but Session returned 1s/8d stg to them because of their poverty. On 6th June, 1775 the need was expressed for tables, linens and seats for the Lord's Supper and while it was decided that John Kirk, an Elder, was "to get the table and seats made and the old ones mended ... and the Minister to get the Linnen ready" the suggestion was made that the expense be defrayed from irregular marriage fines and this proposal was approved on 18th October.

Drunkenness. Charges of drunkenness are few but this is not surprising in view of the poverty prevailing and also the custom of heavy drinking by those who could afford it was tolerated unless accompanied by public disorder or misbehaviour which affronted the Kirk. Such a case appears on 23rd October, 1720 when James Elliot in Gulinill was alleged to have been drinking at Newbridge on a Communion Day, but he was referred to Terregles Session to be dealt with. Allegations of drunkenness

1. For a general discussion of this subject the reader's attention is drawn to W. A. J. Prevost's article on "Irregular and Clandestine Marriages in Dumfriesshire". These *Transactions* IIIrd Series, Volume LII, pp 143-151. Ed.

against John Aitkin, an Elder, were subsequently declared false, this being dated in 1726. Janet Burgess was involved in an enquiry in January, 1735, when allegations were that swearing, quarrelling and drunkenness had occurred at her house during a recent night. Apparently Janet ran an ale-house and she and her daughter were probably no better than they should be. After several hearings when both women were interrogated and several witnesses testified Janet was warned against allowing such behaviour in her house. Although the amount of ale consumed varies according to the witness examined; two "choppings" at lowest and as much as thirteen or fourteen "choppings" according to others including Jean, there seems to be no doubt that there was certainly cause for complaint. A "chopping" was about the equivalent of an English quart.

Fornication etc. The earliest mulct recorded is in Volume One; then Jon Welsh paid "4 lib. Scots" for fornication. Nearly one hundred years later the fine for this offence was 3s/4d Sterling by each party. This subject and the Kirk's attitude to it will be considered later.

Libels. In March, 1765 a Sarah Proudfoot lodged complaint against Mary Fisher, the latter being accused of imputing sexual immorality to the former. Sarah lodged 3s/4d with the Session as a guarantee of good faith. The hearing took up much time and dragged on until September, many witnesses being examined; eventually the minutes were sent to the Presbytery for consideration and advice. The end of the affair was a sharp rebuke for both parties. A point of interest arises in that some of the evidence was only possible by reason of the fact that some of the witnesses lived in a *long house* which provided accommodation for more than one family with division between compartments up to side wall height and made of 'sodds'. This style of building enabled occupants to hear what was said in adjoining *houses* unless conversation was conducted in whispers, and also for the nimble it was possible to get a view over the top of such walls. Alexander McMaster was arraigned before the Session in 1748 because he had spread a story to the effect that he had actually witnessed by chance sexual relations between John Aitkin, an Elder, and his step-daughter. Despite long interrogation and the examination of many witnesses McMaster adhered to his story. He was put under sentence of excommunication. Five years later he sought reconciliation with the Kirk and baptism for his children, but as he continued to assert the truth of his accusation against Aitkin he was referred to the Presbytery. On 18th March he asserted that "as he should answer to ye great God at last that what he had said was true" and accordingly he was refused the baptism and his own reconciliation. Six years later, in June 1759, and eleven years after his original appearance before Session he went to the Presbytery and retracted and was allowed church privileges.

Theft. This seems to have been uncommon despite the extreme poverty. In 1738 Janet Rhea had her house robbed. In July 1776 Robert Hairstanes admitted that he and others "borrowed" a hay knife and in August Robert Stott admitted stealing an ash tree to make a ladder and excused himself for failing to attend an earlier meeting because of "colique".

Fines for other reasons. On 16th July, 1699 Jean Douglas was fined "nothing because of poverty" — she had stood three times "at the pillar" for fornication. 21st March, 1725 — Mary Edgar "being poor — to pay half a crown as a mulct to the

poor" and "she is allowed to hold up her own child and take the consanquinity for it and baptism after she is absolved." 1729, 20th July to 3rd August. John McWhinnie accussed of "scandalising" i.e. "Prophane swearing, cursing and saying he would rather serve Gribton than God" was publicly rebuked but not fined. On 10th August of the same year David Edgar was rebuked for "breach of Fast Day" 1732, 5th November — Isabel Henderson was excused mulct because of her poverty — she being guilty of fornication. 3rd November, 1751 — David Glencross and Janet Donaldson fined 2s/- sterling "for being married in their own house" plus "five shillings stg for their being allowed proclamation twice in one day".

August 1754. Agnes Bain paid a fine of 3s/4d sterling, for a relapse in fornication, but the Session gave it to her mother "who is very poor". Around 1730 it was common practice to fix fines in terms of groats, ten were usual being the equivalent of 3s/4d stg. Fines were sometimes offered on behalf of an offender; in February, 1734 Robert Ronald paid a fine on behalf of Mary Kirkpatrick.

The Kirk Session was generally the first court to which the ordinary person applied for justice and help. Rarely were disputes between the people taken to the Sheriff Court. In 1728 the "Lady Killilung" (who was Mrs Maxwell, wife of the laird of Killilung) took Jean Henderson, a servant, to the Session on a charge of slander, but after much wrangling the Session decided "to drop the case."

THE ELDERS

As was the custom vacancies caused by the death or removal of Elders were filled by nomination from the Moderator and existing Elders. As a vacancy arose the Session would discuss probable suitable men to occupy the vacancy, such men being those who were regarded as the type desired to uphold the dignity of the office. Nominees were usually men of upright character having a firm grasp of the principles of the Presbyterian faith. The duties required a good deal of tact and knowledge of human nature and an ability to sum up the needs of the poor and assist in the distribution of *supply* to the needy. Suitable candidates were then interrogated and asked if they were willing to accept the offices of Elder and Deacon. It appears that it was customary for the invited candidate to profess his unfitness for the offices until he was pressed further and then he would accept nomination, seemingly with reluctance. There were occasions when the Session misjudged the man they favoured, as they did in April, 1754, when James Wightman "peremptorily refused" an invitation to join the Session. Once chosen the name of the nominee was announced in the kirk and at the door thereof; this being the semblance of democratic election. In fact the Session was a self-perpetuating body. But there was an occasion in 1783 when the election of John Stot may be said to have been a mistake; there being a rumour that he was guilty of fornication with his servant; both denied this but because of it the ordination was prudently delayed and two years later he declined office. The parish being of an awkward shape to administer (it being about nine miles long from the River Nith (in the east) to the west, and roughly a mile and a half in width at its broadest, it was decided in 1747 to divide it and apportion the divisions to the Elders living most conveniently to the areas so formed. The minutes are not kept in such a way as to indicate the names of all Elders at any one time. In most cases those present at meetings are shown by name but deaths are shown only

on some occasions and any other departures are shown only where there seems to be some special reason for doing so. However, on 12th July, 1760, a list of Elders is shown in order of seniority as follows :— Thomas Sturgeon, John Kirk, Robert Freshie, William Walker, William Dunbar, James Crockat and Thomas Wauch. William Dunbar left the parish in 1766. All acting Elders are again listed in 1767. As Elders were chosen for their rectitude it is not very surprising to find few cases of misdemeanour amongst them. Nevertheless the occasional lapse appears, the first is in 1726 when allegations of drunkenness were levied against John Aitkin, and in the following year there was a 'bruit' about him and a Mary Biggar and also concerning alleged poaching activities. In fact he admitted the poaching and was rebuked for it — the other allegations seem to have found no support. John Kirk, another Elder, made "confession of his unworthiness" etc. (1769) but specific details are not minuted, merely that he was admonished. In 1755 one of the Elders named Walker had been at feud with a neighbour of the same name concerning the land which shared a common march. At the height of the dispute the Elder abstained from the duties of his office and from partaking of the Sacrament, he being aware that his relationship with his neighbour was unworthy but he found himself incapable of suppressing his anger. He did at last express remorse and was rebuked by the Session and a narrative of the affair was read to the Session and later to the congregation. Robert Muirhead, ordained in April, 1785, petitioned in October, 1786 against "a false Clamour against him as guilty of indecent conduct with Jean Brown, his late servant maid". The 'clamour' had "arisen from some unguarded expressions of his wife Margaret Neilson . . .". The latter attended the hearing before the Session who decided "there is insufficient reason to deprive him of his office as Elder but in view of the differences between him and his wife they suggest he voluntarily decline to operate as an Elder for some time." He accepted the Session's decision.

There is no doubt that Elders at this time wielded considerable power. They met before every celebration of the Lord's Supper and went through the parish roll to decide who should be allowed to participate and who should be excluded. Those who were acceptable were given Communion Tokens which had to be produced to enable the chosen to take part. To attend and be excluded or to absent oneself from this solemn annual event was to be a centre of gossip and speculation. Whenever the Session decided to question an alleged sinner the minute opens with the words "It is reported that . . ." or some similar phrase; the name of the person who made the 'report' rarely appears. It seems that such 'reports' were either made by a member of Session or by some other person who was acceptable as a reliable source. Either the Elders were constantly on the look out for indications of sin or they had certain persons who conveyed information to them and on which they acted. Reports of women being "with child" were made long before the birth. Single women were not the only ones watched in this fashion; there was also a keen eye for the recently married woman who showed signs of pregnancy, and indication of advanced pregnancy was considered in conjunction with the date of the marriage. Despite this early warning system some women managed to 'bring forth' without advance notice. Widows also were watched, particularly where they had a man about the place. It is not surprising that many of the unfortunate women left the parish when they

discovered that they were "with child". While there is no record of any with-holding of *supply* on account of the standing of the supplicant it might be that wherever funds were short preference might be given to those who conformed to the acceptable code of conduct; and it must be remembered that the Elders were those who had the power to decide who should be aided and who should not.

It is also noticeable that the great majority of contracts for parish kirk repairs went to Elders. Some of the work went, perforce, to Dumfries but of those placed with men in the parish the only notable recipient of contracts, other than the Elders was one named William Roxburgh.

Certificates

The custom of the times was for those leaving the parish to apply to the Session for a certificate which would be presented in the new parish and was, in effect, the passport to acceptance there. Incomers were expected to bring with them certificates from their previous parishes. One of the very earliest minutes in Volume One concerned a man who had arrived in the parish and was summoned to the Session to explain why he had brought no certificate and was instructed to get one; at the next meeting it was reported that the man had been removed by death. Certificates were of no damage to the conforming member but as the documents were expected to show not only the obvious information as to name and address, occupation etc they also stated whether the holder was married or single and gave particulars of any recent scandal surrounding the migrant. In brief, if the person was free from scandal, the certificate was a passport to acceptance elsewhere. In other circumstances the certificate could be at the least a basis of suspicion and possible persecution. Some examples of the remarks which were made on certificates are as follows : 30th July, 1749 — Mary Berwick having sought a certificate the Session decided that "her sin with Kelly to be attested at ye foot of an extract of ye Presbytery sentence concerning her." 22nd Dec. 1754 — Katherine Kilpatrick's certificate "bearing that she had been rebuked for ye scandal of uncleanness she was guilty of according to ye rules of the church." There are other cases of similar certificates but one which gives cause for approval was given to Janet Smith, a widow, on 5th January, 1778, the certificate being accompanied by one pound to enable her to travel to Cumberland where her son would support her a prudent gesture and cheap at the price. Apparently even non-members of the Kirk were given certificates when claimed (21st May, 1786.) Certificates were not always of the type above described. In 1804 a man named Joseph McMinnies asked for a statement of the state of his health in the summer of 1803 to enable him to get assistance from a Society at Castle Douglas, of which he was a member, as he had fallen from his horse and had several ribs broken and was much bruised etc. and was long in bed. His request was granted.

The Lord's Supper

Reference has already been made to this Sacramental celebration. In addition to the preparation of lists of those deemed to be fit to receive the Sacrament certain of the Elders were required to prepare tables, linens, communion cups etc. and also to examine and erect the tent for the occasion. Usually an Elder attended to the tent and was paid for his labour. On 8th May, 1777 "The Session considering that the old tent in the parish is useless resolved to get a new one made out of the money received

for marriages and baptisms out of the church . . . appoint their Moderator to employ James Aitkin to make the same and also a table for the Elements."

Tokens.

In August, 1737, tokens, 246 of them, cost 6s/5d Sterling. More were bought in 1747 and on 20th July, 1750 was "payed James Simpson 2s/6d stg" for a further one hundred. Again, in 1752 more tokens, 100, cost 2s/6d stg. These purchases suggest that many tokens must have been lost.

Kirk Fabric & Upkeep

Although it was the duty of the Heritors to provide and maintain the parish church there is ample evidence to show that in practice the upkeep was largely financed from parish funds; but there was one occasion when the Heritors allowed the Session to finance some repairs from the share of seat rents which were due to the Heritors. The many items of repairs etc. here quoted are of interest to show the cost of such and also the state of the building. In 1726 (23rd September) the Session decided that the 'beddel' was to sweep the kirk floor at least four times a year and that besoms were to be provided. From other sources we are told that the present church was built in 1779, from the existing pre-Reformation Abbey but to a very different design. It is extraordinary that there is not one word about this to be found in the Kirk Session minutes. It is scarcely credible that the rebuilding was never discussed in Session. That the building was the responsibility of the Heritors we know but it is difficult to believe that the Session was not consulted, or that the subject was not brought up in Session.

Glazing. Frequent replacement of the windows of the old church was necessary. On 23rd February, 1738 "James Simson, glazier in Dumfries, has been paid 15s/- stg for glass work wrought by him in ye church" and "for chassing a window in the north gabel and on the west side of the church above ye loft and one above ye big door". In December 1749 there was further outlay on glazing and on 12th January, 1755 ". . . the treasurer to pay to James Crockat two shillings and ten pence stg for going up and finding nests and righting the bells and also for one payne of glass and putting it in one of ye gavel windows of the kirk." William McGie (April 1756) was paid 3s/6d for glazing — the wind having blown down the glass of a window. Despite repeated bills for glazing and repairs to windows and doors, a minute of 1st February, 1767 says that "James Fisher, Kirk Officer, was obliged to employ two men to assist him in turning out snow out of the kirk in time of the late storms, appoint 2s/4d to be given to himself and them". Soon after this the Session appointed the treasurer to get the window in the north corner of the kirk mended and pay for it accordingly". While most glazing was done by a Dumfries glazier the greater part of masonry repairs were done by a Holywood man named William Roxburgh who has already been mentioned. Other repairs were usually done by the Elders by agreement with the Session. July, 1756. "William Walker", one of the Elders, represented that he had mended the benches, put new feet in several of them and had put some flags in the floor of the kirk and filled up some holes in it otherwise and he was payed as marked in ye book of distributions". In October of that year two Elders were told "to take care to get a step mended in ye floor of the loft in ye church, to get ye wall at ye little door of ye church some stones of which are fallen down built and also the style at ye north gavel

mended which was lately broken by a storm." "The roof of the kirk needed much some repairs" (5th June, 1751). On 28th August it was reported that "the Minister has bought and paid for 100 slates, half a boll of lime for the same purpose not yet paid for, and hired transport for the same". The Session authorised the Treasurer to pay the Minister 2s/4d for ye slates and also to pay 4s/8d stg for the lime and to have the roof repaired as soon as possible. On 28th October payments for the roof repairs were recorded as follows "for slates 2s/4d, for lime 4s/8d, for slate nails 10d, for workmanship to William Roxburgh slates 14s/6d, for carriage of lime and sand one shilling, all sterling money in all one pound three shillings and four pence." At the same meeting William Walker reported "he had before the last Sacrament done work for ye Session as follows, viz Had put up tent, mended the stair in ye church, one of ye styles of ye kirk yard, ye check to a bench, in all amounting to 2s/6d." William Roxburgh was paid 2s/6d Stg for "putting some sleets" on the kirk roof (December, 1760). On 19th September, 1762 "four shillings to be given for half a boll of lime to point the skews and roof of the kirk and also one shilling stg to be given to Thomas Hunter for bringing the lime from the Kingam" (Kingholm). And on 30th November the Minister reported that "he had caused William Roxburgh . . . to point the roof of the kirk and build the check of the back door and to lay a step at the big door for the convenience of old people which with this work in souring lime and riddling sand amounts to 12s/- stg." William Walker was paid 2s/- for workmanship and tools for two new sacrament tables, and 2s/6d was paid for the plank from which the tables were made. "Also a seat near the pulpit put up by Walker is to be paid for out of irregular marriage fines, i.e. for 'dales' 6s/- stg, 3s/- for making the seat." (June, 1749.) Walker made another new sacrament table at a cost of 6s/5d stg in 1754 and he also mended some benches at a cost of four pence stg and was paid one shilling stg for putting up the tent for the sacrament. In December of that year Wm Roxburgh charged 2s/4d for roof repairs plus 1s/4d to Alexander Sloan for serving him, plus cost of nails. John Kirk, an Elder, made a box for collections in ye loft in December 1754 and in August 1769 "William Walker got 2s/6d for making two boxes for gathering the collection to the poor." In May, 1787 the Session dealt with sundry small repairs necessary to the kirk, the manse and the school house. As this is the first mention of a school house it may be that when the kirk was rebuilt in 1779 the opportunity was taken to build one. It was on this occasion that the Heritors allowed the Session to lay out "their half of the seat rents in the middle area of the kirk for such repairs". In July 1784 new seats were "set" in the kirk.

Seating. The rights to seats in the kirk seem to have been somewhat complicated, the one thing being clear was that Heritors had privileges which were frequently the subject of controversy. Petitions to put up seats by Heritors for themselves and their tenants were not uncommon. In October 1727 Alexander Alves of Baltersan asked the Session for "room in the Kirk." He was refused permission to build part of the common loft but some years later (1731) he was allowed space in the kirk to build seats. Robert Milligan sought permission to put up a seat in 1739; he was refused but an alternative was offered on certain conditions and was accepted by him in 1740. Irving of Gribton made a claim for seats in 1742 and here again a conditional agreement was reached.

The Bells. Numerous items appear concerning the maintenance of the bells. In September, 1727 "triggs to the bells were authorised, and in 1740 John Aitkin got "ten shillings Scots and four pennys for a cord to ye bells and putting it to" and in March, 1742 Aitkin got "four pence for putting a tow on one of ye bells. John Coward received three shillings for buying cords to ye bells." In July, 1756 "James Crockat gave in an accompt of what was due to him for putting up a window in the kirk and going up to ye bells and nailing them" and in December he was paid "one shilling eleven pence and three fourths of a penny stg ... for cords to the bells." In June, 1760 it was reported that the "Bells need new slocks" but there seems to be no report of anything being done about them. New cords were again required in May, 1762 the cost being 3s/4d stg. In July, 1763 "6d to be paid for some links to the bells." Then in April, 1766 there is recorded that "James Aiken, joyner ... had taken down ye bells and mounted them with new stocks and wheels, they did agree to pay him ... £2 Sterling for the same ...". Finally, on 31st December, 1769 "given to James Fisher for new cords to the bells two shillings ten pence halfpenny."[2]

Schoolmasters & Education. While the Act of 1646 was passed "for founding of schooles in everie paroche" and the Act of 1696 "ordained that there be a school settled and established and a schoolmaster appointed in every paroch not already provided" etc, the earliest volume of these minutes (1698-1700) contains no reference to schools or schoolmasters, but too much weight need not be given to such because of the very brief period covered by this volume ... The first mentioned schoolmaster was Joseph Affleck in 1720 in which year he was appointed Session Clerk in November. In the following October he was paid "7 lib-13-4 due to him for poor scholars and for cellary" but we learn no more of him or of any swchoolmaster until 4th April, 1725 when William McMillan was paid "for four poor scholars four merks Scots and five merks offering the interest of 100 merks ... as a cellary." McMillan seems to have left in 1729 for on 16th November of that year John Aitkin was "at present schoolmaster in the Kirk" and in the following March he was "to get five merks salary for the past winter." He continued to hold school in the kirk until 1742 when he died. However, in November 1734 the Session had given permission to James Logan, an Elder, "to set up school at ye head of ye parish" because children there "could not come to ye school at ye kirk." For what period he taught is not clear but on 27th April, 1740 he was paid "for teaching poor scholars last winter." William Howat appears to have succeeded John Aitkin and to have continued until 1747 when Frederick Maxwell, from Lochrutton — a relative of the Maxwells of Cowhill and Killilung — was approved (*pro tem*) as schoolmaster at the kirk on 1st November. He continued to teach in the parish until about 1752 when, on 17th July, he was appointed Session Clerk (also pro tem). This last appointment would suggest that he was expected to continue in both offices for some time but he vanishes from the records after 1752. Presumably the post he held had been in a subordinate capacity because a James Welsh is recorded as schoolmaster in February, 1748 and he continued until 1756 when, on 3rd October it was intimated that last year's schoolmaster, who was, so far as we know James Welsh, had "hired to go elsewhere" and a meeting of the Heritors and heads of families was held to consider the lack of a

2. See also "The Church Bells of Holywood and Kirkmahoe & the Municipal Bells of Lochmaben". James Barbour, these *Transactions* IInd Series, Volume 14 (1897-98), pp 82-87. Ed.

schoolmaster. It is, however, clear that Welsh must have taught at least until 1755 because there is a note on 4th April, 1756 of his "four poor scholars". However, in May 1756 a James Burgess got five merks Scots "for keeping school in ye church last winter" which places his starting in Late 1755, but we hear no more of him. John Sharp started school in the church on 31st January, 1757 but his stay was also brief as on 4th February, 1759 "William McCubbin, now schoolmaster in this parish, to be their clerk". A few months later (November, 1759) Samuel Kirkpatrick "was approved to teach at ye kirk and to precent, the former young precentor having gone out of ye parish." Samuel was again approved to teach in April, 1761, probably to assist John Wilson, who was, in January, 1761 "now schoolmaster chosen Clerk." Wilson stayed a few years but resigned in May, 1765 "as he has been appointed schoolmaster in Sanquhar." Six months later Samuel Kirkpatrick was again approved "to teach young children at ye kirk" and he was awarded ten shillings "for his encouragement" Young Samuel was evidently a lad of promise as is indicated by a minute of 26th August, 1764 — "John Wilson, schoolmaster" was voted "7s/6d sterling being school wages for three quarters for Samuel Kirkpatrick, a poor lad and a Latin scholar and who has been for a considerable time, and still is Precentor". John Wilson was soon to leave as John Corrie "now schoolmaster and precentor is chosen Session Clerk" on 8th December, 1765. Corrie resigned all his offices as from Whitsunday, 1767 as he was "going abroad." The Session recorded that on 11th October, 1767 Richard Forest, schoolmaster, was chosen Clerk *p.t.* There is no indication as to the period served by Forest but on 25th November, 1782 there was "no schoolmaster at present" and there was a vacancy for some time as the next reference, in January, 1784 is to "James Geddes, lately chosen schoolmaster is chosen Clerk and Precentor." For what period Geddes served is not recorded as it is not until 10th June, 1793 that Thomas Proudfoot, the parish schoolmaster, was appointed Session Clerk. He, too, had disappeared before June, 1798 when John McWhir is described as parish schoolmaster and he resigned at Martinmas 1800. It is then four years before John Harkness appears as schoolmaster, Session Clerk and precentor in June 1804 and this is the last record of schoolmasters in the minutes up to 1812. It is evident that there were several intervals between periods of service by the various men listed and no doubt the pretty frequent changes were due, in part at least, to the ambitions of men anxious to have a career in a more remunerative parish than Holywod. Throughout the years covered there are several references to the purchase of bibles and psalm books for the children of the poor and also of payment of *school wages* by the Session for the benefit of the children whose parents could not afford to pay the fees.

Literacy

While the Session minutes do not afford any direct evidence of the standard of literacy within the parish, they do provide certain information on which a reasonable computation of the incidence of literacy may be made. The term 'literate' is here taken at its rather fundamental level to mean those who were able to subscribe their signatures when required so to do. Apart from the obvious literates such as the clergy and the schoolmasters and other professional men and, presumably, the Heritors and their wives, there are few occasions where the rest of the population were

required to authenticate identity by appending their signatures to formal documents. The chief occasion when the ordinary folk were required to sign their names was when they testified before the Kirk Session. It was customary for principals and witnesses to put their signatures at the foot of statements made, or when they could not write the Moderator would get them to make their marks and he would witness the authenticity of the evidence given. Persons under the age of sixteen years were not permitted to depone but were allowed to make declarations which, while recorded, were not signed. The statement which is to follow treats as literate those who put their own signature to the depositions and treats as illiterate those who either made a mark or merely made their initials. In the main these depositions before the Kirk Session were by women who were interrogated as to their own sexual misconduct or that of others. Men were also witnesses. Most of the women and the witnesses were either domestic or agricultural servants and so it is reasonable to claim that the more educated classes are under-represented in the statistics given below. But it is necessary to add that cases of theft, libel etc. are also included but are numerically less than the other classes of testifiers.

"Free" education had not yet arrived and many of the poor were unable to pay the "school wages" required when the children attended the local school. So, apart from the children who were subsidised by the Session there would be many, particularly girls, who had no formal education. Distance from the school, inadequate clothing and weather conditions also operated against the schooling of the poor. Another factor tending to limit the number of school attenders was the need for children to earn some augmentation of the family income.

The first volume of these minutes offers no evidence of the kind used for this subject of literacy, but Volumes 2 and 3 (1720 to 1734) reveal that 34 persons (13 males and 21 females) made depositions before the Session and of these nine males and two females can be classified as literate on the standard here adopted. Volume 4 (1734 to 1751) shows 84 testifiers (45 men and 39 women) and the literates total 37 men and 4 women. Volume 5 (1751 to 1769) indicates 62 persons testifying (29 men and 33 women) and of these 28 men and 7 women are regarded as literate. Volume 6 (1770 to 1806) shows that 146 persons deponed and 71 of these were men and 75 were women, and of these the literates were 66 men and 22 women. In percentage terms literacy amongst men was 69 in the period 1720-1734, rising to 81 in the period to 1751 and to 96 in the period to 1769, but the final period, to 1806 indicates a decline to 93, very possibly accounted for by the absence of younger men in the armed forces. Women had much less chance of formal education and the percentages of literate women in the periods referred to above were 10, 10, 20 and 30 respectively. The figures set out above reveal a rather surprising high level of literacy amongst men, and as was to be expected, a much lower level amongst women but nevertheless a steady upward trend.

Population

The minutes supply no data as to population of the parish and it is necessary to look elsewhere for such figures as are available in order to consider the previous section on Literacy with the approximate numbers of inhabitants of the parish. Perhaps one of the best guides is Webster's Census of 1755 where the estimated

population of Holywood was taken as 596 at the time, this number being of Protestants, there being no members of other denominations shown. The only other Dumfriesshire parishes shown with a lesser population were Dalton 451, Keir 495, Morton 435, Mouswald 558, St. Mungo 481, Torthorwald 584, Tynron 464, Wamphray 458, and Westerkirk 544.

Parishes bordering on or adjacent to Holywood showed populations as follows: Dumfries 4517, Dunscore 651, Irongray 895, Terregles 897, and Troqueer 1391 and Kirkmahoe 1098. The foregoing figures are taken from *Scottish Population Statistics* edited by James G. Kyd. Duncan Adamson in his papers on the Hearth Tax (*Transactions,* IIIrd series, Volume XLVII, page 155) estimates the population of Holywood in 1691 at 700.

Opposition to the Kirk

While there is little opposition revealed by the Kirk Session minutes there are many indications of a resistance to its rule. Reluctance to obey the summonings to the Kirk Session was quite common, this reluctance being shown by the number of people who had to be summoned repeatedly before they compeared and the excuses put forward for non attendance. Economic and other conditions made defiance of the Session a rather unwise stance to take. One of the earliest indications of opposition is shown in a minute of 23rd July, 1721 in which is recorded that Alexander Griev applied to have his child baptised. While his request was ultimately acceded to attention was drawn to his habitual neglect of ordinance and that he had been formerly rebuked by Presbytery but that this had produced no change in his behaviour and he was now "very hard to be convinced of the sin and scandal of his carriage, but at length acknowledged it and was allowed to get his child baptised." On 27th October the Session "also considered those that have separated from us. Mr Gilchrist, the chief instrument of that separation is removed by death." It was agreed that the Minister and Elders visit all seceders. 5 May, 1728 — After investigation Margaret Renwick, accused of drunkenness, scandalous carriage and uncleanness with William Alves, son of Alves of Baltersan, all of which she denied, was referred to Dunscore parish on 16th June. Alves will be mentioned later in this paper. 28th December, 1740 — It having been alledged that "some people of no good character had come to live at ye New Bridge" and it being reported that the owner of the property concerned was "Lady Locharthur" representations were made to her with the result that she had put the offenders out of her house there. 7th April, 1754 — An Act of Assembly anant immorality was read to the congregation.

Ministers

At the beginning of Volume Three of these minutes there is a list of the Ministers of the parish from the Reformation to the year 1725. This list is similar to Numbers one to nine as shown in the Second Statistical Account of Dumfriesshire contributed by the Reverend Robert Kirkwood and dated December, 1837. For record purposes the list shown in Volume three plus the names of those Ministers who served from 1725 to 1820 is now entered here in order to complete the roll of clergy up to the end of the period covered by the minutes here described :—

1. Mr Robert French, first protestant minister.
2. Mr Adam Rae who preached two Sabbaths at Holywwod and one at Keir by turns.
3. John Nimmo.
4. Mr William Hay, put out at ye Restoration.
5. Mr Alexander Arbuthnot last Episcopal Minister after the Reformation, 1660.
6. Mr John Malcolm who was turned out at the Revolution 1688.
7. Mr William McMillan first Presbyterian minister after the Revolution.
8. Mr Robert Blair, a Presbyterian minister who died 3rd June, 1724 — was ordained 27th September, 1698.
9. Mr John Scott, a Presbyterian minister, was ordained 9th February, 1725 and *transported* to the new church in Dumfries, 30th November, 1732.
10. Mr Thomas Hamilton, ordained 21st February, 1734, resigned because of ill-health and died at Glasgow, 24th June, 1772. He had been minister of Holywood for 37 years and became minister at Cathcart for a brief period before his death.
11. The Reverend Dr Bryce Johnston, D.D. ordained August, 1771, died 27th April, 1805 aged 58 years.
12. James Crichton, D.D. was translated from Wamphray and inducted at Holywood, October, 1805 and died July, 1820.

The Reverend John Scott (No. 9) on leaving in 1732 gave his pulpit cloth and his sand glass to the Session. The minute recording the retiral of the Reverend Thomas Hamilton includes a list of all Session records relinguished by him.[3]

Session Clerks

There is insufficient information to enable a list of these officers. As has already been stated it was the custom to appoint the parish schoolmaster to this office, but when there was no schoolmaster the clerking was delegated to the Moderator or one or other of the Elders. Comment on the keeping of the minutes having been made in the opening pages of this paper there is little or nothing to add concerning the clerks. One item refers to John Clark, a writer in Dumfries, who was paid three shillings sterling for "clerking" in December, 1748.

Kirk Officers

Variously described as such and also as beadles, beddels or beddals. There is some confusion as to the holders of this office in the early years, but a James Logan seems to have held the job in 1720 and was given "a crown for his cellary last year" in December, 1721. This man, whoever he was disappears and on 16th February 1725 a Roger Anderson is described as 'beddal' but he was dismissed in April, 1725 because of his "ill-behaviour with his neighbours and beating of his wife". Robert Pot, who was previously Kirk Officer, probably earlier in the century, accepted the appointment but he died in 1738 and was in turn succeeded by a James Logan who died in September, 1748. John Cowan followed Logan and continued until he resigned in May, 1751 because he attempted to press the Session to increase his remuneration, a step they were not prepared to take. Alexander Sloan was appointed, *pro tem,* but was dismissed in September, 1760 for reasons of dishonesty; he found some money and kept it until found out. James Fisher then served until his recognition on 4th December, 1767. Andrew Ewart followed and he too was followed in 1799 by Robert Hairstains. The latter was paid "as salary from

3. Details of the ministers of Holywood from the time of the Reformation to recent years will be found in the Revd. Hew Scott's *Fasti Ecclesiae Scoticanae* (Revised edition of 1917 & 1950). Ed.

Whitsunday, 1805 to Martinmass last eleven shillings sterling", being a half year's pay. In April, 1745 James Logan received 2s/6d for a similar period of service. It is possible that between the early years of the century and 1748 when the James Logan 'beadle' died there were three men of that name; the first being the Kirk Officer prior to Roger Anderson, the second being the 'beddal' who died in 1748, and another James Logan who in November, 1734 purposed "to set up a school at ye head of ye parish" and again in November, 1739 proposed to start a schhol "towards ye head of ye Parish." Possibly they were all related as the name was not a common one in the area at that time. In addition to the meagre salary the officers received small sums for various duties such as "one shilling to Alexander Sloan who had assisted to keep ye kirk door" (28th August, 1748) "at ye sacrament on ye seventh of this month."

Sexual Indiscretions

In this attempt to present a general, though truncated, account of the dealings of the Kirk Session as revealed by its minutes, the picture would be far from complete if the passing references already made to sexual misdemeanours were left without further comment. It is not the aim here to go into great detail on this subject; indeed so much of the minutes are taken up with the enquiries, interrogations and rebukes that far greater space than is now available would be required to recount a full story of the activities of the sinners and their judges. So prominent a place do these matters occupy in the minutes that on first reading of the entire accounts one is left with the impression that sexual misbehaviour was rampant. However, after further reading and consideration one gets the subject rather more into perspective. In brief the fact is that the custom of Kirk Session was to make so much of this human frailty as to magnify it out of all proportion. Cases of sexual misconduct came to the notice of the Session in several ways. Sometimes the unmarried woman would herself inform the Session or a member thereof that she was with child, or, on a very few occasions she would confess to an act of fornication shortly after that act. Sometimes a woman and her partner would admit to *uncleanness* and promise to marry, but such cases were rare. Many cases came to the notice of the Session after the birth of a child to an unmarried girl or a widow. But the great majority of cases brought before the Session came as a result of *reports*. The usual opening to most of this type of case was by a member of Session making a statement at a meeting that *So-and-so* was thought to be *with child* or had given birth to a child and that the woman was either unmarried or, in a few cases, a widow. Another type reported to Session was of the birth, (or obvious advanced pregnancy) of a child to a couple ho had recently married or had not been married for the normal period of gestation. The name or source of information of these items is not recorded. One is forced to the conclusion that the Ministers and Elders either themselves were watching for the obvious signs of sexual immorality, or were the recipients of willing purveyors of such information. A report having been made at a meeting of Session the erring woman would be summoned to the next Session meeting and in most cases she obeyed that summons; but some women were summoned many times before submitting. The woman having come before the Session was challenged as to the accuracy of the report, and in the majority of challenges the woman immediately confessed and usually named a man she accused of the paternity. She was then interrogated in detail as to time, place, circumstances

and frequency of the *uncleanness*. The next act was the summoning of thealleged father, usually to the next Session meeting. If the accused man put in appearance he was questioned in detail and if he acknowledged guilt further interrogation was made to test the accuracy of the statements made by him and the woman. If the man accepted guilt the case was pretty straight forward and after due rebuke by the Session each of the parties was ordered to appear publicly *at the pillar* in the kirk for several Sabbaths and stern rebuke was made to them on each occasion. So, having admitted guilt and expressed sorrow and having paid a fine or mulct the guilty ones were finally absolved: this was termed *satisfaction* and until that satisfaction was complete the child remained unbaptised. Such was the rule in simple cases where guilt was undisputed but very many cases were disputed. The accused man would often deny guilt and then it was customary to call witnesses, and this would entail further adjournments and long statements by several people. If after evidence had been given the man still refused to accept responsibility he might be referred to Presbytery and in turn the latter body would send the case back to Session with advice as to any further action. When a man admitted guilt it was rare indeed for him to offer marriage and only in a few cases is there any evidence of marriage or promised marriage. Having given *satisfaction* the male sinner seemed to go free and unpunished once he had paid his fine and suffered the required public rebukes which constituted that *satisfaction*. Many men accused defended themselves by making allegations that the woman was promiscuous. Others attempted to get the woman to procure an abortion and offered assistance to that end. Some men attempted to bribe the woman to name another man as the guilty party. In some cases the accused man beat a hasty retreat over the Border, but the most common way in which the accused tried to extricate themselves from their predicament was to fail to appear before Session and this inaction could go on for several weeks or months. When cornered, or when falsely accused, men would offer to take *an oath of purgation*. This oath was usually first authorised by Presbytery after they had interrogated the accused. The Presbytery would send the man back to the Session with instructions to see that a copy of the oath was given to him well in advance of the date named for the taking of the oath. If the oath was taken then no further process was allowed by the woman or the Session. No doubt the Presbytery and Session felt pretty sure that the man they permitted to take this oath was fully aware of the seriousness of it and that he was unlikely to perjure himself. Perhaps their confidence was justified but in accepting this oath they automatically condemned the woman as at least a liar. There is a general tendency to disbelieve the female and in the six cases in which women alleged rape not one was accepted. But in many cases where the accused man had denied guilt and the Session had doubts as to the guilty one they showed a rather naive belief that the woman would disclose the true paternity when she was questioned *in her pangs* and to this end they instructed the *howdie-wife* and any women in attendance at the birth to listen and question and report the result to the Session. In no case does the woman seem to have changed her mind in these circumstances.

The circumstances of the times certainly made sexual immorality easier because of the number of young people who lived out of the custody and guidance of their parents. These youngsters were often employed as domestic or agricultural servants

and lived in the houses of their employers who were often local landowners such as Cowhill, Gribton and Killilung. Not only did they therefore have opportunity of illicit relationships with their fellow servants but they were also the victims of the laird or his sons. No doubt the poverty in these times was the reason for young people not having the means to early marriage.

The Maxwells of Cowhill and Killilung and the Irvines of Gribton and other Heritors were accused of the paternity of many children born to their female servants and it is clear that some at least of these accusations were well founded and even admitted. But in the main these landed gentry were able to escape the penalty meted out to the less educated and the poorer sinners. Maxwell of Cowhill spent a considerable period procrastinating and so evading his desserts. By invention of excuses for non-compearance before the Session and by various means aided by the lawyers they could afford to advise them they usually went free. On one occasion in 1746 it was reported in Session that the people were offended by the delay in dealing with Richard Maxwell. Irvine of Gribton went to great lengths to evade the responsibility for a child he fathered on one of his servants, even to the extent of trying to bribe the girl to keep silent or place the blame elsewhere; he failed in this. From the lengthy hearings involving many witnesses the several cases of women *with child* which arose amongst the servants at Cowhill there is a general impression that for a period the moral tone at that place left much to be desired. The son of Alves of Baltersan was the focus of a scandalous case which lingered on for many months, chiefly because the young Alves at first evaded attendance before the Session, then denied guilt and having at last admitted culpability refused to stand at the pillar as was the general custom at the time; by the advice of his father he maintained that it was not customary for Heritors and their families to admit their guilt in the way which others did, but to accept rebuke while seated in his usual seat in the kirk. The issue went to and fro, at one time with the Session and at another before the Presbytery. Alves and his wife openly defied the Kirk and Alves defended his son's attitude before the Presbytery. In the course of the case young Alves assaulted the Kirk Officer and evinced a defiance which was one of the most glaring cases of a Man in a position of power regarding himself as not of the common clay. In the end it may be said that there was some sort of compromise but with Baltersan having the best of it. Presbytery considered Baltersan's compromise on 2nd January, 1726, and decided "that in the present circumstances it was most for edification to accept of that." A victory for Baltersan! And, when young Alves compeared on 9th January, 1726, to be rebuked, he afterwards presented himself to the Session to pay his mulct "he told he had it not except he got it from his parents and therefore he could not give it this day but promised to use his endeavour to obtain it." So far as can be seen from the minutes the mulct was never paid.

As had already been stated it is impractible to go into this subject in detail here. One question which arose in 1732 is of some interest to note, viz. a woman named Barbara Hairstanes was somewhat notorious for her sexual behaviour and the Session discussed the proposition that she should appear publicly in sackcloth and ashes but as this custom had fallen into disuse it was agreed to consult the Presbytery who advised against it. As a final comment on this subject an indication of the sexual

behaviour may be judged from an analysis of the records of cases brought before the Kirk session and this shows that between 1720 and 1807 (88 years) the total number of cases in which there was reasonable proof of extra-marital sexual relationships was 131. This figure covers accusations of fornication, adultery and pre-nuptial fornication. The figure 131 represents an average of one and a half per annum and this can be broken down to show a fairly steady incidence being just over one per annum in the decade to 1729, about two per annum in thefollowing decade, a fall to little more than one a year over the next forty years and then a rise to almost two per annum in the decade to 1799 and a slightly lower number in the eight years to 1807. For what this information is worth it does not indicate a high incidence of sexual immorality; and it must be borne in mind that some of the women concerned appeared on charges more than once and one young woman was judged guilty of illegitimate births on four occasions.

Acknowledgement

The writer wishes to acknowledge his gratitude to Mr Alfred E. Truckell who first brought the existence of the minutes to his notice some years ago.

THE LANDS AND TOWER OF BRECONSIDE

by

W. A. J. Prevost

The lands of Breconside[1] and Cocketts lie in the parish of Moffat. Their story begins in 1411 when Simon Carruthers was granted a charter of the tenement of "Logane".[2] Logan-tenement was still in the hands of the Carruthers family in 1492 when Simon Carruthers of Mouswald of a later generation obtained a sasine of Mouswald, Logan-tenement and other lands. The tenement consisted of the farms of Craigbeck, Breconside, Logan Woodhead, Logan Woodfoot and Crofthead. The estate was called the Procornal or Logan and on Craigbeck are still to be seen the remains of a tower called the Cornal Tower.[3]

In due course Breconside came into the hands of the Johnstones for it was occupied at least as early as 1550 by a branch of that family as feuars of the Douglasses of Drumlanrig.[4] Little is known about the early history of the place but in an assurance to keep the peace entered into between Sir John Johnstone and his three neighbour chiefs Maxwell, Drumlanrig and Applegarth there is a list of the Johnstone clan 1581-1587 containing 414 names, among them a "James Johnestoun of Brekansyid".[5] Nine years later it was this James Johnstone of "Brakenside" who was one of the arbiters for James Johnstone of that Ilk in a submission between him and the Earl of Morton and Lord Maxwell.[6]

This Johnstone of Breconside had a tower upon his lands about which it has been said that "the two upper stories of this mansion of the seventeenth century are erected on the lower storey or arches of a tower of a much earlier date, apparently of the fourteenth or fifteenth century". This information had been extracted from some old writings in possession of Charles Stewart of Hillside who as factor of the Annandale Estate was able from his knowledge of the county to help the surveyors of the first Ordnance Survey which was carried out in 1857.[7] It was from this same source to which Fairfoul referred when he wrote in his *Guide to Moffat* that the owners of the tower or Breconside farm-house were Johnstones; and "it was the laird in possession about 1700 who built on the two storeys above the vaulted basement."[8]

One must question the authority for Fairfoul's story and it seems that the above mentioned James Johnstone was responsible for building all of the tower which in 1979 still forms part of the farm-house. (Plate IV). It must have been built in the last decade of the sixteenth century and this can be confirmed by the fact that it is not

1. There are two Breconsides in Dumfriesshire and one in Kirkcudbright. The name is spelt in at least seven different ways. Breconside is the modern spelling as used in this article.

2. A. Stanley Carruthers and R. C. Reid. *Records of the Carruthers Family* (1934), 51. [*Records*]

3. *Ibid*, 59-60.

4. *Ibid* 77.

5. W. Fraser, *Annandale Family Book* Vol. Ip. xcvii.

6. 'The MSS of J. J. Hope Johnstone Esq,' Hist. MSS Comm. *15th Report*, App ix (1897), 33.

7. Ordnance Survey, 'Object Name Book' No. 39, Moffat Parish, 1857, 206. Charles Stewart had an "estate plan" of Breconside besides the old writings.

8. *Fairfoul's Guide to Moffat* (1879), 59.

Plate IV
Breconside Tower from west.

shown on Aglionby's Platt of 1590 which shows the "houses of strength" north of the Scottish Border. This is also the opinion of the Ancient Monuments Commission who describe the tower as being vaulted, with walls which are 3 feet 6 inches to 4 feet 6 inches thick, and that the ground plan is oblong, measuring 36 feet by 22 feet.

These measurements may be compared with those of Lochhouse Tower in the adjoining parish of Kirkpatrick-Juxta which is oblong on plan and measures 37 feet by 27 feet. Like Breconside there are three floors and a garret. The walls are 6 feet thick and recently, when work was being carried out in the tower, tradesmen uncovered two wall closets and an awmrie which has been hidden by the plaster for many years. The basement is vaulted. It must be again noted that a Moffat guide-book states that Lochhouse dates from the year 1400[9] but a more authoritative source considers that it is a tower of the sixteenth century.[10] It was perhaps built not long before or soon after the passing in 1535 of the Act of the Scottish Parliament

9. William Keddie, *Moffat* (1854), 2.

10. Nigel Tranter, *The Fortified House in Scotland*, iii, (1965), 77-8, 88-9.

which ordained that every landed man dwelling upon the borders having so much land should build a barmkyn and also a tower if he thought it expedient. The fact that the windows of the ground floor are looped for musketry may give some indication of its age. It was a Johnstone stronghold for many years and Lochhouse Tower is mentioned as being occupied by a Johnstone in 1567.[11] These two towers have one thing in common. They are the only sixteenth century dwelling-houses in Upper Annandale which are still inhabited. Both are to some extent modernised and in the case of Breconside there are certain outside additions.

It was another James, the fourth James in the line of succession of the Breconside Johnstones, who succeeded his father who had died in 1666. He was in Breconside in 1684[12] when the persecution of the Covenanters was at its peak and with whom he must have been in sympathy, for it is said that conventicles were held on his land near the tower. This information comes from the Rev. William Bennet (1822-1899)[13] who was born in Ettrick manse and after his father's early death was taken by his mother to live with her father, the distinguished Dr Singer, in Kirkpatrick-Juxta manse. He was destined for the ministry and at the Disruption threw in his lot with the Free Church. Bennet was familiar with the neighbourhood and as a man who "was much appealed to by antiquarians".[14] His story which follows is no idle invention.

"Near Breconside is a fine greenstone rock, shadowed by an ash tree, which is said by tradition to have served as a pulpit in the days of the persecution . . . I cannot recall the person from whom I heard the tradition, but it exists; and a more fitting place could not have been found for the purpose. The valley is quite hidden from the main roads. It is approached from Moffat by a path from Woodhead . . . over a height called the Cocket, from which is a fine view".[15] Be it as it may the ash tree is still "entire" and in 1979 is flourishing. It stands near the tower, 1500 yards from the Old Carlisle Road from Moffat.

In September 1684 "Master David Johnstone, minister att Moffat, gave in the roll of the haill heritors, life renters, tennents, cottars, there wyfes, childrene and servants of both sexes above tuelv years of age."[16] The list of all those living on Breconside shows "The Laird"; and with him are seven Johnstones, a Davidsone, a Donaldsone, a Litle, Jayly and Janet Patersone and others, in all 22 persons. In addition there were shown three persons living on "The Cocket".[17] The Laird was not referred to by name but he is elsewhere, and a significant entry in the Register of the Privy Council records that "James Jonstoun of Breckensyd, now tested."[18] It would seem that whatever his true feelings were in the matter the Laird had decided to follow the prudent example of many others, sign the test, and avoid further trouble.

11. C. L. Johnstone, *Historical Families of Dumfriesshire* (1889), 108.
12. Adams, *A History of the Douglas family of Morton* (1921), App. B, 60. See also App. A, 57, 65, 74.
13. Rev. William Bennet, *Echoes of the Past* (1899), with a prefatory memoir by W. B.
14. *Scotsman*, 17 May 1899.
15. Agnes Marchbank, *Upper Annandale* (1901), 96.
16. *RPC*, 3rd Series, x, 568
17. *Ibid*, ix, 403.
18. *Ibid*, ix, 630.

The connection of that Johnstone family with Breconside came to an end in 1693 when John Johnstone, presumably the son of James, disponed the lands to his nephew Andrew Chalmers of Dam. Andrew was dead by 1695 when his sister Margaret was retoured heir to him. She married a William Carruthers and the place came into the possession of the Carruthers family.[19] Dr R. C. Reid writes that William Carruthers and his wife succeeded to an estate already encumbered with Johnstone debts (which were no doubt partly incurred by monies spent on the tower), and "our knowledge of them is almost entirely derived from this unhappy source". They were forced on three occasions to borrow large sums of money and even after William's death in 1720 money was loaned to Margaret by Mr David Wightman, minister of Applegarth.[20]

Circumstantial evidence seems to credit the Johnstones with carrying out many of the improvements to the tower which still survive, in particular the panelling referred to by Nigel Tranter in his book on fortified houses in the south west of Scotland which was published in 1965. His description of 'Breckonside Tower' is authoritative and follows hereunder.[21]

"This is a small much-altered fortalice of probably late-16th-century construction with 17th-century additions and alterations, now a farmhouse ... The original building, based on outcropping rock, was a simple oblong tower of three storeys and a garret. The north and east sides of this remain but little altered, although the roof level has been lowered and the crow-stepping removed. But the west side has been transformed by the addition of a large semi-octagonal stair-tower and the opening of large windows ..."

"The original door was, no doubt, near the foot of the early turnpike stair which" according to Tranter, "rose in the north west angle with an inward projection on the apartment space".

What appears to have been the original doorway is now partly blocked up and its place taken by a window, and near it are six stone steps of the bottom part of the turnpike stair which has been superseded. "The basement contains two inter-communicating vaulted chambers, that to the north seemingly having been the kitchen. The hall on the first floor is now subdivided. There are two chambers on the second floor, one having two garderobes or wall-cupboards. Considerable 17th-century panelling still remains, painted over. Some small windows have been built up, and others enlarged." It may have been in the lairdship of the Johnstones when the two windows were inserted in the vaulted basement.

14 windows was the number on which John Carruthers of Breconside was assessed in 1758. He paid Window Tax at the rate of 6d per window per annum but he was careful to restrict the number to 14 for had he opened up more he would have been liable to a higher rate, for every house with 15 to 19 windows paid 9d per window. It would be interesting to know just how many of the original windows have been done away with. However it is evident that by 1723 much had been done to the tower else Garioch would not have included Breconside in the list of "Gentlemen's

19. *Records*, 77.
20. *Ibid*, 78.
21. Tranter, *op. cit.* 77.

seats" in Moffat Parish, recorded in his "Description of Annandale".[22] Indeed it is still shown by the conventional sign for a gentleman's seat on Crawford's Map of Dumfriesshire in 1804.

To hark back to William Carruthers who according to Dr R. C. Reid died in 1720 and was survived by his wife Margaret whose affairs were taken care of by her son John. He was usually styled Captain John and was a shipmaster in London, inconveniently placed for looking after his mother in Scotland. Nevertheless he was fortunate in having a friend and neighbour in George Clerk of Dumcrieff which as the crow flies is only a mile away from Breconside. The two men kept in touch and some letters to Clerk from Captain John survive in the Scottish Record Office. Some correspondence in May 1744 concerned the purchase of a gun which Clerk wanted to be sent to him from London in time for the shooting. It was an unusual order for, as Carruthers wrote, "left handed guns must be spoke for". However the best gunsmith in the country tackled the job and the bill for the finished article reads "One fine Steel Rolled full bridle gun and case. £5. 8. 0."[23]

The word 'bridle' here refers to the bridle which in riding refers to the left hand, and put into modern English the bill could read "a complete left-handed gun and case". At the same time Carruthers informed Clerk that insurance between London and Leith by sea was "now ten guineas instead of one" and this is hardly surprising for the *Scots Magazine* for July 1744 published a list of 41 ships which had been captured by the French and taken into French harbours and another list of 34 ships captured by the Spaniards.

Clerk had at some time in 1745 left this gun behind in Carlisle where it was being looked after by a man named Wilson who wrote to Clerk in January 1746 informing him that it had "escap'd the rebels eyes" but had afterwards been seized by the King's soldiers. However by the General's order it had been handed back to the family who had been looking after it and all was well.[24] Clerk was then living in Dumfries to which place he had returned after serving in the Royal Hunters. This unit had been raised for service in England only and had been disbanded before the Government army had crossed the border into Scotland in pursuit of the Highlanders. Thus Clerk was enabled to resume the management of his linen factory, and so it was to "George Clerk of Dumcrief, Dumfries" that Carruthers addressed a sequence of five letters which mostly concerned a small house and the tower at Breconside which required the attention of masons, joiners and slaters.[25] The first is dated 11 March 1745 (i.e. 1746), London, and was written at about the time when Cumberland was following the Jacobite Lord George Murray to Aberdeen. This was about a month before the battle of Culloden which put an end to all uncertainties and to the Jacobite rising.

"I don't know what to do about my houses at Breakenside. The times looks so cloudy that I am afraid it will not suit you to be att Dumcrief this summer nor me to be att Breakenside till July if the troubles was at an end, nor doe I think people are to be got to work during the consternation that people in general must be under while this wicked rebellion continues. I am in continuall uneasyness about my aged and feeble mother who so soon as she heard of the Rebells moving from Edinburgh pressed me

22. *MacFarlane's Geographical Collections*, (SHS 1906), i, 265.

23. Scottish Record Office, GD. 18/5461/2.

24. *CW* New Series (1963), lxiii, 248.

25. Scottish Record Office, GD. 18/5737. The date 11 March 1745 is Old Style.

to be gone out of their way. She now, believing the affair is over, presses me to return and bring my wife with me; a very likely thing indeed to think any woman will leave London to goe to Scotland att this time when both men and women of all kinds were terryfy'd out of their sense and reason so soon as ever they heard the Highlanders were gott into Lancashire, thinking they could never be stopt till they were in possession of London. Nay, they even begin to quaik a little now and dread another return. I mean the women and perhaps some silly weak men . . ."

Captain John's next letter was written only two days later. He was worried about the news.

". . . I am still in doubt what to doe in regard of the houses att Breakenside. The bad news we hear as to the Rebels confounds me. We have a report this Day that they have sent off two thousand of the Duke's forces who were to cross the Spey. I hope there is nothing in itt. Others say he is totally routed. Another report we have this day is that one of the men of warr from the north is put into Lynn and has wrote up that the Rebells are in full march to meet and fight his highness . . . This morning two thousand of the Guards marched through the city in order to embark for Scotland. I wish they may not come too late . . ."

The rumours to which Carruthers referred were unfounded. He had no cause for alarm for Cumberland was ready to begin operations and the division commanded by Major-General Bland marched on March 17th to Strathbogie which was abandoned by the rebels who fled towards Keith. According to a contemporary report their panic was so great that it was concluded they would not halt long in a place until they had passed the Spey. However Captain John's next letter was not quite so depressing. It was written on 17 April, the day after the battle of Culloden when the Highland army under Prince Charles Stuart was totally defeated by the troops under the Duke of Cumberland. The news of this victory had not reached London until after Carruthers had posted this letter.[26]

"I have heard that the Duke marched from Aberdeen on the 8th inst. If so I hoped he has put an end to our troubles by this time. I am very anxious about mother and would fain see her and accomplish what I have to doe there this season, that is before the fall of the year. I shall write to you before I sett of about the mason who as you say is certainly the fittest for me . . ."

It took some little time for the news of Cumberland's victory to reach London but when on 17 May Carruthers wrote his next letter he was well aware of what had happened and was already making plans to stay at Breconside and supervise the work which had to be done on the tower. In fact the work had already begun for timber was being cut and John Black had been booked to do the joiner work. Black was a joiner who had done a lot of work for Sir John Clerk, George's father, who in the early 1730's was making many improvements to his house of Dumcrieff.[27] It was at Dumcrieff that old Mrs Carruthers was living when there was no accommodation at Breconside.

"I was favoured with yours some time agoe of Ap 27 which I would have answered before now but waited to bring my matters so as to fix the time of my comeing down to Scotland. I joyn with you as to the success his Highness has had

26. *Scots Magazine*, March 1746, 145.

27. 'Some letters from Dumcrief' *TDGAS*, 3rd Series, xlviii (1971), 129-150.

against the Rebells but we are still in some doubt as to the entire end of the affair which keeps things flatt here, together with the Dismall situation affairs in Flanders is in att present ...

"I cannot possibly get down till the end or middle of July but should be very glad in the mean time to have something done before the year is too far spent. I design to put a roof on the house that was burnt which I would have first done in order to fitt up a room in itt to shelter in my self while the other, I mean the tower, is fitted up, for there is no sleeping in itt while the masons and joyners are at work, but how thats to be done you can best advise ...

"Samuell is cutting the timber and if you could gett me a Mason to mend and make sufficient the walls ready to fix the roof on, when it can be gott ready, which shall be as soon as possible, I should be very much oblidged. I dont care how many men are sett to work to gett that house covered in before I come down. I should have full time to goe on the other house alone for the mason work before the winter sets in. The wrights see [say] that Case might work in the winter time if necessity required and [this] would be rather an amusement to me as I am determined when there to stay and see it so finisht that I can lodge my family when we doe come in a tolerable manner turn up what will ...

"I have wrote to John Black to be ready to goe to work as soon as ever the timber which is now cutting will bear working. As my old masons are engaged in contract with you, I cannot desire you to part with them. I remember you told me Forrest the younger, in Lochmaven, was a very good workman; its equall to me who ever you are so good as to employ for me, provided they understand the Quarry as well as William did and the sooner [we] have them the better."

Captain John's last letter was written on "Saturday 24th 1746" after he had arrived in Scotland. It was in September[28] and it seems that progress had been made towards getting the small house ready for the slaters. However he still needed more help which was not easy to get, and he still does not say what he was planning to do to the tower. It seems to have been a biggish job both outside and inside and putting two and two together he had decided to do away with the original stone turnpike stair and replace it by the addition to the west wall of the semi-octagonal stair-tower as noted by Tranter. This is said to be of eighteenth century construction.

"I have troubled you with this on purpose to stopp the slaters as I find that the masons will not gett so farr on with their work as to be ready for the roof slates ten days to come, John Black will have done his part on Tuesday's night next. I wish I could gett one or two masons to assist the others till the roof is covered. They tell me there is one William Turnbull and John Allan at Lochmaven who would be willing to come up" but in this he was disappointed for he wrote in a post script that "I am afraid that Francis Paterson, as he was not employed at first, will not lett any of those at Lochmaven come, so that if you could get any with you it would do me as well."

We can rest assured that in due course the work on the tower was finished and the place made habitable for Margaret Carruthers. She died in January 1749 at Breconside and from the inventory of her 'moveable Goods and Gear' we get a glimpse of the conditions under which she was then living.[29]

28. *Handbook of Dates* (1945), Table 20, 123.

29. Dumfries Testaments, Scottish Record Office, CC 5/6/13, 25 Feb. 1749.

She possessed a quantity of furnishings much of which was described as being 'old' or 'very old'. Thus the list of items in the **kitchen** includes an old chest and trunk, a kitchen table, an old press, an old little wheel, two old kitchen chairs and an old frying pan. Following next in the inventory are the items in the **outer cellar** and then the items in the **inner cellar,** clearly referring to the vaulted chambers in the basement. By a process of elimination the **North laigh Room** must have been one of the two rooms on the first floor. It seems to have been used as a bedroom for it contained amongst other items two stand beds, "six old cloath botom'd chairs," a very old press, and an old twenty four hour clock valued at fifteen shillings.

The **room below the kitchen** was better furnished than the other rooms. Its six chairs with cloth bottoms were twice the value of six in the north laigh room and the two presses were not described as old. Could this have been the other room on the first floor? It is difficult to find the answer but at least it shows that Margaret's kitchen was not in one of the cellars. Amongst the items in the **coach house** was a spinning wheel and a pair of yarn winders. She did not own a horse and the **stable** housed two old stand beds. In the **byre** was an old washing tub which must have left enough room to accommodate 'an old milk cow' worth thirty shillings.

Included amongst numerous other items was 'Some old Timber lying about the house of Breckenside, some of it being only fit for firewood', an old Bible, an old psalm book, and 'An old Looking Glass broke in several parts worth one shilling'. A depressing inventory in which the only bright spot was 'Item six silver broth spoons, an old Silver Cup and four small Tea Spoons weighing nineteen ounces. All worth Three pounds sixteen shillings.'

John Carruthers was served heir to his mother in 1756 but he had already inherited everything, the farmlands, the firewood, the old cow and above all the accumulated encumbrances which forced him in 1769 to assign the estates to a George Muir, W.S.[30] This is a sad story but there were better times ahead, and when the legendary Dr. Rogerson was granted leave of absence from the Russian court to stay in Scotland to attend to his private affairs he first purchased Dumcrieff[31] and then in 1805 the lands of Breconside and Woodhead. Five years later he added the Wamphray Estate to his property.[32]

Rogerson was a most progressive landlord. He repaired and built many houses and offices on his numerous farms, built many miles of fences and carried out many improvements for the benefit of his tenants. He died in 1823 and Dumcrieff, Breconside and Woodhead passed to his daughter, Elizabeth, who married in 1834 William Rollo, afterwards the 9th Lord Rollo. She died in 1836 and her son, John Rogerson Rollo, inherited the Dumcrieff estate. He became 10th Lord Rollo in 1852 and in spite of being an absentee landlord took an interest in his properties and did much for Breconside. He was responsible for the opening of the large Victorian windows mentioned by Tranter. The 'lower extension' consisting of a kitchen, two living rooms and the large porch with the door facing west was also his work.

30. *Records*, 78.

31. 'Dumcrief and its Owners', *TDGAS*, 3rd Series, xlv (1968), 206.

32. Disposition by the Trustees of William Campbell, 28 Nov and 3 Dec 1805.

In 1891 this farm of 1166[33] acres was prospering and the Census Rolls for that year record that it was tenanted by William Carruthers who, with his wife, a daughter, a cook, a dairymaid and two male servants lived in the tower. Also on the farm was a cottage occupied by John Bell, ploughman, and another cottage which sheltered William Boa, shepherd, his wife, five sons and a daughter.

Lord Rollo died in 1916, since when Breconside has passed through several hands. It is a hill farm and like many of its kind which have not been aforested is not being very remunerative to its tenant farmers. However, the solidity of the tower still remains and it would be true to say that it remains much as it was at the beginning of the present century. It is a Category "B" Scheduled Monument.

Acknowledgements

I am indebted to Dr Athol Murray for editing my manuscript. I am grateful to Mrs Stitt who allowed me to explore the tower on several occasions.

33. Reference the two brothers Stitt who in 1979 have been tenants in Breconside for 35 years. The Census Roll of 1881 gives the acreage as 1061, 141 arable.

THE AGRICULTURE OF SOUTH-WESTERN SCOTLAND IN THE MID-NINETEENTH CENTURY

by J. Phillip Dodd, M.Sc., M.A.

Introduction

A summary of events leading to the collection of agricultural statistics in 1854.

In England and Wales official interest in the collection of agricultural information can be dated to 1795 when the prospect of famine throughout the kingdom, prompted the Government to seek information through the agency of the Lord Lieutenant of each county. In actuality the factual information was gathered by parish constables on odd scraps of paper,[1] which in total formed such a heterogenous muddle that the Select Committee set up to report on the evidence, could make little sense of it.

Although suggestion was made by Sir John Sinclair that the gathering of agricultural data should be entrusted to the clergy, a method which was then proving successful in the instance of the Statistical Account for Scotland, the Government decided against this. However, following the deficient harvests of 1798 and 1799 and the failure of that for 1800, a second attempt was made with the aid of the bishops in 1800, who addressed letters to incumbents in their dioceses. This likewise proved to be too imprecise to yield anything approaching an authoritative survey of the country. The return of conditions of near famine in 1801 and the threat of civil insurrection made it imperative for the Government to discover the true state of agriculture. Pre-printed forms were distributed to the Clergy of every parish in England and Wales but the resultant information was of limited value.

The harvest of 1801 was so outstandingly productive, that with the disappearance of fears of famine and civil disorder, official interest in agricultural statistics lapsed other than those for south coast parishes during the invasion scare of 1803.[2]

However, political economists and statisticians notably G. R. Porter,[3] C. Wren Hoskyns, James Caird and J. D. Dent maintained a stream of writing and lobbying until in 1853, a joint deputation of the Royal Agricultural Society of England and the Highland and Agricultural Society of Scotland persuaded the Government to undertake the experimental collection of agricultural statistics in 1853-4. There had been minor trial schemes previously involving Norfolk 1831, Bedfordshire 1836,[4] and in selected Poor Law Unions in England,[5] Ireland, and in Scotland, the county of Midlothian, in 1844.

To Scottish observers progress must have appeared painfully slow, when one considers that The Honourable the Society of Improvers in the Knowledge of Agriculture, was founded as early as 1723, and whose members were to 'mark down

1. J. Phillip Dodd (1965) 'South Lancashire in Transition 1795-1801' *Trans. Hist. Soc. Lancashire and Cheshire* vol. 117.

2. W. E. Minchinton (1955) 'Agriculture in Dorset during the Napoleonic Wars' *Proc. Dorset Nat. Hist. and Archaeological Soc.* V.77.

3. G. R. Porter (1851) *The Progress of the Nation* For Dent, Hoskyns and Caird see contemporary journals of Roy. Ag. Soc. England and Statistical Society.

4. G. R. Porter (1838) 'Agricultural Returns of Bedfordshire' *Journal Stat. Soc.* vol. 189-96.

5. British Parliamentary Papers. House of Commons Sessional Papers (1847) LIX 468.

in writing . . . and to correspond with the most intelligent in all the different counties in the nation, concerning their different ways of managing their grounds, that what may be amiss may be corrected, and what is profitable imitated.' These precepts were extended and developed in the Proceedings published in 1743, which also included a suggestion that universities should appoint 'Professors of Agriculture'.[6]

By 1800, the Farmers Magazine of Edinburgh was publishing accounts of farming practice and presenting quarterly reports from local correspondents, and the Statistical Account had been completed. Sir John Sinclair had commenced surveying the results which were presented in his Accounts of 1813 and 1814, while in 1834 the second lap of the cycle had commenced in the form of the promotion of the New Statistical Account.

Although the English attempts to collect statistics in 1831, 1836 and 1845, were not demonstrably successful, within a few years the East of Berwickshire Farmers' Club had indicated that agricultural statistics could be obtained,[7] a point well and truly hammered home by the Highland and Agricultural Society's collection of statistics for the whole of Scotland for 1854-7. The latter had been preceded by a trial run involving Haddington, Roxburgh and Sutherland in 1853.

The English scheme for 1853 involved the counties of Hampshire and Norfolk and the relative success of this encouraged an extension of the collection in 1854 to include a further nine counties.[8] In most of the eleven counties the scheme encountered a certain degree of opposition from some farmers and landowners, the worst gaps in the collection occurring along the Berkshire-Hampshire border, where non-cooperation was probably politically inspired. In Wrexham Poor Law Union, Denbighshire, with numerous smallholders, many possibly of unsound title, there was a threat to treat the enumerators as trespassers,[9] while in Moreton Say in N.E. Shropshire some farmers burnt the schedules.[10] In Flegg and Guiltcross Unions, Norfolk, details of some 40% of the land use could not be ascertained,[11] but in Brecknockshire only fourteen schedules were uncompleted.[12]

In contrast, in Scotland with a long tradition of appreciation of the value of such information and where the scheme was undertaken by the tenant farmers themselves the outcome was vastly different. "The Scotch farmers, as a body, at once recognised the importance and utility of the measure, and endeavoured to support and forward it by readily and faithfully affording the information required of them. . . . . Many members of committee, indeed, mistaking the extent of their duties, went to the length of ascertaining and reporting the exact acreage of all the crops in their respective parishes".[13] For good measure information was also collected in 1854 on the yields of the principal crops for individual counties and for county divisions. The

6. H. Hamilton (1948) *Farming and the Countryside* 23 Common Ground. London.
7. J. T. Coppock (1956) 'The Statistical Assessment of British Agriculture' *Ag. Hist. Rev.* vol. IV 4-21.
8. British Parliamentary Papers (1855) Reports by Poor Law Inspectors on Agricultural Statistics (England) 1828.
9. J. Phillip Dodd (1959) 'The Denbighshire Crop Returns for 1854' *Trans. Denbighshire Hist. Soc.* vol. 8 p. 7.
10. J. Phillip Dodd (1960) 'The Brecknockshire Crop Returns for 1854' *Brycheiniog* Vol. VI 79-92.
11. J. Phillip Dodd (1976) 'Norfolk Agriculture in 1853-4' *Norfolk Archaeology* vol. XXXVI 253-64.
12. Dodd (1960) op. cit.
13. J. Hall Maxwell (1855) Report of the Highland and Agricultural Society to the Board of Trade. London.

Return embraced 32 counties, the Hebrides and Western Isles being included in their contemporary mainland counties of Inverness, Ross and Cromarty and Argyll.

The 1854 Crop Returns

The statistics were presented in an alphabetical list of counties and embraced some thirty categories of land use. Of these seventeen related to crop acreages, including rotation grass, four to other kinds of grass, two for urban and woodland, and seven categories for livestock. As they stand the figures are of interest but considerable processing has been necessary to provide meaningful analysis. The statistics for the eleven English counties which were collected in 1854, were shown as returns for individual Poor Law Unions, and although not a satisfactory arrangement, I have been able to discuss land use on a basis of sub-regions within counties. For Scotland it is only possible to make comparisons on a county basis although the crop produce statistics, for divisions within counties, provide grounds for a regional break-down of the data as is discussed in Part III of the present study.

The south-west has been regarded as comprising the area between the Forth of Clyde and the Solway Firth, thus embracing the counties of Renfrew, Lanark, Ayr, Wigtown, Kirkcudbright and Dumfries. The last three counties correlate with the dissected plateau of the Southern Uplands, with much of the land rising above 600 feet O.D. (183 m) and coincident with Lower Palaeozoic grits and shales of Ordovician and Silurian age. To the north of the Southern Uplands Boundary Fault which trends north easterly from Cairnryan through Sanquhar, rocks are dominantly Carboniferous. The intrusion of the great mass of basaltic lavas extending from Greenock to Strathaven however, effects a tripartite division of the area with the lavas occupying the central position. In the two lowland areas of the Ayrshire Plain and the Clyde Valley, the solid geology is largely masked by glacial drift, while further diversification of soils has resulted from post-glacial drowning and subsequent eustatic uplift giving rise to raised beaches, notably the 100 foot (30.5m) and the 25 foot (7.6m).

Apart from the factor of soils, land use in the south-west is materially influenced by aspect and in this respect, Renfrew, Lanark and Ayr are open to polar air from the north and to maritime air from the west and differ somewhat from the other three counties to the south. The broad mass of the Southern Uplands too operates to shield the lowland southwards to the Solway Firth from incursions of polar air while Ireland is said to afford shelter to Galloway from both wind and rain.[14] The most significant differences are to be remarked in the incidence of rainfall, for example, whereas the 40 inch (1000mm) rainfall isohyet is at 140 feet O.D. (44m) in the Southern Uplands, north of the Boundary Fault the relevant height is noted as 400 feet O.D. (122m). At these elevations some 63% of the area in the north, and 90.0% in the south, receives a rainfall in excess of 40 inches.[15]

The interplay of these several factors of soils, altitude and climate as between one county and another is observable in Table A. Thus Kirkcudbright with 58.0% of its total area as rough grazing had no more than 39.0% describable as the cultivated area in 1854. At the other extreme, Renfrew with only 21.0% in rough grazing could

14. C. A. Halstead (1958) *The Glasgow Region* Glasgow Chapter 3 p. 67.

15. Halstead op. cit. p. 70.

show 73.0% of its area as cultivated. However, for the majority of the counties the extent of total grass plus rough grazing was an obvious determinant of the 1854 emphasis on livestock farming. The salient features are illustrated in Table B and clearly indicate the significance of cheese making in Renfrew, Ayr and Lanarks although the demands of the urban milk market were being facilitated by the development of the railway network. Conversely the paucity of such communications and the distance from large centres of population influenced the decision making of farmers in the southern sector of the region.

This can be seen from the fact that whereas store cattle represented some 33.0% of the total stock north of the Boundary Fault, to the south the proportion amounted to 52.0%. In the case of sheep, (Table B) breeding was the major activity throughout the region. However, at this point it has to be stated that the date of collection of the 1854 statistics is of importance. The original intention was to issue the Schedules 'A' in time for collection on August 21 but owing to unforeseen difficulties, individual occupiers did not receive the Schedules until after November 1.[16]

The obvious consequence of this administrative breakdown was to record only the livestock being carried on through the winter. Barren cows, culled ewes, the larger part of the lamb stock and a fair proportion of the store cattle and wethers fed on during the summer, had been drafted at the autumn livestock fairs and marts. The sheep stock thus was reduced to the breeding ewes kept on the lower ground and the smaller wether flock pushed up on the poorer feeding of the higher ground. Many farms had insufficient resources to carry on more stock through the winter and in this respect it may be instructive to contrast the density of stocking with that of some of the English and Welsh counties in 1854.

The highest Scottish densities as instanced by Dumfries and Kirkcudbright, occurred on the Ordovician and Silurian rocks of the Southern Uplands. Similar rocks and physical conditions are typical of much of Denbighshire, Brecknock, and along the Radnor — south Shropshire border. In 1854 sheep densities in Denbighshire were 355 per 1000 acres[17] and in Brecknock 580 sheep.[18] These correlate with those of the Scottish counties but the latter fall well below the Welsh Borderland densities. Along the Radnor border sheep were wintered at a density of 935 and on the Shropshire side on Clun Forest at 705 per 1000 acres.[19] As the two last regions have long been turned over to the Forestry Commission, the quality of the land can hardly be regarded as superior to that of the Southern Uplands. Possibly the answer lies in the difference in livestock management with the Welsh Borderland hill farms able to provide more shelter in the bleaker weather, thus reducing the heavy mortality typical of Scottish flocks.

In the employment of the arable acreage, there was considerable uniformity throughout S.W. Scotland. (Table C.) As in Scotland as a whole, oats were the major cereal crop and occupied between 25% and 29% of the arable land. With roots it can be seen that despite all the pioneering propaganda of the earlier improvers like Sir John Sinclair, turnips had not made much headway, particularly if one considers that

16. J. Hall Maxwell (1855) 'Report of the Highland and Agricultural Society to the Board of Trade. London.

17. J. Phillip Dodd (1959) 'The Denbighshire Crop Returns for 1854' *Trans. Denbighshire Historical Society* vol. 8 pp. 1-19.

18. J. Phillip Dodd (1960) 'The Brecknockshire Crop Returns for 1854' *Brycheiniog* vol. VI pp. 79-92.

19. J. Phillip Dodd (1978-9) "Shropshire Agriculture 1816-1854" *Trans. Shropshire Archaeol. Soc.* (forthcoming).

the average for Scotland was 13.0% of the arable average. Much of the land was too heavy and wet for success with the crop without draining and the application of manure, such as that wasted by the sheep on the rough grazing of the hills.

According to the evidence from the New Statistical Accounts, improvements in drainage were taking place and in Ayrshire twelve ministers are said to have remarked on the results in their parishes. However, this appears to have been largely a matter of improving peaty moorland and a later report states that reclamation slowed down after 1840.[20]

The unimportance of barley in 1854 was a marked feature and was probably the result of the disfavour evinced by most farmers who found the straw unsuitable for livestock.[21] The acreage under potatoes was said to have greatly declined following the severe blight years, a factor still evident in 1854 when the crop over much of Scotland was either poor or a complete failure.

Rotation grass, in long leys of up to six years, was a characteristic feature of Scottish agriculture of the time, the average proportion of arable devoted to this crop being 42.0% in 1854. The south-west with its high rainfall militating against any emphasis on cereals exhibited the strongest devotion to ley farming. As even under short leys using improved seeds mixtures modern grass deteriorates in quality, there is obvious room for doubt as to the stock feeding capacity of these 1854 leys. Occupying rather more than 50.0% of the arable, the land devoted to rotation grass was presumably worth ploughing and thus worth improving. Gradual upgrading by draining and sown to shorter leys, the pastures could have supported a larger sheep population, without the risk of foot rot inherent in their undrained condition.

Heavier sheep stocking would have been of benefit all round the farm and would have involved the possibility of increasing the roots acreage, including swedes and mangels. It could be argued that this would have reduced the grass acreage and have upset the bias towards towards dairying. However, when one considers that the total grass of all grades in Renfrew covered more than 73.0% of the total land area and in Lanark over 76.0%, while turnips occupied no more than 5.0% of the arable, it would appear that there was considerable scope for improvement in 1854.

Certainly the economic incentive to do so was in evidence during the succeeding decade. Beef prices in the Metropolitan Markets advanced by 20.0% over the 5 year average ending in 1863 as compared with the 5 years ending 1853. Mutton, however over the same two 5 year average periods made a 30.0% increase.[22]

Before discussing the south-west in terms of land use sub-regions, it may be of advantage to survey the complete region in relation to Scotland as a whole. In 1854 the south western group of counties comprised 15.6% of the total land acreage but 26.7% of the arable land. 10.9% of Scotland's rough grazing was to be found here and 30.5% of the cattle stock and 21.4% of the total sheep population. In terms of regional productivity it is somewhat difficult to compare like with like and probably the best region for the purpose is Central Scotland, which however includes Perthshire. The latter by virtue of comprising two thirds of the region but with only 3.5% of its area classed as cultivated land, operates to materially reduce the overall

20. J. H. G. Lebon (1937) *Ayrshire* Land Utilisation Survey vol. 1 p. 23.

21. F. K. Hare (1941) *Kirkcudbrightshire and Wigtown* Land Utilisation Survey vols. 7 and 8 p. 378.

22. H. S. Thompson (1864) "Agricultural Progress and the R.A.S.E." *Journal R.A.S.E.* Vol. XXV p. 34.

productivity of the Central Scotland Region. Bearing in mind that its total area was only some 89.0% of that of the South Western Region, Central Scotland contained 20.2% of the arable acreage, 19.2% of the cattle stock and 14.8% of the sheep.[23] With Perth removed the two regions would probably show little variation in overall land use although there were differences in the degree of emphasis placed on certain aspects of farming, as for example the dominant dairying role of the south western counties holding 39.0% of the dairy stock of Scotland.

Regional land use

It is possible to distinguish four principal regions in south-west Scotland, which for the sake of simplicity may be termed, the Interior Moors and Upland, the North, the West, and the South Regions. (Figure 1).

The first of these probably accounts for some 55.0% of the total area and in terms of productive land use is largely negative. Taking the perimeter as equating with the 600 foot contour (183m), although in Southern Wigtown the low moors of Minnigaff extend nearly to sea level, the land rises to 2000 feet (610m) over much of the region south from the Lowther Hills and achieves 2700 feet (823m) at Merrick on the Ayrshire-Wigtown border.

There are considerable tracts of peat notably in the salient projecting between Lanark and Ayrshire, (Figure 1) and in the extensive area of peat flows in central Wigtown. The summits carry a vegetation cover of deer sedge, heather and cotton grass, the wetter sedge and cotton grass occupying the flat waterlogged tops characteristic of much of the higher land. Below these levels species such as moor grass, sphagnum, and moor rush become dominant, while in the fringing zone to the moorland edge mat grass, moor rush, and on the drier patches — heather and wavy hair grass are typical.[24]

High rainfall, waterlogging and a high degree of exposure to strong winds restrict the effective use of these moors in terms of agriculture. For the most part the wether flocks, traditionally pastured on the higher land[25] were hard pressed to find much sustenance from the low nutritive quality of the natural vegetation.

On the lower ground and more especially in the valleys with pockets of better drained glacial drift and alluvium, oats were grown with at best a yield of 31 bushels per acre. Such barley as was grown averaged 27 bushels and turnips and potatoes were also low yielding at 11.5 tons and 2.5 tons respectively. The harvest of 1854 however gave a good crop of oats up to 5 bushels above average but turnips in general were below an average yield and potatoes no more than a half crop.

The Northern Region

As may be seen from Figure 1, the region extends southwards from the Firth of Clyde to the moorland edge, which also forms the boundary in the west and east Soils are varied but for the most part heavy clays and loams predominate, the latter being more characteristic of the central portion of the region. The clays are to some extent relieved by pockets of light loam developed on the basalts, which unlike most other igneous rocks tend to break down more easily to form productive soils.

23. J. Phillip Dodd (1978) "Agriculture in Central Scotland in 1854" forthcoming.

24. J. Phillip Dodd (1961) *The Natural Vegetation of Britain* E. P. East Ardsley pp. 8-11

25. C. Scott (1886) *The Practice of Sheep Farming* p. 115.

Fringing the Firth are more light loams coincident with the carse or raised beaches while here also are patches of valley sands and gravels.

The Old Red Sandstone and basalts of Upper Clydesdale form well drained soils as was remarked in 1794 by Naismith[26] who described this area as 'having friable lands interspersed with hills, pasture lands, marshes, peats and spots of clayey soil'.

The effect of a more favourable environment is to be seen in the higher average yields of the basic crops in 1854. Oats produced 36 bushels to the acre, barley 34, turnips 15 tons and potatoes 4.7 tons, rising to over 5 tons near Glasgow where town manure was readily available. In 1854 there was an excellent yield of cereals, oats being 6 to 9 bushels above average, wheat 3 to 6 bushels higher and barley 3 to 8 bushels more than average. However both the turnip and potato crop were below an average yield except in Upper Clydesdale where the turnips were said to be slightly above an average crop.

In some parishes the dominance of heavier soils resulted in the replacement of turnips by beans but in general only one third of the turnip acreage was devoted to this crop. Cambuslang was one of the exceptions and at the time of the New Statistical Account in 1836 no turnips were grown being replaced by peas and beans which occupied about 6.0% of the arable land.[27] Dairying at that time was already

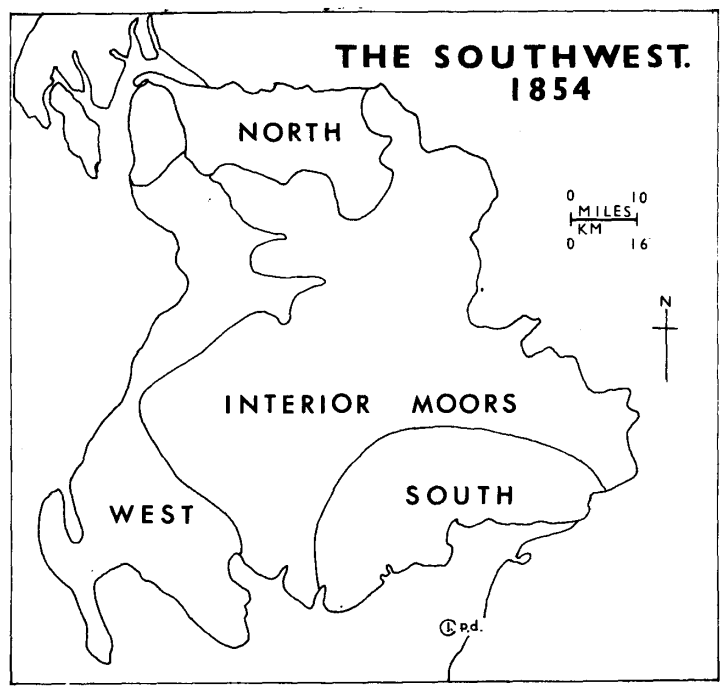

Fig. 1
The South west 1854

26. J. Naismith (1794) *General View of the Agriculture of Clydesdale* quoted by L. D. Stamp in part 21 of *The Land of Britain* 1946 p. 321.

27. L. D. Stamp (1946) supra p. 323.

the focal activity of most farms, which supplied cheese, butter and — where farms were within range of the Lanark industrial belt — fresh milk became an expanding enterprise. Glasgow's rapid growth of population inevitably influenced trends in farming in the region by sheer increase in demand for dairy goods, meat and fresh vegetables. Within its hinterland the conversion of even poor sandy soil into productive market garden land was facilitated by the ample supplies of town manure. Between 1811 and 1821 Glasgow's population grew by 45.0%, by 1831 another increase of 37.0% had occurred, and by 1854 the population had almost quadrupled since 1811. The same expansion was in evidence in other towns, Paisley showed a 65.0% increase between 1811 and 1851 and Greenock virtually doubled in size over the same period. In the region as a whole population increased by 177.0% in these forty years.

The consequences of this rapid urban expansion in terms of agriculture were that there was a significant loss of land for urban housing; for industrial development, and along Clydeside by dock expansion. In many respects the pattern conforms with that of the West Riding Coalfield Region over the same period.[28] The exception being that although in both regions urban growth drew off agricultural labour from the surrounding counties, in the case of this Clyde region much of the labour demand was met by the influx of migrants from Ireland.[29] (Table D). While local agriculture was increasingly channelled into the function of dairy production it is clear that the region could not supply its own requirements for meat. This gap in agricultural production was almost certainly filled by the surplus produced in the counties of Eastern Scotland, whose fatting capacity kept pace with the demand of the London market but yet had ample to spare for the Glasgow region.

The Western Region

This region, (Figure 1) extends along the coast of Renfrew and Ayr and takes in Galloway and Wigtown to Creeside, the eastern boundary being marked by the Moorland edge. Soils vary considerably and by virtue of the high rainfall of these western coastlands, qualities of free draining and easy working are requisite for successful arable cultivation. Even so cultivation is highly dependent on the degree of climatic fluctuation from year to year. Wet springs frequently delay sowing while late harvests pose especial problems. The Old Statistical Account for Fenwick illustrates the erratic nature of harvest weather.[30] In 1781 harvest started on what was for this region the relatively early date of 24 August. In 1782 the relevant date was 7 October, for 1783 September 3 was the day but in 1784 it was October 5.

Heavy rain accompanied by strong winds from the Atlantic are an increasing hazard the longer the grain remains uncut and once the crop is laid by the elements, damage by birds materially reduces the eventual yield. Sheltered locations as in the Nith Valley and the Maybole Basin accordingly frequently provide a more successful harvest than that of the better soils of the more exposed coastal plain.

These several qualifications for a successful harvest can be seen to condition the statements made relating to harvest yields in the early 1850's. In the north of the region the poor soils and high rainfall of the Largs area brought down averages for oats and barley to 24 bushels, turnips to 9.5 tons and potatoes to 1.6 tons. Further south the effect of the lighter sandy soils and loams of the raised beaches operated to

28. J. Phillip Dodd (1979) "The West Riding Crop Returns for 1854" *Yorkshire Archaeological Journal* vol. 51.

29. J. Tivvy (1958) *The Glasgow Region* pp. 260-1.

30. Quoted by J. H. G. Lebon (1937) *Ayrshire* Land Utilisation Survey vol. 1 p. 46.

raise yields to 42 bushels for oats and 33 for barley. Turnips averaged slightly over 18 tons and potatoes 3.8 tons.

In Irvine and similarly located parishes, blown sand travelling eastwards over the centuries had leavened the inherent heavy nature of the Boulder Clay[31] thus upgrading crop potential. On the best of this land the yield of 46.7 bushels for oats and 41.5 for barley were the highest of any part of south west Scotland. Turnips yielded 14.4 tons and potatoes 2.5 tons. Southwards to the Solway, yields of cereals decreased to 35 bushels for oats and 30 to 34 for barley although in Wigtown the latter was reported as yielding nearly 37 bushels. Here too, turnips gave 17 tons compared with 14-15 tons elsewhere. However, it is probable that these higher yields related to relatively small intensively cultivated areas in Wigtown. Potatoes averaged 2.7 tons to 3.5 tons.

As might be anticipated yields on the Rhinns of Galloway were somewhat lower and declined to 29.5 bushels for oats and barley, and for turnips to 13.9 tons with potatoes no more than 1.6 tons.

The harvest of 1854 proved to be rather poor in respect of turnips which were below average in most districts while potatoes were likewise a poor crop. In the Irvine area the crops were diseased but reportedly gave an excellent yield on the farms from Girvan to Ballantrae. Between Ayr, Muirkirk and New Cumnock yields of oats varied from 3 to 14 bushels higher than the average, while elsewhere the excess was of the order of 5 bushels. Wheat varied from an average crop to 3 to 8 bushels higher in the Ayr district. Barley also exhibited considerable differences, in Wigtown the yield was about 25.0% higher but further north in South Ayrshire to Girvan the crop was a poor one and as much as 7 bushels below average.

The Southern Region

From the Solway coast the region extends northwards to the dales of the Southern Uplands. Over much of the land soils derived from the relatively dry sandstone are fertile and easily worked but there are however considerable variations such as the mosslands fringing the Solway in the east, the drumlin lowlands of southern Kirkcudbright and the negative region of the low moors of Minigaff in the west.

In this period the thin soils of the drumlins were utilised as arable but the coastal fringe of the Solway provided only varying qualities of rough grazing, although this proved valuable for livestock grazing. From the beginning of the century the cattle side of the economy had evinced signs of gradual change. The earlier concentration on grazing and selling beef cattle, much of the trade being in Irish beasts, underwent disruption by the improvement in communications. The first blow came with the institution of the Liverpool steamboat services which cut down the inflow of Irish cattle. The end came with the development of the railway network which drew off the supplies of Highland cattle. Meanwhile locally produced beef animals came under competition from the Kyle dairy cattle introduced from Ayrshire in particular by settlers from the latter county.[32]

As is indicated in Table A, arable cultivation was less important and restricted to the lower ground. On the soils derived from the sandstone oat yields averaged 33.0

31. supra p. 54.

32. Hare (1941) op. cit. p. 409.

bushels and barley 31.0. On the margins of the region and on poorer soils within the main cultivated zone yields declined to 27 bushels for oats and 25 for barley. On the best land turnips yielded 15 tons to the acre but on the eastern margin and along the moorland fringe this dropped to between 10 and 11.5 tons. Potatoes cropped at 3.5 tons on suitable soils elsewhere the yield was a ton less.

In 1854 the barley proved an average crop but oats were described as excellent in almost every district being 3 to 5 bushels over the average. Turnips and potatoes were poor crop almost everywhere, the latter giving only a half crop or less in the north and west of the region, while in the east the harvest showed a decrease of about half a ton.

Conclusion

The sound and fury of the debate over Repeal of the Corn Laws was for the south west of Scotland as in Scotland as a whole, of far less significance than in the great wheat producing counties of south-eastern England. Committed to livestock rather than cereal production the misfortunes arising from rinderpest in cattle and scab and foot rot in sheep, were in 1854 still some years distant. In the meantime a series of good harvests as in 1854, coincident with rising prices for cereals occasioned by the removal of Russian imports from the market during the Crimean War, encouraged farmers in Scotland generally to plant an increased acreage of grain crops. After the War the continuing trend of population growth in the industrial areas associated with the Ayr and Lanark Coalfields and on Clydeside, encouraged the further development of dairying in the counties of the south west. Urban development plus the relegation of the poorer arable to permanent pasture as the dairying trend strengthened, caused considerable diminution in the arable acreage. This was obviously more marked in the areas previously mentioned as can be seen from the fact that twenty years after the 1854 collection of Crop Returns, the arable acreage for Renfrew (Table A) had declined to 292 acres per 1000 acres of total area, and in Lanark to 286, while in Ayr the figure was 243. For Wigtown and Dumfries lacking industrial growth, the decline was less dramatic, showing reductions of fifty acres and fifty-six acres respectively.

Insofar as one may arrive at meaningful conclusions based on statistical tables[33] the wages differential for Scottish agricultural workers as compared with the nearest rival industry in the south west, engineering and shipbuilding, stood in a ratio of 77 to 82 in 1854, (1891 as base — 100). By 1870 the gap had apparently closed and both industries were rated at 85 points. Assuming the statistical reasoning to have validity, it would seem that labour migration from the farms of the south west after 1854 was probably more limited than was the case in some other parts of Great Britain.

In other respects also the future of agriculture in south west Scotland after 1854 was brighter than elsewhere. With its sights firmly fixed on dairying and with an expanding railway network to facilitate the growth of milk supply to the urban markets, the region had little to fear from the rising influx of New World imports which ruined southern farmers in the years after 1875.

33. A. G. Bowley and G. H. Wood (1898) in Journal Roy. Stst. Soc. Reprinted in Mitchell B. R. and Deane P. *Abstract of British Historical Statistics* p. 349-50.

TABLE A

Land Use per 1000 acres

County	*Arable*	*Total Grass*	*Rough Grazing*	*Cultivated**
Renfrew	438	296	212	734
Lanark	373	209	359	582
Ayr	345	166	451	511
Wigtown	401	179	386	580
Kirkcudbright	231	161	579	392
Dumfries	274	142	546	416

*Cultivated land = arable plus total grass

TABLE B

Livestock per 1000 acres

County	*Total Cattle*	*% Dairy*	*Total Sheep*	*%Ewes*
Renfrew	150	50.0%	123	79.0%
Lanark	116	52.0%	252	84.0%
Ayr	115	48.0%	275	81.0%
Wigtown	121	28.0%	250	73.0%
Kirkcudbright	69	25.0%	454	71.0%
Dumfries	76	28.0%	570	83.0%

TABLE C

Arable Land Use

County	*Wheat*	*Barley*	*Oats*	*Turnips*	*Leys*	*Potatoes*	
Renfrew	6	—	25	5	53	8	% of arable
Lanark	3	1	29	6	51	4	"
Ayr	4	—	26	6	57	3	"
Wigtown	6	2	28	12	45	4	"
Kirkcudbright	2	2	26	11	56	3	"
Dumfries	2	2	28	11	51	4	"

TABLE D

Irish incomers

as a proportion to total incomers

Year	Airdrie	Hamilton	Port Glasgow
1851	54.0%	42.0%	60.0%

METHODISM IN DUMFRIES

by John Burgess, M.A., M.Litt.

Methodism has always been weak in Scotland and circuits small and scattered.[1] Dumfries was no exception, partly due to the way in which Methodism there was out on a limb, well away from the mainstream of Scotch Methodism in the Lowlands yet 35 miles from the nearest English circuit, Carlisle, and beyond aid and support.[2] This and the strength of the Presbyterians prevented the growth of strong Methodist societies in the area, and allowed only the Wesleyans any measure of success.

John Wesley's visits are a good guide to the eighteenth century success or otherwise of a place, and though he passed through Dumfries nine times between 1753 and 1790 only on the last two did he bother to preach.[3] There seems to have been little call for Methodism in Dumfries, though Robert Dall, the pioneer preacher of the district, was despatched to walk from Ayr to take charge of the work in the town in 1787.

With his family for company, Dall worked the area and the town, spending five months preaching out of doors until forced by bad weather to seek indoor sanctuary. Thereafter he rented a barn with tiny windows that necessitated candles at any time of day, and which Wesley found particularly strange in appearance. Wesley was nonetheless pleased to see the new meeting house being built under Dall's supervision during May 1788 and praised the economy of the project.

The completion of the meeting place in 1788 encouraged the work of the preachers since the folk were unwilling to come regularly to a desperately shabby and primitive barn for services when they could attend grander buildings just down the road. Zachariah Yewdall reported 40 members there in 1790 with considerably larger congregations, but there was friction due to the opposition of the Presbyterians who resented the success of the Wesleyans, and their zeal and confidence in their rightness over religion.

Dall often visited the town and was posted there several times. Duncan McAllum, another Scot and a Highlander used to giving four Sunday sermons, two in Gaelic and two in English, did good work in Dumfries in the 1800s. However, between 1810 and 1821, the society all but died out. The cause was kept alive by Joseph Bailieff, a well off shopkeeper and member of the society for 44 years when he died in 1838.[4] The situation at times depressed him but he did not give up hope, and was rewarded between 1821 and 1823 when Hodgson Casson was appointed to the circuit. Now, Casson was a young Cumbrian minister who had already made a name in his home county by his eccentric but highly effective ways of raising societies and congregations.[5] His first ministerial appointment had been in Ayr where he became so depressed and disheartened that he was moved for several years to his

1. Procs. of the WHS vol 32 part 5 pp. 109/113, "In search of Forgotten Methodism" : O. A. Beckerlegge; deals with Scotland and the strange fact that Wesley and his preachers devoted much effort to that country but little success was achieved.
2. A mine of information is the centenary brochure for Methodism in Dumfries 1868 to 1968, housed at Carlisle Record Office. It does however, ignore the scandals which rocked the society, for which see this paper later. Also see A History of Cumbrian Methodism by J. Burgess, Kendal, 1980.
3. See Wesley's Journal; he neglected all Cumbria too except for Whitehaven, though he travelled across the country 26 times. Wesley put in most effort where the returns would be high.
4. Wesleyan Methodist Magazine 1838 p. 841.
5. Christianity in Earnest : the life and labours of the Rev. Hodgson Casson, by A. Steele, 1855.

home county for confidence and where success followed success. Prior to Casson's arrival the Dumfries circuit numbered 30 members — a far cry from the days when it was considered the third Scotch circuit after Glasgow and Edinburgh.

Casson was not pleased to be sent to Dumfries, but he quickly knucled down to the task in hand. Using Bailieff's shop as a mission centre he would spring out upon unsuspecting customers and try to persuade them to attend the Wesleyan chapel by blocking the door. He would also rush out into the street to take passers-by to task over their religion, and within a year the membership had risen by unorthodox means to one hundred.[6] Casson tackled the Races annualy held in the town, notorious for their "immorality" and "general enjoyment" and offering Casson a ready made audience and congregation. Despite his relative success in this way, and his starting of a Sunday School which soon had one hundred scholars, Casson needed to get away from the place once in a while, and he changed with a Whitehaven minister every month. One of Casson's devoted friends, Local Preacher Mitford Atkinson, readily aided him in the Scotch town and joined in mission work. By 1823 membership was 125, but Casson was for a time distraught about the death of his young Cumbrian bride in that year.[7] Thereafter things were never quite the same in the town, and he left for Yorkshire in 1824.

By the time Casson departed it seemed that fortune was smiling on the town's Methodists. Despite the ravages of Cholera in 1832, the society was doing reasonably well, and was untroubled by the violent disruption of the Carlisle circuit in 1835 and 1836 over the "Warrenite" issue. The society was relatively poor — members were nailmakers, tanners, millwrights, molecatchers, loomworkers, dyers, mailcoachguards, tanners, hatters, sawyers etc, but finances were on an even keel. Suddenly in the spring of 1837 occurred the worst disaster to befall the little community : the "Hyde affair".

James Hyde was appointed minister at Dumfries in 1836 and stayed one year, in which time he probably set the seal on the fate of the circuit. Back in Carlisle in May 1837 the superintendent Samuel Wilde, fresh from successfully resurrecting a seemingly lost city cause after the mass expulsions of his predecessor, was informed as District Chairman of impending trouble at Dumfries involving Hyde.[8] At the May District meeting when things were looking brighter for the District, Wilde was told that all was not well in Dumfries, and that charges would shortly be brought against Hyde for not putting on trial one of his leading officials on a charge of "gross immorality". Insufficient evidence was forthcoming at that date to suggest what precisely the problem was, so Wilde and his colleague Heywood went to Dumfries for a few days. What was happening there jolted both of them.

The man guilty of "immorality" was Pearson, the county agent for Morisons Pills, advertised as a cure for all aches and pains plus sundry diseases, which to the Methodists' horror included a "nameless disease", Venereal Disease. By being an agent for such quack pills the man made a good living for his family. Now this of itself

6. Wesleyan Methodist Magazine 1822, p. 733.

7. Wesleyan Methodist Magazine 1823, p. 345.

8. See "Early Victorian Methodism : the Correspondence of Jabez Bunting 1830/58" by W. R. Ward O.U.P. 1976, page 178. See also "The Bunting Correspondence" in Durham University Library.

was not approved of, but the man, a leader, steward and Sunday School superintendent, had become friendly with a local schoolmaster, who in turn introduced the agent and leader to a "quack doctor" specialising in a range of fake medicines and pills. In a correspondence of nearly 50 letters between the three men, it was clear that the agent was asking the quack doctor for various preparations, and he would then claim that Morisons Pills were doing the work instead. These letters formed the basis for the charges of his immorality, for not only was he trying to dupe the public and to make large amounts of money, but he had stated that he himself had had "the nameless disease" and had been recently cured by Morisons Pills. The gory details of the whole business were described in letters to the "quack doctor" and schoolmaster.

The whole sordid business came to light when Morison himself agreed to give the schoolmaster £25 and a share in the profits arising from a booklet the latter was to write describing the amazing cures resulting from Morisons Pills. When Morison had read the manuscript he refused to give the schoolmaster a penny, and he, furious, turned the matter over to a solicitor. The latter attempted to gain money from Morison and from the agent, but on failing, he advertised the letters concerning everyone to be for sale, and arranged for viewing the day before the public auction of the letters. A number of people went to view the merchandise, informed Methodists of the matter, who in turn went to read the letters and in turn were horrified. They told Hyde of the contents, and pleaded with him to go to see them. Hyde regarded the matter as one of backbiting and gossip and refused to have anything to do with it unless the letters were brought to his house — the solicitors not surprisingly refused to allow this. Hyde thus refused to suspend Pearson from his several posts, and this shocked the society and the town, and the Methodists became notorious. At this point, in early May, 50 members, officials and teachers wrote to Wilde requesting his immediate investigation of Hyde and Pearson, with whom he was friendly.

Wilde wrote back to the 50 to say he could not interfere unless Hyde invited him to do so, and wrote to Hyde asking him to see to the whole business and describing the letters he had received from the worried members. Wilde told Hyde that he himself would come over to aid him with any problems at all. Hyde made no reply. Soon a further letter from the leading members of the society complaining that Hyde refused to interfere in the issue, that he refused to allow Wilde to involve himself, and that Wilde was deliberately neglecting his own duty if he allowed things to go on as they were. They were alarmed for the future of Methodism and could find no redress for their grievances.

Wilde, sensing the danger, told the worried members that they must bring a charge of neglect of duty against Hyde at the next District meeting, and by the same post informed Hyde that unless he saw to the Morison agent business immediately, a charge of neglect of duty would be preferred against him. Hyde wrote back to say that he refused to do anything unless the letters concerned were brought to his house; this was not agreed to by the people involved, and he had therefore to decline to see to the matter, despite the fact that the society and Sunday School were broken up and few would come to the chapel to hear him. The society then charged Hyde with neglect and the matter was brought up at the May District Meeting.

It was agreed at the meeting that Wilde and Heywood investigate the Dumfries charge by going there themselves. The two men found things worse than they had even expected with only 20 of the 80 members still in society. The two best leaders had given up in disgust and given in their class books, allowing their members to disperse. Hyde refused to allow the two leaders to reform their classes and refused to meet them under any circumstances, and despite hours of reasoning and discussing with Hyde the two Carlisle men could get nowhere. Hyde refused to listen to all reason, refused all advice, refused to put the man concerned in the beginning on trial. They finally tried to get him to resign "for the sake of religion and Methodism", but he refused to do so unless given a signed document from them saying that he was not guilty of anything. This Wilde refused to do.

Wilde and Heywood examined all the letters forming the basis of the charge, and concluded that the agent was entirely guilty of the charges against him. Wilde had no choice but to call a Special District Meeting in order to suspend Hyde before more damage could be done, even though Conference was not far away, and the members of the Meeting would be sorely inconvenienced in time and expense. Wilde knew that the majority of the members and congregation would not hear Hyde preach again, and the true friends of the society in Dumfries were mortified by the whole matter. Against Methodism itself Wilde was surprised to find no disaffection — it was all directed at Hyde and his friend, the Pill agent.

Jabez Bunting advised Wilde to hold a Minor District Meeting, which would have avoided the expense and trouble of the Special one. The Dumfries society appointed two of their number to attend it, and Wilde asked Hyde to send the names of his two preachers to defend him. Hyde refused, and a Special District Meeting had to be called. This met on July 4th and 5th, 1837.

At this meeting Pearson was excluded from society since his case was even more sordid and disgusting than was at first thought. Hyde was found guilty of "neglect of duty and of contumacy" after a patient investigation, and was suspended until Conference could deal with him. The meeting was forced to take this relatively drastic measure for several reasons. Hyde had made himself the most unpopular man in the town of Dumfries, by his conduct he had all but destroyed the Methodist society there, and by gross statements and remarks he had driven away the congregation so that few attended the services. He refused to acknowledge the legality of the Special Meeting or of its right to try or to suspend him. To allow him to go back to Dumfries and to occupy the pulpit would have worsened an already desperate situation. He was allowed to occupy the manse until Conference shortly decided what to do with him, but he had to promise not to interfere with any aspect of Methodism in Dumfries and to virtually hide from the public. Watmough, the formidable minister who had done battle so ably with the Whitehaven Methodist rebels of 1835, was sent to Dumfries in the interim, with Coghill of Wigton to replace him shortly. A young local preacher from Whitehaven would then be called on to travel and to replace Coghill. Bunting wrote back that this was a good idea and the cheapest in the circumstances. There was no doubt in the minds of anyone at the meeting that Hyde, who was apparently an elderly person, was "mentally deranged" and had been "ill in the head" since before his arrival at Dumfries. One assumes that he retired at the Conference and nothing more was heard of the affair, which was so painful that the history writers ignored it.[9]

9. The whole matter is based on Wilde's reports, but there is no reason to doubt any part of it; he was one of the most respected and upright Cumbrian ministers, a man of great integrity and justice.

The Queen Street Wesleyan chapel remained the sole Methodist presence in Dumfries, with the societies at Lockerbie, Penpont and Collin soon dying out once no energetic ministers like Casson were available. All too often supernumaries or sick men were stationed there. The cause remained small and scarcely recovered from the Hyde affair. Stalwarts of the society remained loyal, like Catherine Shore who died in 1839 aged 55 and Margaret Patterson in 1852 aged 89, the last of the original 1787 members.[10] However, in the autumn of 1863 difficulties once more presented themselves in the form of the "Riddick affair".

Thomas Ratcliffe was stationed in the town 1861 to 1864, and determined to expel one James Riddick, clothier, on charges arising from the latter's suspicious financial transactions in the course of his work.[11] It seems that Ratcliffe viewed Riddick as a harmful element in the peaceful society, and charged him with being bankrupt and thus liable to lose his membership of the society. On being proved wrong, Ratcliffe looked for further proof of the misdemeanours of Riddick which were arousing the curiousity of the Dumfries townfolk, and were perhaps reminiscent of the 1837 calamity. Riddick, in the meantime, started legal proceedings against the minister for slander, Ratcliffe arraigned him before a leaders meeting and charged him with removing the goods and furniture belonging to Riddick's creditors and taking them to Liverpool prior to his own departure there, with slandering a number of Methodists including the minister in public, and with having lied repeatedly about his business and church membership. On October 20th, at the meeting the charges were found not to be conclusive and a decision was not reached by the Leaders. Witnesses were not accurate in their stories, and the whole matter took on the appearance of incompetence on the part of the minister or cunning on the part of Riddick. On the 28th October 4 leaders and Ratcliffe told Riddick that he was found guilty of violation of Methodist laws and was expelled. Riddick counterattacked by claiming that if the meeting wished to listen to busybodies, liars and rumours they could go ahead, but that they were not acting in a Christian way or in a way to promote the harmony and perfection of the society which they so desired.

Riddick wrote to Ratcliffe that bearing in mind the "nasty" nature of the society and its minister he was pleased to be expelled, since it showed that he was not of a like evil nature. He was also delighted to say that having achieved his object after a long and tortuous campaign to get rid of Riddick on whatever charges were available or could be raised by rumour and gossip, their next meeting would be in the local court over Riddick's suit for damages against Ratcliffe — there at least fair play would rule supreme, he ended in November 5th 1863. What in fact happened is nowhere recorded, but the whole matter was probably dropped when Riddick's rather unfortunate broadsheets giving the whole business in graphic detail were published and widely distributed around Dumfries. Nonetheless, the matter cannot have helped the Methodist cause.

One might think that poor Dumfries had had its fair share of trials, but in 1869 one more was added. In the previous year the society had been able to buy for only

10. Wesleyan Methodist Magazine 1839, p. 71.

11. See Statement by James Riddick, clothier, of Dumfries, in regard to the charges made against him by the Rev. T. Ratcliffe, November 5th 1863; reading between the lines of this printed piece it is plain to see a clash of personalities in the affair.

£800 a pleasant and large chapel from the Episcopalian Scots church in Buccleuch Street which elevated their prestige in the town and improved their congregations. Then the new minister, Joseph H. Skewes, did something rather silly. He had printed a private pamphlet in 1869 which criticised the conduct and work of every minister in the town save the Wesleyan man, and cast aspersions on the character of every congregation save the Wesleyan one where he asserted "true religion" had its sole home in Dumfries. The town was scandalised, and shortly Skewes, immediately under suspicion by his omission from the list of those "at fault", was discovered to have penned and printed the pamphlet.[12] This did not amuse the local people or the Methodist society, and Skewes left the ministry shortly afterwards. Decline once more set in and by 1887 there were only 32 members, and only one active trustee when the Rev. John Atkins called a meeting to consider how to counter appalling debts in 1882. In 1885 the inevitable happened, and the place was put under the control of Carlisle District chairman. It was decided that an active supernumerary or a lay pastor would look after Dumfries, where there were 57 members in 1891.

The situation deteriorated and in 1899 the difficulty of supervising Dumfries from Carlisle led to it becoming part of the Carlisle circuit, though being planned there did not appeal to preachers, ministerial or local. Attempts by the pastors and ministers to take Methodism to the poorer areas of Dumfries had some success, and during the 1890s rooms were taken in Glasgow Street, College Street, in the Freemasons Hall, and at Noblehill. Cottage meetings were encouraged, and there were 70 members in 1899. By 1905 it was down to 30, and the Home Missions Committee, looking for ways to cut its expenses, decided to drop it from the plan and to sell the chapel. At that point the "Joyful News" Evangelist Thomas Cook agreed to see what he could do in one year. Due to his brilliant work there were 128 members by 1907, and Cliff College was sending batches of students regularly to help him out.[13] Services were held in outlying areas like Locharbriggs, Drumsleet, Holywood, Georgetown and elsewhere at that time. Success at Annan for the first time happened in the 1900s. Previous unsuccessful ventures were capped by a change in fortune in 1897 when a new engineering firm was opened there, and brought with it some Methodist families. The Dumfries society responded to their call for preachers and by 1908 there were 18 members. Despite major debts the Dumfries trust brought extra land near to the chapel in 1911 in case of future expansion. This proved optimistic, and by 1931 there were only 82 members in the whole area.

Methodism in Dumfries remained small and struggling into the twentieth century.

NOTE: Dumfries under Ayr Circuit 1788/89; an independent circuit 1790/1899; 1899 to date, under Carlisle circuit and part of Carlisle District since 1805 when it was taken off Whitehaven (Carlisle superseded Whitehaven); prior to 1798 when it was under Whitehaven district, it had been under Edinburgh.)

12. See the Church Centenary which treats this serious matter lightheartedly.

13. See FCM/1/2/102 to 109 in Carlisle Record Office; mainly Leaders' and Trustees' Meetings.

S. R. CROCKETT : THE MAN AND THE WRITER

by Islay M. Donaldson, B.A., M.A. (Belfast), Ph.D. (Edinburgh)

The memorial to Samuel Rutherford Crockett, the Galloway novelist, erected in 1932 at Laurieston in the parish of Balmaghie, Stewartry of Kirkcudbright, gives his dates as 1860-1914, and most works of reference do the same. In fact he was born plain Samuel Crocket on September 24th 1859 at Little Duchrae, a small farm in Balmaghie just off the Laurieston to New Galloway road; his grandfather William Crocket was the tenant, and Samuel's mother was his eldest daughter Annie. The identity of the father is not known, but he must have been a family acquaintance perhaps not entirely in favour; Annie's brother Samuel, after whom the boy was

Plate V. The Rev. S. R. Crockett in the year of *The Stickit Minister's* appearance, this photograph forms the frontispiece of *A Fifty Years' Retrospect, being a Short History of the Free Church Congregation in Penicuik*, by J. J. Wilson 1893.

presumably named, wrote from Rochester, Minnesota, U.S.A. after his birth sympathising warmly and declaring

> . . . he must be a miserable wretch to act as he has done . . . I am glad he did not marry her, I never thought highly of him and the longer the less.[1]

William Crocket and his wife Mary Dickson were Cameronians, both from Lochrutton parish where the quiet graveyard is the resting-place of several generations of Crockets or Crocketts. Austere and narrow as the Cameronian creed may appear to modern eyes, it apparently did not imply the stigma that later respectability attached to illegitimacy; young Sam was brought up in the long white-washed single-storey farmhouse of Little Duchrae, a most happy and beloved child, surrounded by Crocket aunts and uncles both at home and in the neighbouring farms of Drumbreck and Mains of Duchrae, and later, when Uncle Samuel returned from the United States, by his family at Glenlochar. His grandfather, a dignified and patriarchal figure, was the dominant and much loved presence of his childhood; his grandmother, warm-hearted and sharp-tongued, ruled the kitchen and filled his boyhood with the smell of baking scones; his mother and aunts came and went, in and out of service; his uncles worked the farms; and all alike joined to make a secure and carefree childhood for the solitary child, filling his ears with Galloway speech and his mind with Galloway folk-tales and Covenanting history.

His earliest memories are all happy ones — days of harvest when the oats were being gathered in and he was left, a contented baby in an old cradle, in the farm kitchen with his grandmother, the scent of pine chips as his mother and her brothers picked up kindling, the simple quiet "Taking of the Buik", a daily family ritual when his grandfather, his head bared and bowed, read from the old rough-coated family Bible and prayed to his Maker, the joyous rough-and-tumble with the farm dogs, left behind like their young comrade when the elders had gone to the Cameronian "Kirk on the Hill" in Castle Douglas on the Sabbath morning.[2] This Calvinism was very different from that experienced in nearby Annandale by Thomas Carlyle or in Edinburgh by R. L. Stevenson. Delight in the life of the farm shines through everything Crockett was later to write about Galloway, from the hushed peace of sunlit Sunday mornings to the sharp exhilarating frosts of winter when he rose brushing the snow off his coverlet, at five o'clock in the cold darkness to start his tasks. One of the sounds which recurs frequently in his books as typical is the "strake" sharpening the scythes of the men busy with the hay. Even the sudden alarm of the Dee in flood, when the whole family had to turn out at night to rescue the threatened stooks, is something which he recalled with relish.[3] Samuel Crockett was indeed a Galloway peasant in his upbringing, but a peasant unusually aware of and responsive to his surroundings.

His first schooling came from his mother. Thereafter at the age of five he attended the Free Church School at Laurieston, walking the three and a half miles there from Little Duchrae, often accompanied by his dog Royal, unconsciously

1. Letter from Samuel Crockett to John Crocket, Mains of Duchrae, February 14th 1860, lent by Professor John Crocket Smyth, Johnstone, Renfrewshire, great-grandson of John Crocket.

2. S. R. Crockett: *Raiderland. All About Grey Galloway its Stories, Traditions, Characters, Humours.* With illustrations by Joseph Pennell. (London 1904), pp 20-23, 30-32.

3. R. H. Sherard: "S. R. Crockett at Home", *The Idler* VII (July 1895) pp 799-801.

noting the countryside through which he had to make his way, the waters of the loch, the details of wayside hedges, the sterner dignity of the distant hills. His natural quickness enabled him to do well without too much exertion in a curriculum based on the Bible and the Shorter Catechism, and his outstanding tallness and strength ensured that he held his own in playground fights. At home he played with Royal, or with visiting cousins, or imaginatively by himself like most only children, acting out scenes from *The Pilgrim's Progress* or playing at Dragoons and Covenanters as more modern children play at Cowboys and Indians or Cops and Robbers. It was perhaps their adventures rather than their theology which first aroused his interest in the Cameronian heroes.

In 1867 William Crocket retired from farming and moved with his family to a small house at 24 Cotton Street, Castle Douglas. The move extended Sam's horizons; the market town offered a busier, more crowded scene. He became aware of the railway, recently extended as far as Castle Douglas — two of his uncles became porters at the station, and trains, their drivers, maintenance staff and shining rails, became lifelong interests. Threave Castle, on an island in the River Dee, also caught his imagination; a new kind of history became alive for him, that of the warring Douglases, helped by his reading of Scott and Dumas.

The world of school became larger and wider; he attended Cowper's School, a little farther along Cotton Street, and always paid warm tribute to his schoolmaster John Cowper, "a true man and a great teacher",[4] both for discipline and inspiration. Although in many ways always solitary in spirit, Crockett was popular and a leader among his schoolmates; one of them, Andrew C. Penman, later the founder of the Dumfries firm of motor engineers still in existence under another name, describes vividly the impression he made.

> Being his nearest neighbour I became his most intimate companion, and soon found that although he looked soft he had a marvellous long reach and a style of fighting, like an infuriated windmill, which was most disconcerting. . . . We read "Penny dreadfuls" in those days, and three of us clubbed together to buy the "Boys of England", but bye and bye Crockett discovered the "Waverley Novels", and by his command the "Penny dreadfuls" were collected into a bon-fire and burned. He was always a propagandist, and a little bit of a tyrant in matters of literary opinion. If we did not admire his latest hero, and would not be amenable to reason, we got punched till we rendered lip service at least.
>
> Our holidays were spent roaming the country side, and if any "dare devil work" was on hand he was the ringleader. He was absolutely fearless. I have seen him go up the chimney of Threave Castle (not "the black lum", but the upper chimney), right up to the top of the walls, walk round them and get down straddle-legged on the hanging stone, while we stood below and held our breaths.[5]

The battles organised at Threave, alternately defending and attacking the

4. S. R. Crockett: *Raiderland* p. 130.

5. Quoted by M. McL. Harper: *Crockett and Grey Galloway. The Novelist and his Works.* With illustrations by John Copland. (London n.d. Preface dated 1907) pp 45-48.

Castle, played themselves out again in some of Crockett's fiction. Crockett and Penman, along with two other school friends, William Maxwell, later editor of the Aberdeen *Daily Journal,* and William S. MacGeorge, later A.R.S.A.,[6] spent a memorable holiday during their teens at Roughfirth on the Solway; this later was used as the basis for the early chapter of *The Raiders,* describing with cheerful irreverence the household of boys on Isle Rathan, which was, of course, Heston Island in Auchencairn Bay.[7] Penman also describes the future author practising the art of description in his notebook, "biting the end of his pencil, and gazing up to the heavens as if for inspiration",[8] and M. McL. Harper records how he tried his hand at drawing and painting, under the influence of MacGeorge.[9]

The move to the town did not break his connections with Balmaghie; he often went back to his old haunts at weekends and on visits. His cousin Robert Crocket of Drumbreck was twenty years older than Sam, but the two had literary interests in common; Robert, whom Crockett sometimes describes as the original of the Stickit Minister[10] though in private he at least once denied this,[11] was influential in introducing him to Shakespeare, Carlyle, Milton, Macaulay, Tennyson and Dante in Cary's translation[12] and they argued together happily and endlessly. Long days were spent at Drumbreck perched on a comfortable seat up a tree, reading anything and everything, forgetting mealtimes, completely absorbed. Uncle Robert, the railway porter, was also a man of literary and theological interests and encouraged the boy to buy and read books, though it must be remembered that much of his reading had to be carried out surreptitiously, since in a Cameronian household *The Pilgrim's Progress* or *The Traditions of the Covenanters* were the lightest fare permitted and fiction was unlawful and forbidden. The books Sam borrowed from the Mechanics' Institute — even Scott — had to be conveyed secretly to his room disguised as sober history or biography.[13]

At school Crockett acquitted himself well, as was to be expected of a boy with such lively curiosity and varied interests. In due course he became a pupil-teacher, and in 1876, well coached by John Cowper, sat for and won the Bursary awarded by the Edinburgh Galloway Association — an ordeal he describes vividly in *Kit Kennedy : Country Boy.*[14]

A Bursary of £20 a year did not cover a student's expenses even in 1876. Crockett came up to Edinburgh that autumn and shared lodgings first of all with his cousin William Crocket, later to become headmaster of Sciennes School, Edinburgh,

6. M. McL. Harper: *Crockett and Grey Galloway* p 53; "Death of Mr S. R. Crockett, the Galloway Novelist", *Kirkcudbrightshire Advertiser* April 24th 1914.

7. S. R. Crockett: *Raiderland,* pp 115-116.

8. M. McL. Harper: *Crockett and Grey Galloway,* p 51.

9. M. McL. Harper: *Crockett and Grey Galloway,* p 54.

10. S. R. Crockett: *Raiderland,* p 32; R. H. Sherard: "*S. R. Crockett at Home*" p 807.

11. Letter from S. R. Crockett to his cousin William Crocket, January 22nd 1894, lent by Professor J. C. Smyth, "The *Leader* man was out on Saturday forenoon . . . I had no idea he was coming . . . I gave him a note I once wrote about Robert Crockett of Drumbreck whom he calls my uncle, but I did not draw the S.M. from him. However everybody knows what an interview is and I shall not bother to correct it."

12. S. R. Crockett: *Raiderland,* p 32.

13. R. H. Sherard: "S. R. Crockett at Home", p 806.

14. S. R. Crockett: *Kit Kennedy: Country Boy* (London 1899) Chapter XXX.

then with William MacGeorge and later with other friends, nearly always attics in various parts of the St Leonards district, supplementing his meagre income during his first year in the Arts Faculty by coaching, which involved walking long distances from the home of one pupil to another before returning to prepare his own studies. By his second year he had found a more attractive way to earn money — free-lance journalism. He wrote paragraphs, news items, art criticism, topical notes, for any paper or magazine that would print and pay him — the *Edinburgh Daily Review, Lloyd's,* the *Daily Chronicle,* Dumfries and Galloway local papers.[15] He also wrote poetry, but this was not financially profitable. By the time he had completed his three-year course in 1879 he had developed quickness and facility in writing; he was so attracted by this means of making a living that during the summer of 1878 he spent several months in London,[16] hoping perhaps to find employment as a journalist, but returned disappointed. At the end of his M.A. course he found himself with no definite career in view, but was fortunate enough to be recommended to a rich young American as a travelling tutor and embarked on miscellaneous journeying in his company.

Crockett as a student was not distinguished. His journalistic activities consumed much of his time, and he confesses himself that he spent more time reading in the University library than attending strictly to his Professors.[17] His Saturdays were devoted to rummaging for treasures among the second-hand bookshops.[18] The only distinction recorded in the University Calendars for his student years is a "Highly Commended" for work in the physics laboratory, which at least shows that his interests were not narrowly literary. He was probably an ideal choice for a travelling tutor — eager, enthusiastic, and ready for any adventure or any sport that offered. With his first pupil he traversed most of Europe and beyond, tramping with knapsack on back through Italy, penetrating north as far as Siberia and Novaya Zemlya in Russia and south to the northern coast of Africa and the Holy Land.[19] On his return to Scotland he was engaged to travel in the same position with another pupil, a young Englishman. With him he spent a year, mainly in Switzerland, and a term at Heidelberg University, discovering among other things the joys of Alpine climbing. From all these varied and enjoyable journeys he brought back photographs, notes, poems composed at appropriately romantic spots, firsthand experience of other countries, peoples and customs, and a taste for wandering which remained with him all his life.

An aimless period followed, spent mainly in Edinburgh, teaching, writing, attending classes in geology, helping Professor Tait to arrange the New College Museum,[20] with summers spent in Galloway and Dumfriesshire. He was no nearer a settled occupation. However, through his reviewing he had made the acquaintance of a Manchester mill-owner of literary bent, Mr George Milner, a prominent

15. R. H. Sherard: "S. R. Crockett at Home", pp 808-809.

16. M. McL. Harper: *Crockett and Grey Galloway,* p 74.

17. R. H. Sherard: "S. R. Crockett at Home", p 809.

18. S. R. Crockett: *My Two Edinburghs: Searchlights through the Mists of Thirty Years* (London 1900) pp 13-14.

19. R. H. Sherard: "S. R. Crockett at Home", p 810.

20. R. H. Sherard: "S. R. Crockett at Home", p 811.

nonconformist interested in welfare work and Sunday Schools, for many years President of the Manchester Literary Club. Mr Milner invited him to Manchester on a visit, where he met his host's third daughter, Ruth Mary Milner. Crockett fell in love, with the enthusiasm which he devoted to most of his activities.[21] His desire to marry united with his sincere and lasting affection for the creed in which he had been brought up and the hopes he knew his mother had cherished; he decided to enter the ministry of the Free Church of Scotland, with which body the Cameronians had been united in 1876, and in the autumn of 1881 his name appears in the Enrolment Book of New College, Edinburgh. His journalism continued throughout his divinity course, as did his travelling abroad during vacations; his name also grew more sophisticated. He entered in 1881 as plain Samuel Crockett, but by 1883 he signed himself Samuel R. Crockett and by his final year he was S. Rutherford Crockett, having added the name of the famous Covenanting minister of Anwoth to his baptismal name to make it more literary in sound.

As it happened, during his years at University and New College many of the old ties binding Crockett to Galloway were removed by death. His grandfather died in 1875, the year before the Bursary, his cousin Robert of Drumbreck in 1877, his mother and his Aunt Janet of Little Duchrae in 1879, his grandmother in 1884. Other Galloway aunts, uncles and cousins were to follow between 1890 and 1902. The days of Little Duchrae and Castle Douglas vanished into the past. But Crockett remembered them all his life. Little Duchrae appears over and over again in his Galloway books under different names, and various uncles and aunts and his grandparents can be clearly recognised, notably his Uncle Bob, who was the prototype of the heroic railway porter Muckle Alick in *Cleg Kelly*.[22] Dumfriesshire connections still remained, however; some of his New College vacations were spent at Kirkmahoe where his aunt Margaret Smith, the grand-daughter of his grandfather's elder sister, made him welcome at the farm of Netherholm.[23] A further tie with Kirkmahoe was formed when his Aunt Janet (or Jessie) of Drumbreck married in 1885 the Rev. William McDowall, the Free Church minister there, for whom in future years he was frequently to preach.[24] He liked Dumfries, in spite of what he called the "raw beef sandstone of its villas"[25] and found the lush green meadows of Nithsdale a pleasant change from the granite fastness of Galloway.

During term, as well as prosecuting his theological studies he enlarged his knowledge of Edinburgh — not the picturesque city of spires and wynds but the harsher Edinburgh of poverty-ridden tenements. His evenings as a divinity student were spent in the slums of the Pleasance, working as a home missionary. He had seen rural poverty which could be borne with dignity, but the vice and ugliness of urban poverty aroused his anger and sympathy — anger with the middle-class Christians

21. "Memory Harvest", in *Dulce Cor being the poems of Ford Berèton* (London 1886), is a long poem giving a poetic account of their meeting and courtship.

22. Marion Macmillan: "S. R. Crockett", MS 11/9, Hornel Collection, Broughton House, Kirkcudbright.

23. I am indebted to Mrs Mary McKerrow of Edinburgh, a descendant of the Smiths of Netherholm, for details of this connection.

24. I am indebted to Miss Pearl McDowall, Kirkton, Dumfries, for details; Miss McDowall also informs me that the incident of the man dressed up as a ghost described by Crockett in "A Midsummer Idyll", one of the stories in *The Stickit Minister*, actually occurred in Kirkmahoe; Crockett and one of his Smith cousins were the two men who thrashed the mischief-maker.

25. S. R. Crockett: *Raiderland*, p 3.

who were serenely unaware of it or came down in carriages distributing tracts, sympathy with its victims whose cheerfulness in struggling with its temptations and hopelessness appealed to his humanity. From this period of his life came later stories of street urchins like Cleg Kelly and Kid McGhie.

In 1886 he emerged from college as a Free Church minister, going first to Dunfermline as an assistant. In the same year was published his volume of poems, *Dulce Cor*, under the pseudonym Ford Berêton, taking its title from Sweetheart Abbey and having as its frontispiece a sepia portrait of Ruth Milner as My Lady Beatrice done by William MacGeorge. The poems describe his childhood and his travels, often lamenting Ruth's absence from his side; Tennysonian echoes sound strongly — or weakly — throughout, with a touch of Longfellow here and there. Verse was not really Crockett's forte.

In that year too the Free Church at Penicuik in Midlothian, ten miles south of Edinburgh, was in search of a new minister and having some difficulty in choosing from forty applicants. Someone thought of S. R. Crockett, who had not applied, as a solution to the problem. He had recommendations from prominent Free Churchmen like Principal Rainy and Dr Whyte of Free St George's, to whom he was well known. His name was approved. In November 1886 he was ordained and took up his charge, and in March the next year he married Ruth Milner and after a honeymoon on the Continent brought her to Penicuik as his bride.

As a young minister Crockett was a whirlwind of energy. A significant clue to his ministerial style is the fact that he found the pulpit too constricting, since he liked to walk up and down as he preached, so he set it aside and used instead a platform which afforded more freedom. Penicuik suited him; the nearby Pentland Hills reminded him of Galloway, it was still near enough Edinburgh to keep him in touch, and its miners and paper-mill workers provided him with the same kind of Home Mission field. He settled down to a vigorous programme. In addition to visiting and getting to know his congregation as a friend as well as a pastor, he took particular interest in young people, and the Sunday School and Bible Class benefited. He gave regular weekly talks to the Bible Class on such subjects as history, science and literature, linking them with the Christian message and injecting new life into the meetings, so that the numbers attending increased. Many of his talks on poets were useful also for a magazine for Sunday School teachers which he edited and largely wrote himself, *The Worker's Monthly*; as well as notes and suggestions about lessons and how they should be taught (in the story of Jonah and the Whale, the Whale should not be allowed to become of greater interest than the prophet[26]) it contained articles on the Holy Land by himself and other contributors, competitions for young scholars to encourage them to explore the Bible and literature for themselves, extracts from and comment on other religious periodicals, and general remarks on passing events in the world and the churches.

There had been a long tradition of public lectures in Penicuik. Crockett made use of this in starting regular lectures to the Free Church on such topics as "Weather" and "Some Shifts Among the Lower Animals", bringing his friends as visiting speakers. Others, like "Mountaineering" and "The Geology of Scotland" he dealt

26. *The Worker's Monthly: a Magazine for Sunday School Teachers and all Christian Workers*, edited by the Rev. S. R. Crockett, II (London and Edinburgh 1891) p 94.

with himself, devoting the proceeds towards the Bible Class Library. The magic lantern struck him as an excellent and useful novelty; he borrowed one from Glasgow and embarked on a series of lantern lectures on Biblical subjects, extending them later to include slides from his own photographs of the Holy Land, of Scotland, "Land of the Mountain and the Flood", and of Penicuik and district, delighting his audience in this last venture by humorous local references and a topical song, composed no doubt by himself to the tune of "John Peel" and sung by Mrs Crockett, "D'ye ken Penicuik ...?" Later, largely because of Crockett's efforts, the Free Church acquired its own lantern.[27]

On a more serious level, he threw himself into evangelical and welfare work, from the Wellington Reformatory Farm School to the Valleyfield and Shotts Missions that were adjuncts to his own church, tirelessly involving himself in their activities. In the dark days of 1889 when the Mauricewood Pit Disaster claimed sixty-three lives of men and boys, he was prominent in relief work, visiting and comforting the bereaved, appealing for and helping to administer financial assistance to the widows and families, and using his pulpit to express his forthright opinion that there must in future be greater safety measures in mines so that this should not occur again.

> The Rev. S. R. Crockett, in Penicuik Free Church, speaking from the text Romans xii 15 — "Weep with them that weep" — devoted the whole of his remarks to the disaster. In the midst of the universal grief, he said, they, as a congregation, had more cause for it than any, for no other religious body had closer ties with the bereaved, and it was upon them and upon their Fieldsend mission that the heavy end of the work must fall. There were few houses in the stricken district where they did not bless the work which the mission has carried on, and even in their deepest sorrow they could catch a glimpse of a future blessing through that great calamity. The printed list of the dead which he held in his hand was the emblem of desperate grief and grim suffering, but would there not be some good fruit from that bitter flow if the law, or the administration of the law, became so strict that never more, legally or illegally, would more than half a hundred men be left to die with no chance of escape, without even a Man's poor consolation of a fight for life and wife and little ones? God forbid that they prejudge or apportion blame on insufficient knowledge. There might be no blame, but the hard fact remained that these men died because there was no other way to life save that which was barred by fire and deadly vapour — no other way to reach the air save that which a repeated accident made impossible. He would impress upon them that these terrible and extraordinary risks must cease, and that the inspection of the mines must be a much more frequent and real thing. If the Mauricewood disaster did nothing else it would at least make that certain, for he knew that that question would assuredly be brought to the front in the highest councils of the nation.[28]

27. The late Mr R. E. Black of Penicuik collected throughout his lifetime a vast quantity of cuttings related to all aspects of Penicuik and its activities and pasted them up into more than 140 volumes, a treasure-trove for the social historian. From two of these, *Volume 57 : Free Church (South U.F.)* and *Volume 18 : S. R. Crockett (other than Free Church connection)* I have taken these details of Crockett as a minister: many of them have been confirmed by Penicuik residents who remember him or have heard their relatives talk of him. I am most grateful to the late Mr Black's son, Mr William W. Black of Silverburn, Midlothian, who allowed me free access to these and other volumes compiled by his father which are in his possession.

28. *The Scotsman*, September 9th 1889, p 7.

Here speaks a man who had not merely gone to comfort the bereaved in a professional way but one who listened to the talk in the miners' cottages and was speaking out for them and as one of them, using his pulpit to voice their quiet indignation.

At the same time as sharing in the sorrows, interests and problems of his people — at the same time as preaching and attending meetings in his own church and occasionally in those of others — assisting Dr Whyte of Free St George's in his adult Bible Class, for example — Crockett managed to find time to continue with his own journalistic work and even to extend his writing into more literary channels. He contributed theological and general articles to various periodicals, just as he had been doing for so many years, getting up at five in the morning as he had done as a boy in Little Duchrae and as Sir Walter Scott had done before him in order to find time to write before the day's work began, and also, for his own interest and amusement wrote sketches and tales based on incidents in his own experience — some of these appeared in *The Worker's Monthly* and, like one called "Stray Memories of a Galloway Farm", are interesting hints of what was to follow.[29]

The principal paper for which he wrote was *The Christian Leader : Scotland's Religious Weekly,* published in Glasgow from 1882 onwards under the editorship of its founder, the Rev. W. Howie Wylie. One day the editor asked him in a hurry for an article on the pastoral work of a minister. Not having any time to spare to write this formally, Crockett sent instead one of the sketches with which he had been amusing himself, "A Day in the Life of the Rev. James Pitbye", a satirical account given by a shrewd and sarcastic Galloway elder of a lazy minister and how he spends his time. This story proved so much to the editor's liking that he demanded more of the same kind. In this way Crockett contributed a large number of lively stories to *The Christian Leader* and in due course, on the suggestion of Dr W. Robertson Nicoll of the *British Weekly,* twenty-four of them were collected and published in 1893 as Crockett's first prose work,[30] dedicated to Robert Louis Stevenson, whom he admired and with whom he was corresponding.

Overnight this unpretentious book was a success. Most of the stories were set in Galloway, with all the freshness of its countryside. Some were tragic, some were satirical and funny, all of them were to the taste of the readers of Barrie and later of Ian Maclaren who enjoyed the new fashion in "Scotch" stories. Because they came from Crockett's own experience and were varied in mood and style they had both originality and authenticity. The fancy of the public was caught immediately and the young minister of Penicuik Free Church became well-known. He was feted in May 1894 by the Edinburgh Pen and Pencil Club, with a flattering speech from his old Professor, David Masson.[31] By that time *The Raiders* had also appeared, a splendid open-air adventure story set among the crags and lochs of Galloway in the eighteenth century, owing a little to Stevenson but with its own special qualities and touches.

29. *The Worker's Monthly,* II, pp 8-11.

30. R. H. Sherard: "S. R. Crockett at Home", p 812-814. The dedication with its phrase "where about the graves of the martyrs the whaups are rying, his heart remembers how" inspired Stevenson to write in reply "To S. R. Crockett" and send it to Crockett in manuscript; it appears in facsimile in the large illustrated edition of *The Stickit Minister* brought out in 1894. (8th and Illustrated Edition. London 1894). The poem begins "Blows the wind today, and the sun and the rain are flying" and is probably familiar to readers.

31. M. McL. Harper: *Crockett and Grey Galloway,* pp 105-109.

The Lilac Sunbonnet, written before *The Raiders* at the same time as the early stories and sketches, ran as a serial in *The Christian Leader* in the early part of 1894 and did not appear as a book until the autumn. Two other minor books, *Mad Sir Uchtred of the Hills* and *The Playactress,* also appeared in this year of promise; S. R. Crockett was one of the discoveries of 1894. He became much in demand as a lecturer, a short story writer for magazines, a critic and a writer of prefaces to other men's books.

Pleasant as this undoubtedly was, it provided a problem. Crockett's eager enthusiastic temperament was such that he had to give himself wholeheartedly to whatever he was doing; a division of talents could not satisfy his conscience either as a minister or as a writer. He had to choose between the two. In January 1895 he announced to a saddened but not altogether surprised congregation that after much heart-searching he felt himself compelled to choose writing as his vocation; it was what God had given him to do and he dare not disregard it. Through writing he could reach a far wider audience than he could through preaching, and might carry out God's will in this different way.

> A congregation of the size and importance of Penicuik requires for its minister a man who can give his whole time and his entire strength to the work. This I cannot do, without, as it seems to me, hiding some of the entrusted talents in the ground. Moreover, I think the matter should be faced now at the beginning of this year. So far as I know, the congregation was never in a better state. It was never, I think, larger in numbers. The young communicants at the last two communions have been exceptionally numerous. The whole people are, I believe, in good heart. It is thus that I should desire to hand my charge over to a worthy successor, whose hand, when you choose him, I shall loyally and cordially uphold. In resigning my charge, I desire to put on record that I hold, and shall teach to the wider audience, the same vital truths which I have taught to you — the virtue, the praise, the sacrifice, and the atonement. Literature has need of believing men to hold aloft the banner of belief. I am, it is true, but a humble soldier in the army, but I trust that in the day of battle I shall not be found wanting.[32]

But in laying down his charge, Crockett did not leave the Free Church at Penicuik; he had moved from the Manse to a larger house, Bank House on the Penicuik estate, rented from Sir George Clerk, but he remained a member of the congregation, and it was not until many years later that his increasingly poor health and his necessary sojourns abroad made him feel obliged to give up his eldership. That he could do this, and remain on the best of terms with his successor, with the affection, pride and respect of the majority of his former flock, speaks well for all concerned.

From this time on, writing was Crockett's sole source of income. He lived happily and comfortably at Bank House with his wife and a family which gradually grew to consist of two sons and two daughters, and at first all was well. But the step he had taken was a hazardous one. He had voluntarily given up financial security and put himself and his family at the mercy of his literary talent, as it were, trusting that the promise of 1894 would be fulfilled indefinitely. He had, in addition, gone against

32. Penicuik Cuttings, *S. R. Crockett.* See also *Dumfries and Galloway Standard,* January 9th 1895, "Local Intelligence", p 2; *Kirkcudbright Advertiser,* April 23rd 1914 — Obituary; *The Scotsman* April 21st 1914 — Obituary.

the Free Church and its traditional distrust of fiction. Many heads were shaken over his lack of prudence and his desertion of his sacred calling, including that of Dr Robertson Nicoll who recognised his honesty but doubted his wisdom.[33]

His current popularity ensured that his stories would be in demand both for serialisation and as books, and he deliberately widened his scope seeking always for new themes and scenes. *Bog-Myrtle and Peat* introduced the public to more of his short stories, some of them set abroad as well as in Galloway. *Men of the Moss Hags* drew upon his knowledge of Covenanting traditions and provided a vivid and thrilling romance of the Killing Time; with characteristic generosity of temperament he put into this narrative incident after incident drawn from tradition and history, making his hero present at well-known event after well-known event, endowing his heroine with the brave actions of both Grizel Hume and Grizel Cochrane, introducing character after character that belonged to the period and were known by heart in Galloway, so that in this one book he used up nearly all the splendid material available to him. Like a kind of literary spendthrift, he packed so much into this one narrative that never again would he be able to write so freely or so vividly of the Covenanters.

In *The Grey Man*, he turned to Ayrshire and its traditions, and back in time to the seventeenth century; he retold the story of the feuding Kennedies, particularly Kennedy of Culzean and Kennedy of Bargany, and the machinations of a most splendid and subtly depicted villain, John Mure of Auchendrayne, the Grey Man, who moved behind events, manipulating and scheming. He visited and explored Ayrshire for his scenes, just as he had visited and explored with John Macmillan of Glenhead of Trool the mountain fastnesses that are the background of *The Raiders,* so that the story is firmly set against its castles and seacoast, and he introduced as an additional and gruesome extra the ghastly cave of Sawney Bean the cannibal where the limbs of the men and women he and his crew had murdered were hung up to cure in the smoke. Crockett's talent for the macabre, already evident in some of the incidents in *Men of the Moss Hags,* was coming into prominence in response in some measure to public taste — this was 1896, the year before the publication of Bram Stoker's *Dracula.*

In 1896 also, totally different in mood, he took up the story of the waif Cleg Kelly whom he had introduced for the first time in two stories in *The Stickit Minister* and devoted an entire book to his adventures, *Cleg Kelly, Arab of the City.* Cleg, the son of a worthless Irish drunkard, motherless and living in the Pleasance by his wits, is thrown out of Hunker Court Mission school for declaring impiously that "God's dead!" He sets on fire the whins on Arthur's Seat to console himself, then devotes himself to looking after three other young waifs, a girl, and her two young brothers, one only a baby, whose drunken mother (also Irish) abuses and beats them. He gives up his own refuge in a builder's yard to house them and finds the girl employment, but when her mother turns up they have to run away from Edinburgh. Cleg, at first not knowing where they have gone, discovers through the anecdotes of a railwayman that they have gone to Galloway; he follows them there, thus affording Crockett the opportunity to describe railways and their employees, and after a strange interlude where he is the servant of an eccentric ex-Indian Army General, who lives alone in a

33. T. H. Darlow: *William Robertson Nicoll: Life and Letters* (London 1925) p 123.

mansion protected by automatic locks from the intrusion of women whom he hates and sleeps every night in an open coffin with a closed coffin on each side of it, settles down in the end with his sweetheart, the eldest waif, as a market gardener. The ending is less good than the beginning of *Cleg Kelly* — Crockett is not good at endings — but the first half set in Edinburgh is vividly authentic.

Christmas 1896 also saw the first of the books for children which Crockett was to produce from time to time during his writing career. *Sweetheart Travellers* is a rambling series of anecdotes based on his adventures and conversations with "Sweetheart", his eldest daughter, then a little girl, as they travel through Galloway and elsewhere on his tricycle; she travels in a basket attached to the handlebars and comments freely on things in general. *Sir Toady Lion* and *Sir Toady Crusoe* followed in later years; "Sir Toady" is his second son George, who found it impossible to pronounce properly the name of Richard Coeur de Lion, the family's current hero, and had earned the nickname "Sir Toady" through his imperfect attempts. Both of these draw on the idiosyncrasies of his four lively children and credit them with adventures Crockett himself had had at Threave and on the Solway in his childhood — or perhaps just would like to have had. They are pleasant rambling books sharing family jokes with their readers and full of shrewd records of childish conversations and ideas.

> "I don't yike the New Test'ment" commented Toady Lion in his shrill high pipe, which cuts through all conversations as easily as a sharp knife cleaves a bar of soap; "ain't nobody killed dead in the New Test'ment!"[34]

This sums up with unsentimental truth the enjoyment young children take in tales of violent adventure, just as Sir Toady's farewell note when he runs away from home is surely a classic goodbye for all runaways:

> "Doan't grieve for US. We doan't for you."[35]

With Gordon Browne's illustrations, these books in their time were high on the publisher's Christmas list, and deserved to be; Crockett obviously enjoyed the company of his children and their refreshingly critical views on "grown-ups".

Several years later they were equally critical of the wordiness of his beloved Scott and obdurately refused to read him. Crockett re-told some of the Waverley novels in *Red Cap Tales* and *Red Cap Adventures* so as to make them attractive for children, with interspersed passages of comment from the still irreverent youngsters and accounts of their re-enactments of incidents from the novels, often involving bruises and sticking-plaster. *Sweethearts at Home,* the last of the books for children, written when the original Sweetheart was a girl of sixteen, is less happy a venture; Crockett adopted the device of pretending that Sweetheart herself is telling the story, in the gushing and exclamatory style of a young girl not altogether satisfactory to modern ears. The book, however, has one advantage for readers interested in Crockett as a personality; he is able to tell stories against himself, quote himself with amused mockery, give glimpses of himself as an author typing away in his study, Old Growly who must not be disturbed, or showing magic lantern slides of the family on dark winter nights. It ends with what purport to be letters from the indignant children to the publisher complaining about having been put into books at all.

34. S. R. Crockett: *Sir Toady Lion,* (London 1897) p 107.

35. S. R. Crockett: *Sir Toady Crusoe* (London 1905) p 146.

Different types of historical romance took up his attention throughout his career. There are always the Galloway ones about the Covenanting period; as already mentioned, he made use of so many traditions in *Men of the Moss Hags* that thereafter he was forced to rely mostly on his imagination. Sometimes this works, sometimes it does not. *The Standard-Bearer,* a very free and lively rendering of events in the life of the Rev. John MacMillan, the rebellious minister of Balmaghie, seems on the whole successful, in spite of its departure from truth, because of its Galloway background; Crockett names him Quintin MacClelland to make it quite clear that he is fictitious and part of the process described as "leeing at lairge".[36] *The Cherry Ribband,* on the other hand, though equally lively, is too foolishly melodramatic to be satisfactory; the heroine is blown off the Bass Rock just like the girl in the tradition who was wicked enough to mock the Rev. Alexander Peden, but instead of drowning she is rescued by the kindly household of the hero's family, living temporarily near Tantallon, and survives to fight and win a single-handed duel with Grierson of Lag. *Dark o' the Moon* is a continuation of *The Raiders* and deals with the Levellers in Galloway; it would be as well not to try to reconcile its dates with those of *The Raiders*, as within very few years Patrick Heron and May his wife are old enough to have a son who can be kidnapped by Hector Faa in order to be married to his daughter Joyce — *The Raiders* the other way round, as it were — and we meet over again in surprising circumstances many of the old characters; in spite of the musical comedy atmosphere which tends to prevail, some passages can be vivid and curiously moving, like the ending where Silver Sand, his brother Hector and another gypsy give their lives to save the others from the redcoat dragoons.

In totally different times in Galloway, Crockett moves back to the middle ages in *The Black Douglas* and *Maid Margaret* and brings to life remarkably successfully the brightly coloured characters who inhabit Threave and its surroundings. *The Black Douglas* tells the story of the Black Dinner and what led up to it, adding to the familiar Scottish tradition the Frenchman Gilles de Retz and his necromancy; the tale moves to his blood-drinking diablerie in the very Gothick castle of Machecoul in Brittany, were-wolves, sacrificial altars and all, from which the heroine and her maid have to be rescued. *Maid Margaret* tells of that heroine's later life when, wilful and spoiled, she is married to two earls of Douglas in succession and lives sadly and quietly in Threave, a victim of political intrigue, waiting for what fate will next bring her — a happy if somewhat unexpected ending, as it happens. Still in Galloway but nearer the present day, *Kit Kennedy : Country Boy* allows Crockett to draw on the simple events of his childhood. Since the nostalgic depiction of childhood for its own sake, without narrative, was not yet the fashion in 1899, he had to provide for the structure of his story a very contrived and theatrical melodramatic plot involving a full-scale villain slapping his boots with his riding-whip at all times and totally unbelievable. The plot in the end leads to muddle and absurdity, but there is humour and realism in the details of the story; Kit's grandfather and grandmother are genuine pictures of Crockett's own experience, the long whitewashed farmhouse and the dogs are there, along with Kit Kennedy rising early in the morning to sned turnips and in due course sitting for and winning the Galloway Bursary.

The Red Axe and *Joan of the Sword Hand* are something quite different again.

36. S. R. Crockett: "A Word of Introduction", Rev. H. M. B. Reid: *The Kirk Above Dee Water* (Castle-Douglas 1895) p x.

They are historical romances but they are not set in Galloway; they are not set anywhere except in Crockett's imagination. Following the example of Anthony Hope's *Prisoner of Zenda*, Crockett invents two entirely imaginary European duchies, Wolfmark and Hohenstein, sets the period back in time to when men still rode forth to war with armour on their backs and swords and spears for their weapons, and proceeds to weave pleasant tales of romance in settings which he is free to make up for himself; the stories are pure entertainment, not intended to be taken seriously for a moment, but the places, the plains and cities, the rivers and towers, are described with fairytale delicacy or folktale grimness, whichever is more appropriate — there is more than a touch of Jessie M. King in their décor, oddly enough. And for all their fantasy, they seem preferable to those set in various periods of religious oppression in Europe, periods which could be equated with that of the Covenanters — the Huguenots in *White Plumes of Navarre* and the Camisards in *Flower o' the Corn*, for example; the historical novel since Crockett's time has become much too serious, scientific and solemn for us to be able to be happy with his villains and swashbuckling heroes. He was writing in an era which seems unbelievably remote and innocent to us in the last quarter of the twentieth century; he died just before the outbreak of the first world war; a whole numbing and dispiriting panorama of concentration camps, brainwashing and atomic destruction stretches between him and the modern reader — is it any wonder that we find his perspective trivial and his plots at times tiresome, when they are not buttressed by the Galloway scenes and characters which remain real to us as well as they were to him?

These are only some of the stories and settings over which Crockett was able to range during his twenty years of writing; he produced an average of three to four books every year for the remainder of his life, endlessly changing his backgrounds, endlessly optimistic. It is highly ironic that he is abused today as a member of the so-called "Kailyard" school; in fact, he was almost neurotic in his feeling that change was perpetually necessary in order to please his publishers, who were themselves varied and different. At a local occasion in Dalbeattie, a banquet organised to honour him, he expressed this feeling very clearly:

> You cannot go on producing the same kind of crop. After each book is finished the brain becomes something like cold boiled turnips. To recover its elasticity, to strike fresh that unexhausted soil, one must try a new crop, something as different as possible from the old.[37]

It was a healthy instinct which made him avoid the repetition and the "formula" writing into which so many popular writers fall, but it led to several unfortunate experiments, like *Me and Myn* whose hero and heroine are passionate collectors of stamps; Crockett himself was a stamp collector[38] and the narrator, Sam Brown, with a father who had been a railway worker and his position as pupil-teacher in a school on the wrong side of the Border to be in Castle-Douglas but in other respects rather like Cowper's school, is clearly Crockett thinly disguised, but the breezy colloquial

37. M. McL. Harper: *Crockett and Grey Galloway*, pp 161-162.

38. I am indebted for this information to the late Mr James Milroy, of Edinburgh, son and grandson of Crockett's gardeners, who remembered him with great affection and provided many details of daily life at Bank House, Penicuik. See also Fred J. Melville: *All About Stamps* (London n.d.) p 215.

English slang in which he expresses himself is tiresome and dated — the story was written in the first place for *Gibbon's Stamp Weekly*.[39]

Yet for the most part Crockett's experience enabled him to use a wide variety of styles to range over the different varieties of fiction at which he tried his hand. His country upbringing had made him at home in several types of Scots, from the dignified slow speech of his grandfather, heavily influenced by the Bible, to the sharp interchange of farm servants and countryfolk generally. His apprenticeship in miscellaneous journalism had provided him with different English styles in which he could write, from those suited to theological disquisitions to others suited to brief news items and amusing comments. Already in *The Stickit Minister* he presented a range of narratives; some of the stories rely on down-to-earth Galloway Scots like those featuring Saunders McQuhirr, sometimes comic, sometimes deeply serious; others are couched in what is almost ponderous newspaper prose, like those which introduce Cleg Kelly, the impersonal narrative ironically contrasting with the hero's own activities. Throughout his career Crockett deliberately changes his style to suit his material. He belongs to no one school and each book may be different from the one before. This makes him difficult to define, and right from his first appearance critics were puzzled by him.

The Stickit Minister seemed somehow to be like Barrie — and yet it was not completely Barrie; there was something original in its varying tales which was difficult to diagnose. That difference lay perhaps in Crockett's point of view as a Galloway countryman; his sketches of middle-class ministers and well-to-do ladies handing out tracts may have pleased the congregations more than they did their subjects — the ministers of whom he writes warmly with approval are plain men who have come from humble homes and are not ashamed of them or of the broad Scots of their childhood. Yet he can turn his scorn on sanctimonious congregations too. They complain about their minister's ways with children :

> "I like nae siccan wark," said some, "how is he to fricht them when he comes to catechise them if he makes so free wi' them noo, that's what I wad like to ken?" "Na, an' anither thing, he's aye sing, singing at his hymns. Noo, there may be twa-three guid hymns, though I hae ma doots — but among a' that he sings, it stan's to reason that there maun be a hantle o' balderdash!"[40]

There is just a hint here of the meanness and whining which George Douglas Brown was to use years later for the "bodies" of Barbie in *The House with the Green Shutters*. There is comedy and a keen sense of the ridiculous in *The Stickit Ministert* but it is by no means a mere collection of harmless rural tales; violence and cruelty are shown as well as the humour of life, and some of the stories have a cutting edge.

The Lilac Sunbonnet had its own narrative style. For the purposes of this story Crockett turned himself into a wise old amused narrator, well versed in human follies and vagaries; the novel is the nearest to one of ideas which the extrovert Crockett was ever to write and its narrative muses philosophically. The priggish young divinity student Ralph Peden, in Galloway to pursue his studies, is distracted from the dark trammels of Calvinism and the past by the sensuous sunshine of natural beauty and

39. L. N. and M. Williams: *The Postage Stamp: Its History and Recognition* (London 1956) pp 120-121.

40. S. R. Crockett: "Accepted of the Beasts", *The Stickit Minister*, (London 1893) p 20.

the sexually exciting heroine Winsome Charteris. The sunbonnet is as much a sexual symbol as anything in D. H. Lawrence; it obsesses Ralph's thoughts, its strings are torn when he pulls it from Winsome's hands, and at the end when the hero is safely imprisoned in happy matrimony it is seen, tattered and faded, on the head of one of his children. The scenes slip significantly from brightness to darkness, playing with light deliberately. The novel is especially interesting because during the writing of it Crockett must surely have been pondering his own laying down of the ministry, a parallel with Ralph's turning away from the negative Marrow Kirk to poetry, and it has affinities with the novels of George MacDonald who similarly freed himself from dogmatic Calvinism during his ministry. Long passages of semi-mystical description of nature can be exactly paralleled with similar passages in MacDonald. Unfortunately, Crockett terminates his story with a George MacDonald ending of universal forgiveness lapping everyone in kindliness which is disappointing after the clear landscapes and the realistic descriptions of character which lead up to it. Crockett is weakest in his endings, as if at times he grew tired of his story and hurried it to a close both careless and perfunctory.

Men of the Moss Hags is different again. As with *The Raiders* Crockett adopts a period style like that used by most historical novelists of his time from Stevenson to Stanley Weyman — a style which he is able to use with ease and flexibility because it is based partly on the the rural speech of his grandparents and partly on the styles of the Covenanting pamphlets with which he was familiar and of books which he knew well as a child like *The Pilgrim's Progress.* His hero, William Gordon, tells his own story; he is a young lad who is not so devout that he cannot see the comedy of the rigid and humourless Puritans, especially his brother and sister-in-law, the one contumacious to extreme, the other whiningly pietistic. As the narrative proceeds, William himself is caught up in the courage and grandeur of the conventicles and the excitement of the battles, just as Crockett had been as a boy, and he becomes a very real human character, not heroic but convincing; his dogged and honest prose is so genuine that the attitudinising of his cousin Wat Gordon of Lochinvar is shown up for what it is, something out of Dumas, a Scottish Aramis carrying on intrigues with the imaginary wife of an imaginary Privy Councillor. It is interesting to see the two strands intertwining; for once two of Crockett's styles have not matched entirely successfully yet contrast effectively.

In *Cleg Kelly* we find that Crockett, the exuberant enthusiast for natural description, has disciplined his pen so that in his descriptions of Edinburgh the city is cut down to a bony colourless landscape of back yards and alleys as is appropriate to the experience of a ragged young scamp. Arthur's Seat, prickly with whins, is the only brightness, and even so appears not as a beauty spot but as a refuge from pursuing policemen or Sunday School superintendents, convenient but not aesthetic; the damp decaying slums are described with such unemphatic exactness that the flat open-air bareness of a builder's yard seems idyllic in comparison.

Crockett was indeed a man of many styles and many interests, all of which he used to diversity his writing; there are few of his interests and hardly any of the countries which he had visited which are not brought in somewhere to provide a background or an episode in a story. His first love, of course, was the collecting of books; by the time he left Penicuik Free Church Manse for Bank House he had

amassed so large a collection that his books had to be housed in a chalet-type annexe built on to the house which, when the family moved later to Peebles was moved as well and attached to their new home. Even in Penicuik the books took two people six weeks to dust.[31] Their range is astonishing as an index to his eager curiosity about all things. Their titles include incunabula as well as complete editions of contemporary authors like Dickens, Thackeray, G. P. R. James, the Brontes, Ruskin and Carlyle in serried ranks of volumes; French novels as well as *Naphtali, or the Wrestlings of the Church of Scotland;* forty-one volumes of *The Studio* as well as Wycliffe's Bible (1676); the works of Rabelais as well as Viollet-le-Duc on *French Architecture* (1875). There are books of travels and exploration, books on birds and wild life, books on necromancy, books on pirates. He possessed a First Folio Shakespeare, Elzevir editions of Terence and Caesar, a sixteenth century edition of Froissart's *Chronicles*, Blaeu's colored maps of Ireland and Scotland (1662), and Malory's *Works* edited by Rhys and illustrated by Aubrey Beardsley (1893). Balzac, Daudet, Zola and Bourget are all there, as well as Joseph Ritson's *Caledonian Muse* (1831), the Poetical Works of Gavin Douglas, William Dunbar, John Donne, and thirteen volumes of *The Yellow Book*. Catalogues of their sales at Sotheby's are in the Hornel Collection at Broughton House, Kirkcudbright, and surprise follows surprise as one reads down the long lists. Most tantalising perhaps are more than one hundred and fifty bound volumes of cuttings from periodicals made by Crockett himself on subjects like Anthropology, Biography, Folk Song, History, Literature, Hagiology, Ghosts, Social Science and Theology.

Travelling was another passion. Once freed from the ministry, he was able to visit the Continent once more, seeking material or just enjoying freedom. It was probably at this period that he became familiar with Spain; if he is to be believed, he spent some time with the Spanish smugglers among the Pyrenees and even joined in their exploits for the sake of the adventure.[42] There was always something of the gypsy in Crockett — it was no accident that John Faa, Lord and Earl of Little Egypt, is the most striking figure in *The Raiders*. He was an enthusiastic golfer at St Andrews, playing two rounds a day for the whole of one July and August with Willie Auchterlonie, the Open Champion of 1893, who made special left-handed clubs for him and both admired and liked him.[43] He was also a keen astronomer; at Bank House he had built into the roof his own observatory and telescope, from which he often contemplated the heavens until late into the night, an ingenious bed having been constructed for him beside the observatory so that he need not disturb the rest of the household.[44] He was fascinated by gadgets, be they typewriters, dictaphones or just ingenious fountain pens; at one time he had six typewriters with different shuttles for typing in different languages.[45] He was an enthusiastic photographer; in an article in the *Windsor Magazine* he describes with comic gusto his trials as an amateur and how photography enabled him to record localities and make up for his

41. Information supplied by the late Mr James Milroy.

42. S. R. Crockett: *The Adventurer in Spain* with illustrations by the author and Gordon Browne (London 1903).

43. I am indebted for this information and many other details to Mr Laurie Auchterlonie of St Andrews, son of the great Willie.

44. Information supplied by the late Mr James Milroy.

45. Information supplied by the late Mr James Milroy.

defective memory.[46] It would be interesting to know what has become of his plates and lantern slides.

It is significant that this *Windsor Magazine* article is called "A Romancer's Local Colour". Here as in all his references to himself he thinks of himself as a romancer rather than as a novelist. Crockett was the last person to have stood upon his literary dignity or to have claimed to be more than he knew himself to be. His overnight successes in 1893 and 1894 delighted him, as they would have delighted anyone, but it was as a teller of tales, a popular author, that he placed himself before the public. He disliked novels with a purpose, declaring that they belonged to the world of preaching, not of story-telling.

> The purpose must emerge, not be thrust before the reader's nose, else he will know that he has strayed into a druggist's shop. And all the beauty of the burnished glass, and all the brilliancy of the drawer labels will not persuade him that medicine is a good steady diet. He will say, and with some reason, "I asked you for bread — or at least for cakes and ale — and lo! ye have given me Gregory's Mixture."[47]

This is a tenable point of view; in the 1890s universal education had created a mass audience which demanded entertainment from its reading and was eager for novelty and strong sentiment in a dull comfortable age. Readers wanted to be "taken out of themselves" and popular authors did just this. But by accepting this and catering for the general low taste, even if largely for financial reasons, Crockett placed himself in the second class of writers when by aiming higher he might have achieved much more. He chose to avoid the "novel of purpose" but also threw overboard the middle way, the well-structured serious narrative which without preaching can come to grips with problems. Such morals as he inculcated in his unanalytical stories were the simple obvious ones of honesty, loyalty, humour, tolerance and moderate piety, expressed with the optimism and hasty unreflecting boyishness which never left him. He depicted social injustice but only in the passing, as part of a good "yarn". Like Scott he wrote quickly; he also wrote carelessly, muddling names and endings, and as time went on and necessity extracted so many books from a tiring imagination further strained by ill-health, his quality suffered. His initial connection with the religious press, whose literary standards were low, did him no good. At first he looked like escaping — *Cleg Kelly* before publication as a book was serialised in the *Cornhill*, *The Grey Man* and *The Red Axe* in the *Graphic*, *Joan of the Sword Hand* in the *Windsor* — but he gradually slipped back into the *Lady's Realm*, the *People's Friend*, the *British Weekly*, *Annie S. Swan's Magazine*.

He had won deservedly high praise for his early books, but critics were irritated by too rash admirers comparing him to Scott and Stevenson and he paid dearly for his rocketing to overnight fame. They damned him for sentimentality, for over-sweetness, for slapdash boisterousness, and placed him firmly among the Kailyarders. A fairer criticism would be that of easy sensationalism. Already in *The Stickit Minister* some stories had relied on sudden death as a facile solution to what promised to be a genuine dilemma — "Accepted of the Beasts", "The Heather Lintie", "Boanerges Simpson's Encumbrance". This grew, and melodrama abounded. It did not do too much harm in historical romances, but in stories of

46. S. R. Crockett: "A Romancer's Local Colour", *Windsor Magazine* XII (June-November 1900). This article was later reprinted (London 1900) as a booklet advertising the cameras of Messrs Newman and Guardia.

47. S. R. Crockett: "Scottish National Humour", *Contemporary Review* LXVII (April 1895) p. 529. See also *Raiderland*, p. 91.

contemporary life like *Kit Kennedy, Vida* (coal mining and engineering works) and *Princess Penniless* (working-class industrialism in the north of England) the number of stock villains who conveniently go mad when their creator cannot otherwise dispose of them ruins the effect. Yet there is always a flicker of originality, a turn of phrase, a flash of description which makes them individual. He could not devise plots, but even in the worst of them, one reads on fascinated to see what happens next, and in the best one is aware of a talent and a personality which place him alongside other popular contemporaries — Conan Doyle, Rider Haggard, Anthony Hope, Stanley Weyman — if not a little above them.

Crockett's greatest quality is his power to describe. He ranks in this with Thomas Hardy. He is able to build up in exact sharp phrases a picture not only of a scene but of the physical sensations which his characters are undergoing as they live through an experience, be they delicate and subtle or painfully intense. It was this in *The Raiders* which caught the imagination of his first readers. The storms and tempests in the Galloway hills come vividly to life.

> I could see only a hundred yards or so above me, but overhead the thunder was moaning and rattling, coming ever closer. There was a faint blue light, more unpleasant than darkness, high in the lift. Then little tongues of crawling cloud were shooting down as it seemed, to snatch at me, curling upward like the winkers of an old man's eye as they came near me. I hated them.
>
> As often as they approached there was a soft hissing, and the rocks grew dim and misty blue. My hands pricked at the thin fine web of skin between the fingers that we call the webs. I had a strange prickling tightness about my brow, and my bonnet lifted.[48]

Quietness is equally within his range.

> The snow flew thicker but in a curious, uncertain way, as though little breezes were blowing it back from the ground. A flake would fall softly down till it neared the earth, then suddenly reel and swirl, rising again with a tossing motion as when a child blows a feather into the air.
>
> As we went along the pale purple branches of the trees grew fuzzy with rime, which thickened till every tree was a wintry image of itself carved in whitest marble.[49]

He can conjure up the soft sound of swallows flying round Threave "like the hissing rending of fine silk"[50] or at the other extreme suggest a train passing in the night "with a hoarse roar and a leaping volcano of fire-lighted smoke", "each winking carriageful" of heedless passengers reading their papers or settling down to sleep.[51] And in the most unexpected places comes the light touch of amusement which is Crockett expressing his sense of the ridiculous at the heart of life, making his heroes human by giving them a comic dimension, or inserting into Cleg Kelly a derisive caricature of himself as a Pleasance missionary, Big Smith, with "a black beard like an Astrakhan rug, and a voice that could outroar a Gilmerton carter".[52]

48. S. R. Crockett: *The Raiders* (London 1894), Chap. XXVI p 226.

49. S. R. Crockett: *The Raiders* Chap. XL p 335.

50. S. R. Crockett: *Maid Margaret of Galloway* (London 1905) p 218.

51. S. R. Crockett: *Cleg Kelly* (London 1896) p 327, p 328.

52. S. R. Crockett: *Cleg Kelly* p 134.

When in 1906 the lease of Bank House came to an end, the Crocketts moved to Torwood House in Peebles, on the road to Cademuir and the Manor Valley; their gardeners and servants moved with them — a tribute to the affection in which they were held — and so did all the books, "conveyed by steam traction, to the wonder and delight of the neighbouring population".[53] In the same year, on the 28th September, in the Town Hall, Dalbeattie, with Sir Herbert Maxwell of Monreith presiding, there was held a Public Banquet to honour Galloway's own author, attended by local notabilities of all kinds. But already Crockett's reputation in the larger world was waning, and as the years went by his health gradually deteriorated. He was a huge man, over six feet tall with shoulders broad in proportion and had always taxed his energy to the full; some form of stomach and kidney complaint made him grow weaker and unable to endure the harsh Scottish winters, so that he spent the colder months abroad in Spain or France, where his family visited him by turns. It was only during the summer or the early autumn that he came to Peebles, or to the house in the village of Auchencairn, beside Heston Island on the Solway that he had turned into Isle Rathan, which had been left to him by his two unmarried uncles. His family were growing older too and presumably his expenses were greater; in 1910 and 1911 he had to sell some of his library at Sotheby's. His romances were not proving as popular as they had been.

There is little documentation of this part of his life, but from a letter to his friend the Rev. William Thomson of Auchencairn, written from hospital in France, we catch a glimpse of his cheerful acceptance of illness — he was not a man to complain or indulge in self-pity.

> I am still only partly able for work. I have had rather a bad three weeks and have been confined to my room, which means to bed and couch, all the time. But I have not had such a turn for a year, which ought to make me grateful. Though how much more grateful I should have been not to have had it at all!
>
> On the whole I may call myself content. I can live here with my two windows open and my lungs full of fresh air. Here I can do a little work occasionally, and even when the days are warm and the breezes propitious, rather more than a little.
>
> But early winter always tries me, even here and were I in the North I might as well retire to my little landed property (or "howking") in Balmaghie Kirkyaird. To live and work, however, are great things and permission to do both about as much as we have any call to ask of God . . .
>
> I have to keep my son Philip busy contradicting the paragraphs about my being ill, &c. For publishers won't take books from sick authors any more than people will be cured by an invalid doctor. So I say as little as I can about my illness, and my literary agent, Mr Watt, exhorts me to say nothing at all.[54]

So he continued to the end of his life, writing as and when he could — because he had to. He was in Spain and unable to attend the 25th anniversary of his New College class, marked by a dinner in Edinburgh; in the letter of apology written to a friend with kind messages for his old classmates there is a paragraph which suggests that

53. M. McL. Harper: *Crockett and Grey Galloway* p. 115.

54. Letter from S. R. Crockett to the Rev. William Thomson, December 1st 1913, headed "Still in Private Hospital, near Perpignan, Pyrenées Orientales." It was lent by Mrs Ruth Sandilands of Edinburgh, daughter of Mr Thomson, and is now in the Department of Manuscripts and Rare Books, Edinburgh University.

sometimes he questioned the wisdom of his choice of a literary career — but only sometimes. He was not the kind of man who troubled his mind with vain regrets, yet he saw clearly what he had given up.

> Sometimes you feel doubtless that the congregation, the little parish, the daily round hardly afford elbow-room. But a little taste of this bitter bread, and a little climbing on the steep stairs of the literary profession make for contentment with the manse, and even with the Deacons' Court. I do not say that I regret anything. The "calling" was and is too strong for that. But I know well that I was serener-minded when two sermons dominated my week. Give thanks then all of you.[55]

There is courageous honesty about this which demands our respect.

Crockett died suddenly and unexpectedly on 16th April 1914, a little more than four months after his last letter to Mr Thomson which has been quoted above, in Tarascon, near Avignon, in the south of France. His body was brought back to Scotland and buried, as he had wished, in the little graveyard of Balmaghie, among the Crockets of Little Duchrae and Drumbreck, "among the dear and simple folk I knew and loved in youth".[56] His name, dates and two professions, "Minister of the Gospel and Novelist", are inscribed in the space that remained at the foot of the family tombstone.

In an obituary article in the *British Weekly*, a fellow Free Church minister, the Rev. John Grant, who had known and worked with him, gives a vivid picture of this "Saul among men" and discusses squarely the ever-vexed question of his leaving the ministry:

> From this ministry, into which the "three-fold call" and a mother's prayers conspired apparently to carry him, Samuel Rutherford turned aside. By so divesting himself of his sacred office he lost caste with many Scottish folk. Did he do well or ill? Who shall judge? He came to be less clear regarding his call to the ministry than as to the calling he ultimately gave himself to. He chose as he chose who knew best what was best to do ... Only, I could not judge him unkindly, had I deemed him at fault; he was so generous himself.[57]

Our more secular age may attach less importance to Crockett's laying down his ministry, but Grant's comment still has relevance. Present-day critics are markedly ungenerous to Crockett and have been so for some time. The fact that his books are out of print and have been so for many a year undoubtedly contributes to this uncharitable assessment; few readers are aware how many books he wrote or how widely he ranged for his subject-matter. One hesitates to say that he would have done better to remain a Free Church minister and write less, because one cannot be sure that the same faults might not have appeared in any case, however few books he wrote. His carelessness, his untidy zest for life, his lack of attention to detail, his gusto, are temperamental qualities and might not have altered.

Yet he is an author whom it is worth while looking at again. He is not a literary giant, but has sufficient distinctive humour and vividness to make more than a few of

55. ———: "The Late Mr S. R. Crockett and a New College Anniversary", *The Scotsman*, April 25th 1914, p 8.

56. S. R. Crockett: "A Word of Introduction", Rev. H. M. B. Reid: *The Kirk Above Dee Water* (Castle Douglas 1895) p xiv.

57. Rev. John Grant: "Vale Frater!", *British Weekly*, LVI (April 30th 1914) p. 119.

his books worth preserving and re-reading. Two of them at least, *The Grey Man* and *The Raiders,* are once more in print.[58] For the sake of the optimistic kindly likeable Gallovidian who wrote so much and so gallantly, one would like to think that more may follow.

Bibliography

My friend Mr William Blair of the Grange Bookshop, Edinburgh, being an Antiquarian Bookseller, knows much more about editions and reprints than I do and is at present working on a full Bibliography of S. R. Crockett. However, for the record and to satisfy readers' curiosity, I am appending a list of Crockett's published books. This does not include the articles, prefaces and other scattered material.

1. **Verse**
   Dulce Cor being the Poems of Ford Berêton (London 1886)
   Valete, Fratres! dedicated to his fellow-students by the author of Dulce Cor (Edinburgh 1886)
2. **Collections of Short Stories and Sketches**
   The Stickit Minister and Some Common Men (London 1893)
   Bog-Myrtle and Peat. Tales chiefly of Galloway gathered from the years 1889-1895 (London 1895)
   The Stickit Minister's Wooing and other Galloway Stories (London 1900)
   Love Idylls (London 1901)
   The Bloom o' the Heather (London 1908)
   Young Nick and Old Nick. Yarns for the Year's End (London n.d.)
3. **Novels**
   The Raiders, being Some Passages in the Life of John Faa, Lord and Earl of Little Egypt (London 1894)
   The Lilac Sunbonnet (London 1894)
   Mad Sir Uchtred of the Hills (London 1894)
   The Playactress (London 1894)
   The Men of the Moss-Hags being a History of Adventure taken from the Papers of William Gordon of Earlstoun in Galloway and told over again by S. R. Crockett (London 1895)
   Cleg Kelly, Arab of the City (London 1896)
   The Grey Man (London 1896)
   Lads' Love (London 1897)
   Lochinvar (London 1897)
   The Red Axe (London 1898)
   The Standard Bearer (London 1898)
   The Black Douglas (London 1899)
   Kit Kennedy: Country Boy (London 1899)
   Ione March(London 1899)
   Joan of the Sword Hand (London 1900)
   Little Anna Mark (London 1900)
   Cinderella: a Novel (London 1901)
   The Firebrand (London 1901)
   The Silver Skull (London 1901)
   The Dark o' the Moon being certain further Histories of the Folk called "Raiders" (London 1902)
   Flower o' the Corn (London 1902)
   The Banner of Blue (London 1903)
   The Loves of Miss Anne (London 1904)
   Strong Mac (London 1904)
   Maid Margaret of Galloway (London 1905)
   The Cherry Ribband (London 1905)
   Kid McGhie: a Nugget of Dim Gold (London 1906)

58. Reissued 1977 and 1978 by Messrs Macdonald and Sproat, Ltd., Booksellers, 242 High Street, Ayr.

The White Plumes of Navarre (London 1906)
Little Esson (London 1907)
Me and Myn (London 1907)
Vida, or the Iron Lord of Kirktown (London 1907)
Deep Moat Grange (London 1908)
Princess Penniless (London 1908)
The Men of the Mountain (London 1909)
Rose of the Wilderness (London 1909)
The Seven Wise Men (London 1909)
The Dew of their Youth (London 1910)
The Lady of a Hundred Dresses (London 1911)
Love in Pernicketty Town (London 1911)
The Smugglers (London n.d. Dedication dated 1911)
Anne of the Barricades (London 1912)
The Moss Troopers (London 1912)
Sandy's Love Affair (London 1913)
A Tatter of Scarlet. Adventurous Episodes of the Commune in the Midi (London 1913)
Silver Sand (London 1915)
Hal o' the Ironsides (London 1915)
The Azure Hand. A Novel (London n.d. Advocates' Library Accession Stamp 1917).
The White Pope, called "The Light out of the East" (Liverpool n.d. Advocates' Library Accession Stamp 1920).

4. **Books for Children**

Sweetheart Travellers. A Child's Book for Children, for Women and for Men. Illustrated by Gordon Browne and W. H. C. Groome (London 1895)
The Surprising Adventures of Sir Toady Lion with those of General Napoleon Smith. Illustrated by Gordon Browne (London 1897).
Red Cap Tales stolen from the Treasure Chest of the Wizard of the North (London 1904)
Sir Toady Crusoe. Illustrated by Gordon Browne (London 1905)
Red Cap Adventures being the Second Series of Red Cap Tales (London 1908)
Sweethearts at Home (London 1912)
Rogues' Island (London 1926)

5. **Miscellaneous**

The Adventurer in Spain, with illustrations by the author and Gordon Browne (London 1903)
Raiderland. All About Grey Galloway, its Stories, Traditions, Characters, Humours. With Illustrations by Joseph Pennell (London 1904)
My Two Edinburghs: Searchlights through the Mist of Thirty Years (London 1909)

The Society is indebted to the Scottish Arts Council for a generous grant towards the publication costs of this paper.

SOME OBSERVATIONS ON GROUND BEETLES (COLEOPTERA, CARABIDAE) COLLECTED IN GALLOWAY DURING JULY, 1978

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In July, 1978, ground beetles were collected from a number of localities in Galloway. The aim was only to make a brief examination of the area — no attempt was made at an extensive collection. All specimens were taken by hand, either by turning over rocks, stones, logs and other debris, or by capturing actively running beetles.

Thirty-two species were found in the course of seven days collecting. All of these except one are in Moore's (1957) list of 155 species from south-western Scotland.

The beetles were from the following localities :
(1) west shore of Loch Ken (NX 6375); 5 July; mean altitude 45m; an adjacent spruce plantation was also sampled.
(2) east shore of Woodhall Loch (NX 6667); 6 July; moorland; 45m.
(3) north shore of Loch Urr (NX 7585); 7 July; moorland; 180m.
(4) south shore of Dornell Loch (NX 7065); 7 July; 80m; surrounded by conifer plantations.
(5) east shore of Loch Ken (NX 6870); 8 July; grassland; 45m.
(6) south end of Loch Doon, near the castle (NX 4895); 8 July; sandy shore with stones; 230m.
(7) Dundeugh Forest near McAdam's Burn (NX 5484); 9 July; conifer plantations; 260m.
(8) north and east shores of Aldinna Loch (NX 3693); 10 July; moorland; 380m.
(9) Glen Trool Forest (NX 3778); 10 July; conifer plantations; 75m.
(10) hills north of Loch Trool (NX 4082); 11 July; moorland; 550m.
(11) path along west bank of Buchan Burn, Glen Trool (NX 4181); 11 July; conifer plantations on one side, moorland the other; 260m.
(12) road above Loch Trool (NX 4180); 11 July; moorland; 140m.

The following list gives details of how and where the beetles were found. The records refer to single specimens unless otherwise indicated.

Abax parallelepipedus (Pill. & Mitt.) — beneath rock in spruce plantation at (1).
Agonum gracile Sturm. — beneath stone at (2).
A. marginatum (L.) — beneath driftwood and stones at (1); beneath stones at (2) and (6).
A. ruficorne (Goez.) — many beneath stones at (2) and (4).
Amara aulica (Panz.) — inside tent early morning at (5).
A. plebeja (Gyll.) — running on patch of bare soil in grass at (2).
Bembidion atrocoeruleum Steph. — a number running among stones and over sand at (1); also *B. bipunctatum* (L.), *B. doris* (Panz.), *B. lampros* (Hbst), *B. punctulatum* Drap. and *B. tetracolum* Say found similarly; the last also under stones at (8).
Calathus melanocephalus (L.) — beneath stone at (3); another found at (6) by Dr Garth Foster.
Carabus glabratus Payk. — beneath rock in grass ride of plantation at (1); a dead individual on path at (11).
C. problematicus Hbst. — running on road after dark at (9).
Cicindela campestris L. — many flying in forest rides at (7); one flying at (11).
Clivina fossor (L.) — beneath stone at (3).
Elaphrus cupreus Duft. — running on sand at (1), and beneath stones at (2) and (8).
E. riparius (L.) — running on sand at (1), and beneath stones at (8).
Loricera pilicornis (F.) — beneath stone at (1).
Nebria brevicollis (F.) — beneath stone well above loch shore at (4).
N. gyllenhali (Schon) — under stones on banks of burn in plantation at (1); many beneath stones at (8).
Notiophilus biguttatus (F.) — active on shore at (1) and (8); running on forest track at (4).
Patrobus atrorufus (Strom) — beneath stone at (4).
Pterostichus adstrictus Esch. — running on rock surface at (10) — probably disturbed by our presence.
P. cupreus (L.) — beneath stone at (2).
P. diligens Sturm. — beneath stones at (2), (3) and (8).
P. melanarius (Ill.) — beneath stones at (2) and (3).

P. niger (Schall.) — beneath stone at (2); running on road after dark at (9), and again mid-afternoon at (12).
P. nigrita (Payk.) — beneath stones at (2), (3), (4) and (8).
P. versicolor Sturm. — beneath stones at (2).
Trechus obtusus Erichs. — beneath stone at (3).

The *Pterostichus adstrictus* was at first thought to be a new record for the area, but Dr Martin Luff has since told me that he knows of another specimen being found.[1] It is a species of open mountainous country, and has been recorded in northern England, Wales, elsewhere in Scotland, and Ireland (Lindroth 1974). It is therefore surprising that it has been only twice in the south-west. I am sure this is a reflection of the lack of collectors rather than beetles.

In a paper on the ground beetles of Argyll, Greenslade (1968) described three colour forms in *Nebria gyllenhali*: black with dark legs, black with red legs, and black with dark legs and brown elytra, and suggested that there were ecological differences between the forms. This idea followed from his observation that the form with brown elytra was only found on open ground above 2500 feet (c.750m), whereas the other two were also found at lower levels along stream margins. He found that the forms were generally present in similar numbers. The three Loch Ken burnside specimens (45m) were all of the black form, and the dozen or so found at Aldinna Loch (380m) were both black- and red- legged forms in roughly equal numbers. Thus, as would be expected from Greenslade's study, none of the third form were found. As only three beetles were found at Loch Ken, no significance can be attached to the absence of the red-legged form.

In the same paper, Greenslade remarked upon some apparent differences in habitat between some species in Argyll as compared with south-east England. Following this line of thought, it was noticed that, whereas wet sites which I have sampled in SE England have always produced either *Elaphrus cupreus* or *E. riparius*, but never both, in two of the Galloway sites both were present. At Lochs Ken and Aldinna the two species were mixing freely. In SE England both species have been found in woodland and grassland habitats, but never together. Thus the apparent habitat/location separation observed in SE England breaks down in Galloway.

Acknowledgements : My thanks to Mr D. B. Shirt, without whose research grant the trip would have been impossible, and to Mr D. R. Collins who accompanied us.

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1. See these *Transactions* IInd Series, Vol. XXIV (1911-12), pp 271-84.

GALLOWAY AND THE ABBEYS OF RIEVAULX AND DUNDRENNAN

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The new edition of *Medieval Religious Houses: Scotland* by I. B. Cowan and D. E. Easson (London, 1976) re-states that whereas the Cistercian abbey of Dundrennan in Galloway was in all probability a dependency of Rievaulx there 'is no apparent record evidence that Rievaulx was the mother-house of this abbey'.[1] Clear testimony of Dundrennan's status as a colony of the Yorkshire house is in fact preserved by Walter Daniel's *Life* of Ailred, abbot of Rievaulx (died 1167), and the associated tract *Epistola ad Mauricium*. These sources have been generally available since they were edited by Sir Maurice Powicke in 1950 as one of Nelson's Medieval Classics,[2] but because of their curious neglect by historians of the Cistercian plantations in Scotland it seems desirable to note the relevant detail here. This first extract is taken from the *Life* itself:

1. *Op. cit.*, p. 75. Easson gives Melrose as the mother-house in *Charters of the Abbey of Coupar Angus* (Scottish Hist. Soc., 1947), i, p. xxvi.
2. Walter Daniel, *Vita Ailredi Abbatis Rievall'*, ed. and trans. F. M. Powicke (London, 1950). Only summaries of Walter's *Vita* had been published when A. O. Anderson compiled his *Scottish Annals from English Chroniclers, 500-1286* (London, 1908) and the importance of this work escaped his attention.

'the father [Ailred] went down to Galloway to visit and console a daughter-house of Rievaulx. There he found the petty king (*regulus*) of that land incensed against his sons, and the sons raging against their father and each other. It is a wild country where the inhabitants are like beasts, and is altogether barbarous. Truth there has nowhere to lay her head .... There chastity founders as often as lust wills, and the pure is only so far removed from a harlot that the more chaste will change their husbands every month and a man will sell his wife for a heifer. ... Rievaulx made a plantation (*plantacio*) in this savagery, which now by the help of God who gives the increase to a new plantation, bears much fruit'.[3]

Turning to the *Epistola ad Mauricium*, we are told that two years before his death Ailred 'was travelling in Galloway and came to Dundrennan (*Dundranan*), as the abbey which the brethren of Rievaulx built there is called, and he stayed there for six or seven days'. Walter Daniel goes on to describe in graphic terms a supernatural occurrence involving Ailred, who for want of suitable accommodation had been obliged to seek humble lodgings: 'the natives in those parts live in pastoral huts and mean hovels, not in houses or foursquare buildings, and the abbey had only begun to build its regular offices a short time before'. The ramshackle roof of the dwelling afforded no protection against the elements, yet even though the rain poured down incessantly and Ailred's companions and their belongings were soaked through, 'never in all that time is a single drop known to have fallen on the father's bed'.[4]

Walter Daniel's style is lively and fluent; he had a good ear for a story, and he was writing as one who had known Ailred well. But we must of course appreciate that as Ailred's hagiographer his object was to eulogise Ailred and the achievements of the abbey he had ruled over for some twenty years, and no opportunity was missed to exaggerate the hardships confronted and the successes that were won. Architectural evidence, for example, would seem to indicate that adequate structures stood at Dundrennan by the 1160s,[5] whilst the presence of a prior and *prepositus* in the administration of the abbey at this date tends to confirm the impression that the house was already more securely established than Walter Daniel wants us to believe.[6]

However this may be, neither in the *Vita* nor in the *Epistola* is direct light thrown on the still unsolved problem of the identity of the abbey's founder. But the claim that the Cistercians were brought to Dundrennan purely on the initiative of Fergus, lord of Galloway,[7] is unlikely in view of the poor press which Walter Daniel, himself a monk of Rievaulx, gave Fergus and his family. Moreover, our knowledge of Fergus' church patronage may be uncertain at many points, but it seems clear that his attention was primarily reserved for communities of regular canons.[8] It appears far more probable that Dundrennan owed its existence to the good offices of King David I who, though he had no demesne reserves in eastern Galloway, could have prevailed upon Fergus to secure a suitable landed base to endow the new foundation. By contrast with Fergus David's relations with Ailred and the Cistercian order in general were so close as to require little emphasis here: Ailred was brought up in his court and remained a devoted friend and admirer;[9] the king settled monks from Rievaulx at Melrose in 1136; and royal support had soon brought Melrose daughter-houses of its own at Kinloss in Moray, Newbattle in Lothian and Holm Cultram in Cumberland. Nor can it escape notice that an alliance with the Cistercian reformers of northern England, and with Rievaulx especially, was well worth cultivating at a time when David was anxious not only to expand south of the Tweed and Solway but also to contest by every means at his disposal the claims of the archbishop of York to metropolitan authority over the *ecclesia Scoticana*.

If we are correct in ascribing the beginning of Dundrennan to King David's decision, then this

3. *Vita Ailredi*, p. 45. According to the *Vita* this visitation of Dundrennan took place in 1163, but Walter Daniel's chronology is often suspect and only a date prior to Fergus of Galloway's retirement in 1160 makes sense. Ailred is known from independent evidence to have been in Scotland during 1159, 1164/5 and 1166 (*ibid.*, pp. xcii, xciv). In this and the other passages given here, I have normally followed Powicke's translation.

4. *Ibid.*, p. 74.

5. P. Fergusson, 'The late twelfth-century rebuilding at Dundrennan abbey', *The Antiquaries Journal*, liii (1973), p. 234. From the first the Cistercian statutes insisted that suitable offices should be available to the monks of a new abbey before they arrived on the site: *Statuta Capitulorum Generalium Ordinis Cistercienis*, ed. J. M. Canivez, i (Louvain, 1933), p. 15.

6. *Vita Ailredi*, p. 75. Prior Walter had begun his career as chaplain to Rievaulx's founder Walter Espec, lord of Wark and Helmsley.

7. E.g., *Early Scottish Charters prior to 1153*, ed. A. C. Lawrie (Glasgow, 1905), p. 362.

8. Cowan and Easson, *Religious Houses*, pp. 96-7, 102-3.

9. But Powicke's claim that Ailred had held high office in the royal household is discounted in *Regesta Regum Scottorum*, i: *The Acts of Malcolm IV*, ed. G. W. S. Barrow (Edinburgh, 1960), pp. 32-3.

10. On the general background see now M. Brett, *The English Church under Henry I* (Oxford, 1975), pp. 14-28. In 1142 Ailred, then a monk at Rievaulx, was sent by his abbot to Rome to appeal against the election of King Stephen's nephew William to the archbishopric of York. Prior Waltheof of Kirkham, David I's stepson, had almost been elected to York with the support of the Cistercian party, but Stephen had quashed his candidature on the grounds that he was too closely connected with the Scots King to be politically acceptable. Waltheof subsequently transferred to the Cistcercians, served under Ailred at Rievaulx and in 1148 became abbot of Melrose. For fuller details see D. Knowles, 'The case of St. William of York', reprinted in *The Historian and Character* (Cambridge, 1963), pp. 76-97.

provides one of our earliest glimpses of a Scots king directly intervening in the affairs of Galloway. The south west was remote from the main centres of royal strength in Lothian; and as Walter Daniel indicates in his use of the word *regulus*, Fergus of Galloway was accustomed to behaving as an independent power, holding sway in his territory with king-like authority.[11] The bishop of Whithorn was his nominee and professed obedience to York.[12] Yet by the early 1140s, when David had extended his rule as far south as the Ribble and the Tees, peace with Galloway was so obviously fundamental to the security of his government of "English Cumbria" that the need to bring this turbulent province into a closer association with the Scots crown was more urgently felt than ever. David's control of Cumberland and Westmorland led to colonisation across the Solway by laymen loyal to Scottish royal interests, and these newcomers or their representatives no doubt were prominent amongst those 'bailiffs and wardens' expelled from Galloway during the troubles of 1174.[13] It is against this background that the settlement of Cistercians at Dundrennan must be set. The abbey was founded by 1142 or somewhat later;[14] and the history of the house had a significance transcending purely spiritual considerations.

> In a further passage Walter Daniel tells how, when visiting Dundrennan, Ailred
> 'found the princes of the province (*principes illius prouincie*) quarrelling amongst themselves. The king of Scotland could not subdue, nor the bishop [of Whithorn] pacify, their mutual hatreds, rancour and tyranny. Sons were against father, father against sons, brother against brother, daily polluting the unhappy little land with bloodshed. Ailred the peacemaker (*pacificus*) met them all and, with words of peace and goodness, bound together the angry sons by a firm peace in a single bond of affection. He eagerly urged their veteran father to take the monastic habit and by his marvellous admonishment bent him to that course, and taught him — who had taken the life of thousands — to become a partaker of life eternal, to such effect that he ended his days in a monastery of religious brethren.[15]

Sufficient is known about Gallovidian politics in the mid-twelfth century to show that Walter Daniel is claiming far more for Ailred than the evidence warrants. Ailred was apparently an experienced arbiter between secular powers: he seems to have had a hand in the negotiations leading up to the second Treaty of Durham between David I and King Stephen after the battle of the Standard.[16] But in 1160-1 a temporary peace was brought to Galloway not by ecclesiastical mediation but through the three military expeditions taken into the province by David's grandson and successor, Malcolm IV. It was forceful royal policy, of which Walter Daniel makes no mention, which obliged Fergus' elder son Gilbert to partition his father's patrimony with Uhtred, his brother, and to relinquish his ambition to secure the whole of Galloway for himself.[17] Furthermore, the claim that Ailred was personally influential with Fergus must be viewed against the fact that in 1160 Fergus became not a Cistercian monk or lay brother but an Augustinian canon regular at Holyrood abbey.[18]

But if Walter Daniel's story cannot be accepted in its detail its sense does serve to bring firmly to the fore a theme of high importance for understanding the complex motives which lay behind royal encouragement of church reform in twelfth-century Scotland. The rapid reception of the new regular orders into the kingdom during this period owed almost everything to the crown's stimulus and favour.[19] Yet the historian's concentration upon the saintliness of King David and the more conventional piety of Malcolm IV and William I has tended to mask the distinct material advantages which accrued to the king through the advancement of monastic concerns. Religious houses were centres of spiritual organisation; but they were also focal points of political influence. It is true that the Cistercians above all would not tolerate a crude proprietary attitude on the part of lay patrons and that the early Cistercian ideal emphasised as a prime virtue escape from the snare of secular entanglements. But as landowners they could not ignore their responsibilities as lords of men, they could help to control people of actual or potential disloyalty and as their Scottish endowments accumulated they could be relied upon to exercise their *dominium* on behalf of the great benefactor and protector, the *rex Scottorum*.

11. For Fergus *rex Galwitensium* see *Reg. Regum Scott.*, i, p. 98.
12. *Fasti Ecclesiae Scoticanae Medii Aevi*, ed. D. E. R. Watt (St. Andrews, 1969), p. 128.
13. *Reg. Regum Scott.*, i, p. 13 and n. 2; *Wigtownshire Charters*, ed. R. C. Reid (Scottish Hist. Soc., 1960), pp. xviff. See also G. G. Simpson and B. Webster in *Château Gaillard*, v (1972), p. 178.
14. Cowan and Easson, *Religious Houses*, p. 74; but cf. *Vita Ailredi*, p. 45, n. 4.
15. *Vita Ailredi*, p. 46.
16. *Ibid.*, p. xlvi.
17. *Reg. Regum Scott.*, i, pp. 12-13.
18. *Chronicle of Holyrood*; ed. M. O. Anderson (Scottish Hist. Soc., 1938), p. 137.
19. G. W. S. Barrow, *The Kingdom of the Scots* (London, 1973), esp. pp. 165-87.

Now of all the Cistercian houses founded north of the Tweed-Solway line, it might well be claimed (Walter Daniel's powers of exaggeration aside) that Dundrennan held one of the most isolated and dangerous positions. Even after Roland son of Uhtred had been established as lord of Galloway in collusion with King William in 1185-6 it is no surprise to find as great a neighbouring magnate as William de Brus of Annandale carefully stipulating that he could only be expected to protect a tenant in possession of his property in peacetime (*in tempore pacis*).[20] Unfortunately we have little information on the vicissitudes of Dundrennan's early history beyond the notes supplied by Walter Daniel himself, although relations between Dundrennan and Rievaulx remained tight after Ailred's death: Silvanus, his successor, had been first abbot of Dundrennan and it was there that he resigned the abbacy of Rievaulx in 1188.[21] Leonius, sometime monk of Melrose, became abbot of Dundrennan in 1236, being promoted to Rievaulx three years later.[22] 'The Cistercians', as Professor Knowles has stressed, 'more than any other order before or since, regarded the growth of their body as that of a family tree, in which relationships by foundation were all-important';[23] and before the Wars of Independence the Border was clearly no obstacle to the persistence of close ties between these two houses and the periodic translation of personnel. Evidence on Dundrennan's economic activity is extremely scanty. But the extensive remodelling of the abbey in the late twelfth century and the magnificent new chapter house soon to be begun provide enduring testimony to its success in continuing to attract the support of lay donors and that the house, in spite of its exposed situation, enjoyed a substantial estate.[24] We know, too, from Francesco Pegolotti's famous hand-book of about the early fourteenth century that Dundrennan's wealth was firmly based, in true Cistercian fashion, upon the production of sheep for their wool.[25]

But Dundrennan was far more than just an ecclesiastical unit buttressed by lucrative economic concerns. The community belonged to a monastic order that had grown to prominence in Scotland by deliberately associating itself with the expanding strength of the Scottish crown, at once benefitting from and contributing to the advances that were made in the consolidation and extension of the king's effective government and control. About 1192 Roland of Galloway endowed Dundrennan with a dependency at Glenluce; his son Alan was buried in the abbey kirk.[26] Yet although these lords of Galloway, direct descendants of Fergus *regulus*, were immensely powerful in their own right, to contemporaries they would have seemed more like the king's 'good men' (*probi homines*) than autonomous rulers. Times had changed since the original colonisation of Dundrennan in the 1140s. The sparsity of documentary evidence preserved for this house ensures that it is one of the most obscure Cistercian establishments of the medieval kingdom. But the lack of available records must not be allowed to hide the fact that the part of Dundrennan, daughter of Rievaulx, in bringing the reformed religious life to Galloway has a small but deserved place in the gradual integration of the province within the wider community of the *regnum Scotie*.

20. Charter granting Adam of Carlisle the land of *Kynemund* for a quarter-knight's service in exchange for Lockerbie, supplemented by a final concord of 29 October 1198 (W. Fraser, *The Annandale Family Book* [Edinburgh, 1894], i, pp. 1-2; *Feet of Fines of the Tenth Year of The Reign of King Richard I* [Pipe Roll Soc., 1900], no. 79). The remarkable fact that this disposition of Scottish property was ratified by a fine made in the Angevin court at Westminster is noted in Barrow, *Kingdom of the Scots*, p. 114.

21. *Early Sources of Scottish History, 500-1286*, ed. A. O. Anderson (Edinburgh, 1922), ii, pp. 265, 316.

22. *Ibid.*, pp. 500, 514.

23. D. Knowles, *The Monastic Order in England*, 2nd edn. (Cambridge, 1963), p. 247.

24. P. Fergusson, *art.cit.*, pp. 232-43. The earliest in the small series of surviving Dundrennan *acta* is an agreement with Holm Cultram by 1174 over their respective spheres of influence east and west of the Nith: *The Register and Records of Holm Cultram*, ed. F. Grainger and W. G. Collingwood (Cumberland and Westmorland Antiqu. and Archaeol. Soc., Record Series, 1929), p. 52.

25. Pegolotti's figures on Scottish wool-producers have been conveniently tabulated in A. A. M. Duncan, *Scotland: The Making of the Kingdom* (Edinburgh, 1975), p. 430. Cf. also *Calendar of the Patent Rolls, 1266-72*, p. 8.

26. Cowan and Easson, *Religious Houses*, p. 75; *Early Sources*, ii, p. 492.

LETTERS FROM DR. JAMES MOUNSEY TO DR. HENRY BAKER
1762-1770
by John B. Wilson, M.D.

Dr. James Mounsey was born at Skipmyre in 1710 and after a dazzling career in the Imperial Service attained the rank of Chief Director of the Medical Chancery and Chief Physician to the Empress of Russia.[1] An account has previously been given of a letter written by Mounsey in 1762 from the Russian Court;[2] now a study of a further ten letters from Dr. Mounsey is reported. These were written to his correspondent in London, Dr. Henry Baker. Dr. Baker was married to Daniel Defoe's youngest daughter

1. Three Scots in the Service of the Tzars, Wilson J. B. (1973), *Practitioner* Vol. 210, pages 569-574, 704-708.

2. Three Dumfriesshire Letters, Wilson J. B., (1978), these *Transactions* LIII, 192.

Sophia and he "supplied much interesting information by means of the extensive correspondence he carried out with men of science in other countries." The Dictionary of National Biography goes on, "In this way we owe him the introduction of the Alpine Strawberry and the Rheum palmatum," the latter claim is, of course open to dispute, for Dr. Baker was merely the means by which Mounsey was able to publicise his importation of what was then a valuable medicinal substance.

The letters were written between 23rd November 1762 and 10th May 1770. The letter of August 1764 and all subsequent letters were headed from 'Rammerskails', though on the last day of 1767 he writes "I have already built good offices and this year I am to begin the dwellinghouse." Perhaps at that time he was living in the old house of Rammerscales which had been purchased some years before from Robert Carruthers. This contention is borne out by the Window Tax Records which show Mounsey as the owner of Rammerscales in 1760, 1764, 1766 and 1769.

Few personalities flit across the many pages covered by these letters. Only the letter to which reference has already been made, written from Moscow on 18th June 1762, alludes to well known Scottish Personalities, Sir Alexander Dick, President of the Royal College of Physicians of Edinburgh, Lang Sandy Wood, a beloved surgical character in Edinburgh and Sir Charles Erskine the Solicitor General, subsequently Lord Advocate. The latter had built the mansionhouse of Tinwald and been provost of the Royal Burgh of Lochmaben from 1731 to 1734. Dr. Mounsey, who was brought up at the farm of Skipmyre, midway between Tinwald and Lochmaben, must, about then, have been busy with his medical studies and probably made Erskine's acquaintance in these early days before he sailed for Russia in 1736. Erskine may, in fact, have influenced Mounsey to go to Russia for his brother Robert had been Physician to Peter the Great.

Perhaps the most memorable paragraph in these letters comes in Dr. Mounsey's first letter to Henry Baker written from Dumfries on 23rd November 1762, soon after his return from Russia. After detailing the honours heaped on him by a grateful Sovereign and commenting on the state of his health which dictated this return, Dr. Mounsey writes,

"Now sir you see what resolution was required to put into execution what I have done. *I have reduced myself from a courtier of high rank and great power to become a planter of cabbage*"!

Plate VI
Reverse of Gold Medal presented to Dr. Mounsey by Royal Society of Arts (full size)

The gold medal presented to Dr. Mounsey by the Royal Society of Arts to commemorate his introduction to this country of "The seed of the true Rhubarb" (Plate VI) is mentioned in the two last letters, of 19th February and 10th May 1770. In the first he suggests that Dr. Baker might send the medal North with his friend Mr Thomas Carlile of Dumfries and in the second he acknowledges its safe arrival. The rhubarb which Dr. Mounsey introduced was not of course the rhubarb which grows so prolifically in our gardens but the medicinal rhubarb whose powdered root was an important component in many medicines and was known to many, not so long ago, in Dr. Gregory's famous mixture.

Dr. Mounsey had described in a letter from Russia to Sir Alexander Dick how the seeds of the "true" rhubarb had been smuggled from China to St. Petersburg. Such was deemed the importance of this communication that Mounsey was elected an honorary member of the Royal College of Physicians of Edinburgh, for, as Sir Alexander remarked "it was to Dr. Mounsey alone that Britain was endebted for this valuable plant."

On his final return from Russia in 1762 Dr. Mounsey presented Dick with a parcel of seeds and at a special meeting of the College some of these were given to Dr. Hope, professor of Botany at Edinburgh University. Hope planted these in the Royal physic garden, then in process of construction.[3]

References to the cultivation of rhubarb roots occur frequently throughout these letters. In the letter of 1st February 1769 Dr. Mounsey tells how he had supplied seeds to a friend in Edinburgh, whose garden was apparently more suitable for the growing of rhubarb than at Rammerscales, and that he had lifted a root five years old.

> "Which for taste and virtue yields to none that comes from China and much preferable to that which is commonly to be had in the shops and is of a much more fresh and fine flavour. I have used it in my family and given it to my friends and find it answer perfectly every purpose of the Rhubarb."

Dr. Mounsey had dried the roots slowly by the side of a small stove or occasionally in an oven after the bread had been taken out. However the best way, in his estimation, was to dry them in a room kept warm with stoves, the roots being first properly cleaned and cut then hung up with cords or small iron rods. When dry they were packed in a chest, very close, lined with paper and left in a dry place.

Dr. Baker had been responsible for the publication of several papers by Dr. Mounsey in the Royal Society's Philosophical Transactions, a publication which set out, as stated on the front cover, to give some account of the present Undertakings, Studies and Labours of the Ingenious in many considerable parts of the World. Certainly Dr. Mounsey's contributions fitted these criteria well. Dr. Mounsey's first communication was "The case and cure of a woman from whom a foetus had been extracted which had lodged in one of the Fallopian Tubes for thirteen years." He had successfully removed the foetus through a sinus in the abdominal wall. The next two papers described natural phenomena, "An Account of the Everlasting Fire in Persia" and "An Account of the Russian castor, the hot springs at Carlsbad, the tin mines of Schlactenwald and the salt mines near Cracow." The fourth report, dated from Moscow the 20th September 1756 had the arresting title "The strange effects of some effervescent mixture." In it Dr. Mounsey described the symptoms produced in a patient through accidental contact with a mixture containing, amongst other chemicals, aqua fortis or nitric acid.

> "Within two hours he began to experience shooting pains in his limbs and abdomen, one of the most spectacular being a severe pain which made him cry out that his shoulder was burst for he felt something fly out with a sort of explosion."

This particular patient, Mr Butler, is referred to at considerable length in Dr. Mounsey's second letter to Dr. Baker, dated 4th March 1763. Therein Mounsey reminds his correspondent that after his unpleasant experience Mr Butler had completely recovered his health and strength. However, after handling Verdigris, Vitriol and the like, copper or iron, the unfortunate Mr Butler had again experienced an intermittent purpuric rash associated with severe shooting pains in his head, trunk and limbs, the most severe occurring after contact with a mixture containing "blue vitriol, Aluminium, quick lime, burnt alabaster and things of this kind." At the same time he had been afflicted with Anxiety, palpitation of the heart, a sense of trembling and weakness of the whole body. The most serious attack occurred on the 26th June 1758 and continued with varying intensity till the end of August; all this in spite of Dr. Mounsey's various attempts at treatment. In the end he had found the most effective remedy to be "My putting him on a milk diet and making his drive hard in a cart every day forenoon and afternoon which he continued to do for several weeks."

Not surprisingly Mr Butler, on his restoration to health, continued "to preserve the same circumspection about paints and metals as before."

The belief that Dr. John Rogerson, whose father's half sister had married Mounsey's half brother, owed his introduction to the Russian Service to Dr. Mounsey finds verification in the letter of April 1766 where Dr. Mounsey recommends young John Rogerson as "A young physician going to try his fortune abroad. His normal ingenuity and learning I hope will assure him success." Then on 10th May 1770 Dr. Mounsey writes that he was expecting

> "A letter every day from St. Petersburg with some account of the success of a young surgeon from this country lately gone over to whom I have given letters of recommendation."

Little did he know that when Dr. Rogerson returned from Russia in 1816 after 50 years service it would be as the undisputed doyen of medical men at the Russian Court. Dr. Mounsey would, however, know that Dr. Rogerson's M.D. Thesis written in 1765 had been dedicated to him.

3. Memoirs of Agriculture and other Oeconomical Arts, Robert Dossie, (1782), London 3 p. 209.

In the letter of 31st December 1767 Dr. Mounsey describes a recent illness and how he

"Had been taken ill with a fluxion in his breast which left his whole frame of body lazy and indolent but did not much affect the actuality of his mind. Though long confined to his chamber and often to his bed he continued fairly cheerful."

From this description of his symptoms a diagnosis of coronary thrombosis would seem likely, though such a diagnosis was not recognised till 150 years later.

In several of the letters reference is made to Dr. Mounsey's interest in acquiring a hand mill for grinding wheat. The difficulty he found in procuring such an object led him to plead with Henry Baker to endeavour to ensure that the Royal Society would give more assistance in publicising useful inventions.

"It is a pity that such inventions should fall into oblivion, which comes from the difficulty the great part of mankind have to quit with their old customs. The Society ought to be aprised of this that they may take proper measures to fully establish by publication, such things as are demonstrably useful. They would be doing more real good than going on in the pursuit of new things and letting pass into obscurity such things before they come to activity and be rightly established."

Dr. Mounsey must have followed Dr. Dimsdale's journey to Russia to vaccinate Catherine the Great and her grandchild with great interest. The technique Dr. Dimsdale had evolved was new and the risk of failure or of complications considerable. However all went well and Dimsdale returned home laden with honours and gifts. As Mounsey comments in his letter of 1st February 1769

"You may see from the newspaper Dr. Dimsdale successful and returning from Russia laden with riches and honours. I believe the greatest part to be truth as such presents on that occasion are very becoming the donor."

Little mention is made in these letters to current affairs though in his letter of 8th April 1763 Dr. Mounsey remarks

"I am sorry the Storms in the minds of the people are not dissipated but I hope a little time will make all calm; if it is possible for them ever to be content which I see the author of the true born Englishmen doubts of saying of them *whom yet no God nor any King can please.*"

The national character does not seem to have changed much since Dr. Mounsey's time! In the letter of 1st February he writes,

"I am much obliged to you for your political news. Things in America, I think do not run quite so high and I hope they will turn calmer at home also, however things wear still a bad aspect, for I do not see that the clouds, which hang round in several corners of Europe, lessen, so we are still in danger of being drawn into a general flame."

A literary reference occurs in Dr. Mounsey's letter of April 1766 in which he comments on his health.

"I have been lately ailing but am now got well again. I know that I cannot expect a continued state of perfect health and will joyn to think with Mr Pope *whatever is right* so will wait contentedly till the alwise Architect break up the useless hulk for other purposes."

From these letters, which are in the possession of the John Rylands University Library, Manchester, Dr. Mounsey emerges as a cultured man of the world, well able to turn a polished phrase and to express his wishes and thoughts. The letters themselves are beautifully and carefully written in a neat, rounded and easily legible hand with few mistakes or erasures. To us living in an era of swift, though not always sure, communications, the successful pursuance of this correspondence may seem surprising, but then our ancestors were cleverer than we give them credit for, without many of the advantages we enjoy.

As a footnote I am indebted to my correspondent John Appleby for an interesting piece of information about Dr. Mounsey, contained in a letter dated 21st April 1772 from the Duke of Queensberry. Apparently Dr. Mounsey had expressed a desire to be created a Baronet. Unfortunately the Duke had mistaken Mounsey's Christian name and the resultant delay while this was corrected meant that the matter was not rectified before his death, on 2nd February 1773.[4]

4. State Papers for Scotland. s4. 46, No. 36 ff96.7.

PLACE-NAMES ON THE FIRST ORDNANCE SURVEY MAP OF DUMFRIESSHIRE

by W. A. J. Prevost

Officers and other ranks of the Royal Engineers were responsible for the mapping of Dumfriesshire for the first Ordnance Survey of Scotland .... carried out from 1848 to 1858. They began the work in Dumfries in about 1850 and the different sheets when finished were published between 1859 and 1862. They accurately record for posterity the face of the land as it then existed and in particular it seems that the surveyors went to some trouble to find out and confirm the up to date spelling of place-names. That this was necessary is obvious when it is pointed out that the two sixteenth century names of Bodesbeck and Breckonside[1] in Moffat parish have each been spelt in about nine different ways down the ensuing years. This applies in a lesser degree to many other names such as Quhytewoollen in Dryfesdale which is spelt Quhitwoolen in 1448,[2] and with one or two other variations is a curiosity which could send a spelling-bee into contortions.

The problem was tackled methodically by the Royal Engineers and to this end "Object Name Books" were provided, one or two or more for each parish. In each book is an index of the place-names, giving the numbers of the pages on which they are to be found. This fills two or three pages. Those which follow are usually ruled in five columns, rarely six, when the odd column was used for the name of the man collecting "the list of names."

The first column is for the place-name, beautifully inscribed in black ink, the spelling as "recommended to be used in the new plans". Column two lists "the other modes of spelling" if there were any, the place-names having first been discussed by local authorities who gave evidence as to their authenticity. Their names appear in column three. Column four pinpoints the situation of the object, and column five is for "descriptive remarks and other General Observations which may be considered of interest". Many of these column fives are blank but the researcher must not give up hope.

There are thousands of names of persons and places recorded over 120 years ago in the Name Books of the county which are a happy hunting ground for genealogists and local historians. It was on 31 December 1850 that a Captain William Driscoll Gossit of the Royal Engineers, whose name is spelt Gossett in the Army List, put the finishing touches to the four books for Dumfries, Holywood and Torthorwald by writing his signatures at the foot of the last pages. There was a lapse of nearly five years before work in Dumfriesshire started again and the signature of Captain Richard Hugh Stotherd, also a Royal Engineer, began to appear in the books, the first being for Keir on 1 November 1855.[3] He was afterwards responsible for the work done on the rest of the 42 parishes and it all came to an end on 30 April 1858 when the surveyors finished the two books for Gretna and Kirkpatrick-Fleming. They too signed their names at the foot of every page which was their handiwork. For example there were Charles Fearnside, Sapper R.E.; Philip Munro, Lance Corporal R.E.; a Warrant Officer and two or three "civil assistants". None of these men, it is only fair to point out, were likely to have been students of Scottish history. They had to rely on the information extracted from local farmers, ministers, shepherds, rent receipts, leases etc, and on the whole they made the best of it. They received considerable help from Charles Stewart of Hillside, the factor for the Annandale Estates, whose name figures frequently in the columns three amongst others who also lived in Annandale. A few examples culled from the manuscripts will make all this clear.

Garwaldshiels in the Parish of Eskdalemuir, spelt according to the two authorities William Scott, shepherd, Garwaldshiels; and James Anderson, shepherd, Garwald Cottage. It is situated "about 25 chains N.E. of Grain Rig". The farmhouse is described in 1857 as being "one story high, with office houses all in good repair, occupied by William Scott. There are also a garden and a large sheep farm attached under the tenancy of Mr James Moffat of Garwald, and is the property of the Duke of Buccleugh (sic)."

In those days the farm of Garwald covered an area of approximately 5375 acres and was divided up into six hirsels. On it there are over a hundred place-names which are entered in the books, most of them with the authority of James Moffat and two of his shepherds. It was a task locating each hill, burn, knowe and sike on the ground though it is thought that they were helped by a plan of Garwald which had been surveyed for the Duke at his own expense.

1. Spelt Breconside in the Telephone Directory for 1972.
2. *Acts Parl. Scot.*
3. Stotherd had been promoted Captain 21 May 1854.

Pockleaf is also in the parish of Eskdalemuir. The information was given by Mr James Glendinning, farmer Over Cassock, and Robert Thompson Esq, Nether Cassock. It was situated "about ½ mile S.W. of Cassock Hill" and is described as "a small house, one story high and thatched, on the farm of Nether Cassock, inhabited by John Little, shepherd. There are two small vegetable gardens attached. Tradition states that a leaf grew here at some period that possessed the virtue of healing the Small Pox, and that is the circumstance to which the house owes its name." This is interesting though the truth of the story will never be known. Johnson-Ferguson in his book of place-names has nothing to say about the derivation of Pockleaf and only records that *Powcleiff* appears in 1613 in the Register of the Great Seal.

In 1857 *St Ann's* in Johnstone Parish was "a small village consisting of seven cottages . . . It is situated exactly 13 miles from the town of Dumfries on the main road leading to Edinburgh via Moffat. It was called after the late Lady Ann and mother to the present J. J. Hope Johnstone Esq who for her acts of generosity to the poor got the title of saint." *St. Ann's Bridge* is described as "a good stone bridge of one arch which crosses the Kinnel Water at St Ann's Village."

J. J. Hope Johnstone (1796-1876), the laird of Raehills, with his estate overseer and another man, confirmed the story about his mother and the naming of St Ann's Village. Spelt "Anne" by Sir William Fraser, she was Lady Anne Johnstone Hope (1768-1818) who inherited the Annandale Estates. She married her second cousin Captain William Hope who added to his name that of Johnstone.[4] Anyway the village and bridge were christened St Ann's and it was the name used by the Royal Engineers to describe that from it "three miles to the N.N.E. in the centre of the parish of Johnstone" and a mile north of Lochwood Castle was a place called *Stockholm*.

Stockholm is described as "a substantial Farm House on the East side of the road leading from Lochmaben to Moffat. Its name is derived from a Holm below the house where it was supposed the Stock was all placed that were taken on the *borders* by the Marquis of Annandale in their Frays with the English." The derivation of this place-name may be rather far-fetched[5] but the tradition that the Johnstones used the holm either for gathering or sorting out droves of illegally imported cattle might well be true. It is in the heart of Johnstone country while the so-called Beef Tub is on its extreme northern fringe, used by the clan, so it is said, for concealing their stolen cattle. This seems wrong, for having got as far as Lochwood with their booty there seems to have been no object in going further away from headquarters. Moreover concealment there might well have been nil if the outlook from the Beef Tub was as described by Thomas Newte in 1785 as being a most dreary prospect "without so much as one single tree or shrub to be seen . . . for thirty miles around." Anyway, whoever told the story to the Royal Engineers was unaware that there was not a Marquis of Annandale in the days of the Border Reivers.

The Name Book of Dryfesdale was finished in April 1856 and a sapper's contemporary description of an unusual feature has been chosen to conclude this article. He writes that "a wooden stake having iron cross bars on the top constitutes the *Market Cross* in Lockerbie. It is nearly central in High Street. There is also a pump and lamp post near it. There was a stone here with a hole in it said to be the font stone from an Old Chapel at Quaas. Such a stone is not here now."

There are, of course, references to other streets and buildings in Lockerbie and this applies to other towns like Dumfries and Annan. The towns are well mapped and the plans are recognisable today. This is not so with the landward areas of some of the parishes where the Forestry Commission has taken over and covered acres with a dense carpet of non-deciduous trees. They have blotted out a heap of local history and in a way it is really rather sad.

The Object Name Books are in the Archaeology Division of the Region Office of the Ordnance Survey in Edinburgh. They have been micro-filmed and the films have been deposited in the Scottish Record Office. In both places they are available to readers.

4. Sir William Fraser, *Annandale Family Book* . . . Vol. i, pp cccxxvii, viii.
5. Johnson-Ferguson in *The Place-names of Dumfriesshire* ignores Stockholm though he has included three names beginning with Stock.

PROCEEDINGS 1979-80

12th October, 1979

The Annual General Meeting was held in the Education Offices, 30 Edinburgh Road, Dumfries. The President, Mr Alex Robertson, was in the chair. The Speaker was Mr Alex McCracken, formerly a vice-president. He took the audience on a conducted tour of the "Antiquities of Eskdale" illustrated with slides. The journey started at Arthuret, connected in legend, with King Arthur. We saw the remarkable church, built in 1609 as a result of a collection taken all over England. An ancient cross in the graveyard was said to mark the burial place of James I's Jester, Archie Armstrong. The journey continued through Liddel Strength with the impressive remains of a medieval stronghold; to Canonbie to see the remains of a priory; to Hollows Tower; to the Langholm railway, with its three impressive viaducts. In Langholm itself we saw the Library, which was largely funded by a £1,000 legacy from Thomas Telford, and "The Marble Man", Pulteney Malcolm. We ended the tour at Johnstone House, now the site of the Tibetan Monastery.

26th October, 1979

Mr Jack Scott, a Fellow of the Society, gave a talk on the "Bronze Age Monuments of Kilmartin". He showed a number of slides of a series of burial cairns which formed a geographical line from South East to North West. In some cases it seemed that previous neolithic sites had been adapted for Bronze Age use. There were features of the monuments which suggested continental influences, for example, one, Ri Cruin, had carvings on the 'lid' of the cist which were like those found on a German stone. There were also numerous similarities on sites in Ireland, Stonehenge, and especially Brittany. Linear Cemeteries, or lines of standing stones were plotted on a map. These were found in Brittany, Wessex, a few in Galloway, and a large number in a belt across Scotland from South Argyll to Angus; perhaps these areas had a similar culture, linked by sea?

9th November, 1979

The Speaker, the Rev. William Aitken, was introduced by the President, as Minister of Irongray, Presbytery Clerk, and a noteworthy amateur actor. This was perhaps an unfortunate description in the light of Mr Aitken's talk, as one extract described unsuccessful attempts by the Kirk Session to stop a play being performed. This was at Waterside Farm, under the 'specious pretext' of raising money to help the poor. Mr Aitken selected material from three sources: Kirk Session Minutes, contemporary literature and the Kirkyard. The Minutes of the Kirk Session revealed the authority held by its members, which was exercised in two principal ways; social work, promoting education and supporting the local infirmary, and discipline which was mainly directed towards the morally lax, the 'Sabbath' breaker, and the occasional witch. In the early 19th century there was mention that the Parish purchased a hearse and built a 'hurse house' for £16, beside the present post office at Shawhead. The literature of several writers unfold different aspects of local activities and history. The devotion of Helen Walker to her sister, immortalised by Sir Walter Scott, an account by R. W. McKenna of the Conventical of 1678, a description of the peaceful beauty of the Manse garden by A. P. H. Boyd, and inevitably, a mention of the weather from R. L. Stevenson. The graveyard contains the tomb of Helen Walker, and those of 3 Ministers, ancestors of John Brown of Shipyard fame. There are graves from the time of the Reformation, and mention of Emigrants to far-away places. Catalogued on the stones are the trades of many parishioners, and in an unmarked grave, the sombre reminder of the Cholera deaths of 1837.

23rd November, 1979

The Speaker, Mr James Robertson, Lecturer in law at Dundee University, and son of an ex-president of the Society, told how, ten years ago he had been sent for 3 months to extract material, from the Vatican archive, that shed light on the relationship between Roman and Scottish Law; he has been a frequent visitor ever since! For about 800 years the Archive was in the Lateran Palace. Eventually it expanded sufficiently to occupy the Castle St. Angelo, and the Vatican Palace. The custom was for the entire record to accompany the Pope on his travels, to its detriment, and many sections were incomplete because of accidents. In 1800 Napoleon carried off the Archive to Paris, but its intended home was too small, and because of this about a quarter was reduced to pulp. The Archive of the Vatican now occupies 25 miles of shelving, seven of which contain the documents relating to the Sacra Romano Rota, dating from 1464, in which our Speaker was particularly interested. This Rota was the highest Church Court, and was much

used by the Scottish people. He calculated that every year some fifty to sixty Scots made the six week journey. The quickest route was by boat along the Rhine, but more commonly they travelled through France. Also, there was a permanent Bar of Scottish Lawyers, specialising in a Scots clientele. Including travelling time, it usually took only six months for a case to be decided, and at an average cost of 60 gold ducats was remarkably cheap. The procedures used were very similar to those later adopted in Scotland.

7th December, 1979

The Speaker, Dr. Fry, gave a wide ranging talk on 'Nature Conservation in Dumfries and Galloway'. He mentioned some sites which the Nature Conservancy Council tried to protect. Bogs, for example, had much greater value than was often realised. They preserved a botanical record going back to the last ice age. Reed beds were important for breeding ducks. He was particularly concerned with deciduous woodland. Woods such as Castramont had a marvellous display of bluebells, which was now a comparatively rare flower in the Region. Lichen on trees often allowed woods to be dated, and were also an indication that atmospheric pollution was minimal. Some Galloway woods were thriving in the Middle Ages. Oak Woods, such as Lochwood, were especially rich in insect life. However, 40% of local deciduous woodland had been lost since the last War. It was also mentioned that tourism and leisure activities could conflict with conservation unless carefully managed. The Region was the only one in Scotland which offered a habitat to the Natterjack Toad, breeding mainly in tiny ponds between the Nith and Annan estuaries. However, last year frozen spawn followed by a dry spell had severely hit the population, and two or three successive bad years could seriously endanger the species in this locality. Another concern was the increasing acidity of our rainfall. The cause was as yet uncertain, but one of the effects was a high mortality among salmon and brown trout.

11th January, 1980

The Speaker, Mr Michael Yates, a Council Member, spoke on 'Bronze Age Funerary Monuments in South West Scotland'. Three distinctive burial styles were associated with the period. These consisted of round cairns, single cists, and 'cemeteries' or clusters of single burials. Round cairns were especially common in Wigtownshire, whereas cemeteries predominated in Dumfriesshire. There was no evidence to suggest that one type of burial came before the others. The round cairns always had a central burial, but often cremation urns had been added later, and these were frequently found near the edge of the cairn. There were far too few cairns to make it feasible for the whole population to have received cairn-burials, but too many, if they were reserved for tribal chieftains. Mr Yates thought that they were probably intended for members of leading families, and considered that it must have required a great amount of physical endeavour, but not a great deal of skill, to build the cairns. These were probably placed deliberately in prominent positions, many of them on hilltops. Others were situated beside stone circles. There was a considerable body of evidence to suggest that the cairn sites reflected the pattern of agricultural settlement. Areas which had few cairns were those which would have been inhospitable at the time. The stones for the cairns might have been collected originally as field clearance.

25th January, 1980

This was the Members' Night. Mr Anthony Tyers of the Forestry Commission spoke first. He gave a short talk on the commercial life of the conifer in areas such as Galloway. He spoke about some hazards with which the trees have to compete, such as weeds, damage by animals and fire. Slides of Forest Staff using hand tools and machinery were shown, also modern safety equipment now worn during operations. The Commission's policy on use of Forests by the Public was mentioned, and it was also stated that areas of botanic and archaeological significance were, where possible, preserved.

Mr Gordon Robertson, the second speaker, took us on a slide tour from Portpatrick in the West to Vindolanda and Hadrians Wall in the East. All the slides had been taken during the Society's past excursions. The pictures provided happy memories for many of our Members.

The final speaker for the evening was Mr Jim Young, on the Birds of Nithsdale. He showed some remarkable slides of birds and some animals, from a variety of habitats, including hills, woods and rivers. Among these were three shots of a mouse being devoured by a young tawny owl. We saw Waxwings, now exceedingly rare in this locality, kingfishers, which are on the increase, and a host of others.

8th February, 1980

The Speaker, Dr Cowan, Lecturer in History at Glasgow University, spoke on 'The Reformation in Dumfriesshire'. He said that there was little evidence of dissatisfaction with the Catholic Church before the Reformation. At the Reformation Parliament of 1560, for example, Dumfries Burgh was unrepresented. Many parishes had difficulty in obtaining Protestant preachers, especially in Annandale and Eskdale, and as late as 1608 there were nearly thirty vacant charges in these areas. Nithsdale was much better supplied, but even there indications were that Protestantism was often only skin deep, and while Protestant services were being held in the New Abbey Kirk, Mass was still being said in the Abbey itself. There was also a report, in 1587, that the Dumfries Deacons of Craft encouraged their fellow tradesmen to observe the Festivals of Pasche and Yule, which the Protestants regarded as superstitious. Many of the early reformed clergy were former Roman Catholic priests, and at least five of the eleven Canons of Holywood Abbey became Protestant preachers.

22nd February, 1980

The Speaker, Mr Chris Tabraham gave a talk on the 'Mottes of the Stewartry District'. The land for the mottes was granted by King David and his successors to a number of minor Norman barons in return for support in times of uprising. The castles, several storied and made of wood, were built on the highest part of the motte which was connected to a bailey — or village area. This usually included a chapel, barns, smithy, stables, and quarters for servants and garrison, all within a high palisade, which in turn was surrounded by a ditch or moat. The Mottes, dating from the 12th to 14th Centuries, were particularly associated with Dumfries and Galloway, where, about one in three of all known Scottish sites were to be found. In the Stewartry the evidence was consistent with the view that the motte was the 'caput' of the medieval parish. Where there was no motte, as in Kirkgunzeon, Dunrod and Tongland, the medieval parish had belonged to the Church. The best preserved motte in Scotland was the Mote of Urr, the home of King William the Lion's chamberlain, Walter de Berkeley, who had moved into the area during the Lordship of Fergus. There were three candidates for the site of Fergus's own motte — Castle Fergus, Buittle, and Cruggleton.

7th March, 1980

The Speaker, Mr Stell, concentrated on three aspects of the Balliol Family History :
1) The rivalry between the Bruce and Balliol Families. 2) The effects of the marriage in 1233 between Devorgilla and John Balliol, the elder. 3) Some less well-known facts of King John Balliol's life. Although the Bruce and Balliol families had been closely associated since, at least, 1138, the evidence suggested that until the contest for the Kingship in 1290 they had not seen themselves as rivals. The Bruces had always been much more prominent in Scottish affairs, whereas the Balliols could be seen rather as an international family. In 1289, for example, John Balliol was apparently trying to encourage trading links between Picardy and Scotland, in both of which he held land. It was the Balliol-Devorgilla marriage which made the Balliols into one of Scotland's leading families. Mr Stell calculated that the total income from Balliol's lands before the marriage was about £500 to £800 per annum. When Devorgilla died nearly 60 years later, Edward I demanded £3,300 as 'the relief' for her Scottish lands. King John Balliol had a largely English upbringing on the family estates at Barnard Castle, County Durham. As the fourth son he could have little expectation of succeeding to these or other estates, let alone the Scottish Crown. There were hints that he may have intended a monastic life, and that he could read and write. The date of his birth is unknown. Perhaps between 1248 and 1250. He probably lived just long enough to hear the news of Bannockburn.

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