

Legal protection of New Zealand's indigenous terrestrial fauna – an historical review

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ABSTRACT: New Zealand has had a complex history of wildlife protection, with at least 609 different pieces of legislation affecting the protection of native wildlife between 1861 and 2013. The first species to be fully protected was the tūī (*Prosthemadera novaeseelandiae*), which was listed as a native game species in 1873 and excluded from hunting in all game season notices continuously from 1878, until being absolutely protected in 1906. The white heron (*Ardea modesta*) and crested grebe (*Podiceps cristatus*) were similarly protected nationwide from 1888, and the huia (*Heteralocha acutirostris*) from 1892. Other species listed as native game before 1903 were not consistently excluded from hunting in game season notices, meaning that such iconic species as kiwi (*Apteryx* spp.), kākāpō (*Strigops habroptilus*), kōkako (*Callaeas* spp.), saddlebacks (*Philesturnus* spp.), stitchbird (*Notiomystis cincta*) and bellbird (*Anthornis melanura*) could still be taken or killed during the game season until they were absolutely protected in 1906. The tuatara (*Sphenodon punctatus*) was added to the native game list in 1895, but due to inadequate legislation was not absolutely protected until 1907.

The Governor of the Colony of New Zealand had the power to absolutely protect native birds from 1886, but this was not used until 1903, when first the blue duck (*Hymenolaimus malacorhynchus*) and then the huia were given the status of absolutely protected, followed by more than 130 bird species by the end of 1906. The ground-breaking Animals Protection Act 1907 listed 23 bird species, four genera, one family (cuckoos, Cuculidae) and tuatara as protected. The Animals Protection Amendment Act 1910 extended protection to all indigenous bird species, but led to confusion as to which bird species were 'indigenous'. This confusion was removed by the Animals Protection and Game Act 1921–22, which presented a long list of absolutely protected species. The 1921–22 Act introduced further problems through omission of species that had not yet been discovered or named, including South Island snipe (*Coenocorypha iredalei*), Chatham Island mollymawk (*Thalassarche eremita*), Pycroft's petrel (*Pterodroma pycrofti*), Archey's frog (*Leiopelma archeyi*) and Westland petrel (*Procellaria westlandica*). The Wildlife Act 1953 avoided missing unknown species by reverting to the 1910 approach of making everything protected unless listed as 'not protected'. Further, by covering both native and introduced species, the 1953 Act was able to avoid use of ambiguous terms such as 'indigenous'. The 1953 Act has provided a stable platform for wildlife protection for 60 years, including allowing the addition of selected threatened terrestrial invertebrates in 1980, 1986 and 2010, and all New Zealand lizards in 1981 and 1996. The reasons why species were protected are explained.

KEYWORDS: Environmental legislation, history of legal protection, terrestrial fauna, indigenous, wildlife, museum collections, native game, animal protection, New Zealand.

Introduction

however well legislative enactments will be framed, the people themselves can determine what shall be allowed to exist ... it must be admitted that the prospect of the preservation of our birds is the reverse of hopeful. (Potts 1870: 43)

let a few words be recorded for the preservation of our native fauna. It is a work of difficulty, except with a few, to get folks interested in this subject. (Potts 1882: 233)

Environmental legislation is a window into societal values. ‘The record of legislation passed by various parliaments is historically of interest, and of value from the point of view of the naturalist’ (Thomson 1922: 554). It is self-evident that legal protection of species reveals those taxa that are considered of intrinsic value to society. The converse – understanding why a species is not protected – is more complex. Species could be left unprotected for a wide variety of reasons, including if they are considered noxious or harmful, if they are hunted and considered able to be sustainably harvested, if they are abundant and not considered in need or worthy of protection, if the mechanisms for achieving protection are too complex, or they could be overlooked through error or lack of information.

Most native New Zealand birds and all native frogs (*Leiopelma*), bats (*Mystacina* and *Chalinolobus*) and tuatara (*Sphenodon*) have been continuously protected for at least 60 years, since the Wildlife Act 1953 was enacted (Galbreath 1993; McDowall 1994). This long period of legislative stability means that two generations of conservation managers and environmentalists have had little reason to consider pre-1953 legislation, and most are not aware that the majority of New Zealand’s terrestrial vertebrate species have been legally protected for more than a century (this article), nor that previous legislation (*sensu* the Legislation Act 2012) was so complex. Understanding the history of legal protection for each species is a necessary first step when considering the legality or otherwise of historical wildlife specimens offered for sale, and during investigations of the activities of private collectors of wildlife specimens active before 1953. Investigating the social context behind legislative change provides insights into the development of an indigenous conservation ethic in New Zealand (Galbreath 1989a,b; Aramakutu 1997; Feldman 2001; Young 2004).

Previous reviews of New Zealand environmental legislation affecting wildlife have focused primarily on acclimatisation and game management (Thomson 1922;

McDowall 1994; Aramakutu 1997), or on the impacts on Māori lifestyle and culture (Aramakutu 1997; Feldman 2001; Marr *et al.* 2001). Here, I review the impacts of legislation on all of New Zealand’s indigenous terrestrial fauna by first analysing the relevant provisions of legislation affecting the protected status of any indigenous terrestrial species. I then summarise reasons why different species were granted protection (or not), and conclude by looking at the history of legal protection of each species or taxon group. The original purpose of the review was to provide a database of when each species or species group received legal protection (and under which piece of legislation), as a resource for officials tasked with advising on the legality of privately owned specimens offered for sale. The review therefore focuses on the details of legislation rather than the complexities of subsequent compliance and enforcement. These latter topics were partially addressed by Galbreath (1993) and McDowall (1994), particularly in relation to application of gamebird hunting regulations, and hunting of New Zealand pigeon (*Hemiphaga novaeseelandiae*) after that species became fully protected.

Methods

Legislation and context relevant to the legal protection of New Zealand’s indigenous wildlife were located through searches of paper-based, digital and online archives. The main paper-based archives searched were bound volumes of *Rules, Regulations and By-Laws under New Zealand Statutes* (Volumes 1–13, 1910–36), *Statutory Regulations* (1936–2012) and *New Zealand Parliamentary Debates (NZPD)*, held at the National Library and Wellington City Library, Wellington; archived files of the Colonial Secretary’s Office (1861–1907) and the Department of Internal Affairs (1907–87), held at Archives New Zealand, Wellington; and subsequent Department of Conservation (DOC) files held at, or for, the DOC National Office, Wellington. Digital copies of the *New Zealand Gazette (NZG)*, the official organ of the New Zealand legislative assembly) at the National Library and at Archives New Zealand were searched for keywords using optical character recognition. The two main web-based sources of New Zealand statutes searched were the New Zealand Legal Information Institute *NZLII Databases* (New Zealand Legal Information Institute n.d.), particularly ‘New Zealand Acts As Enacted (1841–2007)’, and *New Zealand Legislation* (Parliamentary Counsel Office n.d.), with citation details confirmed by inspection of bound

copies of the *Statutes of New Zealand* and the *Statutes of the Dominion of New Zealand* held at the National Library and Wellington City Library. Selected social histories were also checked to ensure that no additional relevant legislation was referenced therein (Galbreath 1993; McDowall 1994; Bassett 1997; Young 2004), as were selected Waitangi Tribunal reports (Feldman 2001; Marr *et al.* 2001) and theses (Galbreath 1989b; Hamer 1992; Aramakutu 1997).

All legislation found that contained information relating to legal protection of indigenous terrestrial fauna, or that amended the primary Acts, was compiled in a chronological database, along with citation details and a summary of relevant information contained therein (Appendix 1). Registers of pre-1933 inwards correspondence received by the Colonial Secretary's Office and the Department of Internal Affairs were searched for files associated with each piece of legislation, using the date of gazettal as the starting point and working back in order to locate prior correspondence that may have prompted legislative action. Additional files of interest found in the registers (usually under the subject heading 'Animals Protection Act') triggered further searches of the *New Zealand Gazette* in an iterative process. Later files were located directly via the Archives New Zealand 'Archway' website (www.archway.archives.govt.nz; viewed 21 September 2013).

Results

Part 1: The main pieces of legislation and their impact on New Zealand wildlife protection

Protection of New Zealand indigenous terrestrial wildlife has been covered by nine primary Acts, each of which repealed its predecessor (Table 1). There were also five minor Acts, 29 Amendment Acts, 34 Statutory Regulations (Warrants, Notices and Orders), and at least 532 Orders in Council or *New Zealand Gazette* notices affecting the legal status of indigenous terrestrial wildlife (a chronological list with citation details is provided as Appendix 1).

Native birds as game: 1861–88

The New Zealand Parliament first sat in May 1854 (King 2003) and first passed legislation affecting wildlife seven years later (Table 1). The Protection of Certain Animals Act 1861 was apparently based on 'An Act to Provide for the Protection of Certain Animals, Birds, and Fishes Imported into the

Table 1 The principal Acts providing legal protection to New Zealand wildlife. Each Act repealed its predecessor and all intervening amendments and ancillary legislation. The Animals Protection Act 1908 was a consolidation of the Animals Protection Act 1907. There have been numerous amendments to the Wildlife Act 1953, which is still in force (Appendix 1).

Protection of Certain Animals Act 1861
Protection of Certain Animals Act 1865
Protection of Animals Act 1867
Protection of Animals Act 1873
Animals Protection Act 1880
Animals Protection Act 1907
Animals Protection Act 1908
Animals Protection and Game Act 1921–22
Wildlife Act 1953

Province of Nelson', which had been passed three months earlier (*Votes and Proceedings of the Nelson Provincial Council*, Session VIII 1861: 21). The Nelson Act is considered to have been New Zealand's first piece of legislation affecting wildlife (Thomson 1922).

Both the Protection of Certain Animals Act 1861 and the subsequent Birds Protection Act 1862 focused on the regulation of hunting of introduced game (see Appendix 1); the only native species affected was the New Zealand quail (*Coturnix novaezelandiae*), if the term 'quail' is interpreted as including that species (although note that black swans *Cygnus atratus*, which were imported in the 1860s, are now generally considered native to New Zealand; see discussion in Miskelly & Powlesland 2013: 5).

The first legislation to mention native birds specifically was The Wild Birds' Protection Act 1864, which set open seasons for native ducks (family Anatidae) and New Zealand pigeon, as did the Protection of Certain Animals Act 1865. The breadth of native species considered to be game was expanded in the Protection of Animals Act 1867 to include 'bittern' (probably referring to Australasian bittern *Botaurus poiciloptilus*, but the term would have covered New Zealand little bittern *Ixobrychus novaezelandiae*), pied stilt (*Himantopus himantopus leucocephalus*), black stilt (*H. novaezelandiae*), 'curlew' (probably referring to bar-tailed godwit *Limosa lapponica*) and quail.

The New Zealand pigeon was removed from the game list in the Protection of Animals Act Amendment Act 1868, which effectively meant that it could be killed year-round.

It was returned to the game list in the Protection of Animals Act 1872. The black swan was removed from the game list in July 1878, but returned to the game list in the Animals Protection Act 1880 (it was again removed from the game list in December 1890, before being returned in most provinces in 1891–95).

The tūi (*Prosthemadera novaeseelandiae*) received some protection when the Protection of Animals Act 1872 made it an offence to sell dead tūi (or for licensed game-sellers to have them in their possession). Both the tūi and the New Zealand pigeon were included as native game in the Protection of Animals Act 1873, with ‘dotterell’ (presumably New Zealand dotterel *Charadrius obscurus* and banded dotterel *C. bicinctus*) also added. The list of native game in the Animals Protection Act 1880 included wild duck of any species, bittern, pied stilt, ‘dotterell’, tūi, native pigeon, teal, black stilt, curlew, and quail, with pūkeko (*Porphyrio melanotus*) added to the native game list in August 1886, and kākā (*Nestor meridionalis*) in August 1888. ‘Teal’ probably referred to black teal (= New Zealand scaup *Aythya novaeseelandiae*; see Buller 1882: 72; Hutton & Drummond 1904: 332), but may have included brown teal (*Anas chlorotis*) and grey teal (*A. gracilis*). Curlew (= godwit) was removed from the game list in December 1886 after the Auckland Acclimatisation Society pointed out that these migratory birds were absent during the May to July game season (Archives New Zealand, IA1 86/4255).

The beginning of a protectionist ethos: 1877–1904

Before the passing of the Animals Protection Act 1907, the primary mechanism available to legislators wishing to protect wildlife species from hunting was to add them to the Fifth Schedule (‘native game’) of the Protection of Animals Act 1873, or (subsequently) the Fourth Schedule of the Animals Protection Act 1880, and then to ‘further notify and declare that the said birds shall not be taken or killed within the said Colony of New Zealand’ (e.g. *NZG* 19, 31 March 1885: 376), and to exclude them from annual notifications of game able to be killed. In several cases, understanding why a species was added to the native game list (i.e. whether this was to regulate access to a hunting resource or to provide year-round protection) required locating the original correspondence requesting the listing (see Part 2), plus viewing subsequent game season listings.

The Animals Protection Act 1880 Amendment Act 1886 granted powers to the Governor to ‘prohibit absolutely or for such time as he may think fit the destruction of any bird indigenous to the colony’. This provided a mechanism for

ongoing year-round protection, additional to the annual game season notifications, but was not used until 1903.

The first time a species or group of species was added to the native game list in order to protect them from hunting was in April 1877, when ‘sea-gulls of any species’ (i.e. southern black-backed gulls *Larus dominicanus*, red-billed gulls *L. novaehollandiae* and black-billed gulls *L. bulleri*) were protected within Wellington Provincial District. This partial protection expired when the Animals Protection Act 1880 was enacted. The first New Zealand bird species to receive ongoing year-round protection nationwide was the tūi, which was first listed as native game in the Protection of Animals Act 1873, and from 1878 was continuously excluded from game season lists of native game that could be killed in all districts (Fig. 1). The white heron (*Ardea modesta*) and crested grebe (*Podiceps cristatus*) were added to the game list in March 1885, but (apart from the Otago Acclimatisation Society, which requested their protection) did not receive nationwide exemption from game season lists until 1888 (Fig. 1 and Appendix 1). The huia (*Heteralocha acutirostris*) also received continuous, nationwide protection in annual game notices after being added to the game list in February 1892, and for the next decade all game season notices in the *New Zealand Gazette* included exclusions for (at least) tūi, huia, white heron and crested grebe.

Fig. 1 [*opposite*] New Zealand native wildlife species protected between 1877 and 1903 (i.e. those species listed in, or added to, the Fifth Schedule of the Protection of Animals Act 1873, and the Fourth Schedule of the Animals Protection Act 1880). Species above the line were listed in the 1873 and 1880 Acts, and those below the line were added to the native game schedule later, or (in the case of blue duck and paradise shelduck) were part of the collective term ‘wild duck’ in the original Acts. Scientific names are given in the text. Species marked with a filled circle [●] were excluded from hunting in all acclimatisation society districts that year (i.e. fully protected for that year);¹ species marked with an open circle [○] could be taken as native game in all districts during the (usually) three-month-long game season; species marked with a half-filled circle [◐] were excluded from hunting in one to three districts that year; species marked with a crescent [☾] were listed as native game in some but not all acclimatisation districts. Unlisted species, or those with a blank cell [–], had no restrictions on hunting year-round. The black swan was listed as a game species in some districts only from 1892 on, and so there were no restrictions on hunting it in other districts. The data are derived from 418 game season notices published in the *New Zealand Gazette* (see Appendix 1), with the number of notices published each year varying from a single national notice to a maximum of 27 separate acclimatisation district notices, as shown in the last row.

Game season	1870s					1880s					1890s					1900s												
	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	
Quail	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Black swan	○	○	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Wild duck	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Teal	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Bittern	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Curlew (godwit)	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Pied stilt	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Black stilt	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Dotterel	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Native pigeon	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Tūī	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Gulls	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
White heron	-	-	-	-	-	-	-	-	-	◐	◐	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Crested grebe	-	-	-	-	-	-	-	-	-	◐	◐	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Pukeko	-	-	-	-	-	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Kākā	-	-	-	-	-	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Morepork	-	-	-	-	-	-	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Huia ¹	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●	
Swallows & swifts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	○	
Tuatara	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bellbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kōkako x 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kākāpō	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kiwi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Saddleback	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Stitchbird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○	○	○	○	○	○	
Blue duck	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○	○	○	○	○	○	
Paradise shelduck	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	◐	◐	◐	◐	
No. of game season notices	3	1	1	2	10	13	15	18	17	20	21	1	1	1	1	1	19	23	24	24	23	24	24	25	27	27	26	27

Several other species were ‘protected’ by being added to the Fourth Schedule of the Animals Protection Act 1880, and then being excluded from being killed. However, apart from a few species in a handful of districts, the protection was not renewed in notices for subsequent game seasons (Fig. 1). Species added to the native game schedule included morepork (*Ninox novaeseelandiae*) in November 1888, the ‘tuatara lizard’ (*Sphenodon punctatus*) in April 1895, bellbird (*Anthornis melanura*), North Island kōkako (*Callaeas wilsoni*), South Island kōkako (*C. cinerea*), kākāpō (*Strigops habroptilus*), kiwi (*Apteryx* spp.), saddleback (*Philesturnus* spp.) and stitchbird (*Notiomystis cincta*) in March 1896, ‘seagulls of any species’ in August 1899, and ‘bats of any species’ (i.e. short-tailed bats *Mystacina* spp. and long-tailed bat *Chalinolobus tuberculatus*) in July 1904.

‘Swallows, swifts, and martins (*Hirundo*) of every kind’ were ‘protected’ in May 1893. As this was achieved by adding them to the Third Schedule of the Animals Protection Act 1880 (‘Game’, as opposed to ‘Native Game’ in the following schedule), it is apparent that the birds referred to were being imported (Thomson 1922: 150), rather than the vagrant swallows, swifts and martins that reach New Zealand (including three species recorded in the 1880s and 1890s; Stidolph 1927).

Tuatara and their eggs were granted absolute protection in September 1898, when the Earl of Ranfurly, Governor of the Colony of New Zealand, declared that ‘from and after the publication hereof the lizard known as the tuatara (*Sphenodon punctatum* [*sic*]) shall come within the operation of the [Animals Protection Act 1880], and [I] do hereby declare that the eggs of such lizard are hereby absolutely protected’. This declaration was *ultra vires*, as the 1880 Act provided no mechanism for absolute protection of any species.

The Governor did have a mechanism for granting absolute protection to indigenous birds, namely Section 3 of the Animals Protection Act 1880 Amendment Act 1886. This was first used in February 1903, to protect the blue duck (*Hymenolaimus malacorhynchus*), and was also used explicitly to protect 15 species of native birds in the counties of Akaroa and Mt Herbert (Banks Peninsula) in February 1903 (see Appendix 1), to protect huia (absolutely, rather than via the native game schedule) in March 1903, to protect bitterns throughout Canterbury in September 1903, and to provide absolute protection to Chatham Island rail (*Cabalus modestus*) in September 1904, and Australasian bittern and New Zealand little bittern (nationwide) in October 1904.

Legislators were clearly aware of the distinction between adding species to the game list (i.e. ‘protection’, under the Animals Protection Act 1880), and the absolute protection provided for by the Animals Protection Act 1880 Amendment Act 1886. Any protection notices referring to the Amendment Act incorporated the phrase ‘prohibit absolutely taking or killing’, which was never used for species added to the native game schedule. The one anomaly was tuatara eggs ‘absolutely protected’ under the 1880 Act (see above).

A few native game species were given sporadic protection by the implementation of a closed season, with New Zealand pigeons protected in 1896 (Animals Protection Act Amendment Act 1895, reinforced in game season notices), and pūkeko, New Zealand pigeon and kākā in 1901, 1904 and 1907 (Animals Protection Acts Amendment Act 1900, reinforced in game season notices), although Māori were permitted to hunt pigeons in selected districts near Taupo and in the Bay of Plenty in 1901 (*NZG* 48, 16 May 1901: 1068).

Protection is extended to most New Zealand birds, bats and frogs: 1906–23

The first attempt to provide absolute protection to most New Zealand birds was a notice listing 138 species published in the *New Zealand Gazette* on 10 May 1906, reproduced here as Appendix 2. This implicitly used the Governor’s right to absolutely protect indigenous birds (see above) by referring to the powers vested in the Governor in the Animals Protection Act 1880 ‘and the Acts amending the same’.

‘Albatross (*Diomedea* [*sic*]) of any species’ and their eggs were added to the protected list by the same means in March 1907. This is likely to have referred solely to the great albatrosses (*Diomedea sensu stricto*), as mollymawks were included in the genus *Thalassarche* at the time (Hutton & Drummond 1904), as they have been again since 1996 (Nunn *et al.* 1996; Gill *et al.* 2010).

For about 100 species this protection was short-lived, with the Animals Protection Act 1907 (which repealed the Animals Protection Act 1880) extending full protection to 39 native species only (based on 2013 taxonomy). This was the first time that a New Zealand Act provided a schedule of protected wildlife. The species protected were: bellbird, Australasian bittern, reef heron, blue duck, crested grebe, kōkako, cuckoo (family Cuculidae), fantail, fernbird, kākāpō, huia, kākā, kingfisher, kiwi, banded rail, morepork, piopio, two species of oystercatcher, paradise shelduck, tūi, robin, saddleback, stitchbird, spotless crane, tomtit, white

heron, bush wren and tuatara (see Appendices 2 and 4 for scientific names). Rather confusingly, a *New Zealand Gazette* notice published five months later (16 April 1908) granted protection to the paradise shelduck (*Tadorna variegata*) (again) until April 1909, perhaps to clarify that it was not to be considered a 'wild duck' (see below).

The Animals Protection Act 1907 listed black swan and pūkeko among native game, which then included: 'black stilt plover, black swan, curlew, dotterell [*sic*], godwit, native pigeon, pied stilt plover, pukeko, teal, wild duck, wild geese'. The Act also introduced closed seasons for all species of native and introduced game (other than deer), to commence in 1910 'and every third year thereafter'. This resulted in 1910, 1913, 1916 and 1919 being considered closed seasons, although Māori were permitted to hunt pigeons in the Urewera and Taupo districts in 1910 (*NZG* 35, 15 April 1910: 1222; *NZG* 46, 12 May 1910: 1418).

Full protection was extended to most native birds later in 1910, when the Animals Protection Amendment Act 1910 included the provision 'Every person who destroys, or injures, or captures any bird which is indigenous to New Zealand, or who robs or destroys the nest of any such bird, is liable to a fine not exceeding twenty pounds.' In current parlance, 'indigenous' is used interchangeably with 'native', and refers to species that occur or have arrived in New Zealand unassisted by humans. However, in 1910 the term was apparently used more narrowly, and there were differences in opinion amongst Members of Parliament (MPs) as to what 'indigenous' meant. The Hon. Sir William Steward believed that the term excluded 'birds that periodically visit New Zealand for nesting and other purposes' (*NZPD* 153: 115), while William Field 'thought that the cuckoo, which came here and laid its eggs and hatched its young, was as much a native of this country as the country from which it migrated in the spring' (*NZPD* 153: 116). Heaton Rhodes considered the term to include non-breeding migrant species also:

If there was any doubt on this point it should be made clear that they, too, were protected – at any rate, during certain months in the year. He would instance such migratory birds as the knot [*Calidris canutus*], the golden plover [*Pluvialis fulva*], and the godwit; while others, like the shining cuckoo [*Chrysococcyx lucidus*] and long-tailed cuckoo [*Eudynamis taitensis*], which visited this country to breed, should be protected during the whole period of their visit. (*NZPD* 153: 116)

There is no record as to whether any MPs considered vagrant birds to be indigenous (as they are now so considered), nor

whether a consensus was reached on which species were covered by the Act. However, six years later a *New Zealand Gazette* notice included both the cuckoos and a small sample of vagrant species (including frigatebirds *Fregata* spp., [red-necked] avocet *Recurvirostra novaehollandiae* and [nankeen] night-heron *Nycticorax caledonica*) among 'Indigenous birds absolutely protected' (*NZG* 42, 12 April 1916: 1034).

A *New Zealand Gazette* notice published in February 1911 removed protection for kea (*Nestor notabilis*), 'Hawks of all species' (i.e. swamp harrier *Circus approximans* and New Zealand falcon *Falco novaeseelandiae*), and 'Shags of the following species: Black shag (*Phalacrocorax sulcirostris*), White-throated shag (*Phalacrocorax brevirostris*), Sea shag (*Phalacrocorax novae-hollandiae*, *Phalacrocorax carbo*)' (likely to refer to little black shag *P. sulcirostris*, little shag *P. melanoleucos brevirostris* and black shag *P. carbo novae-hollandiae*), valid until the end of 1911. This was repeated annually until 1920, but with 'hawks of all species' being protected at the start of 1916, before being returned to the 'not protected' list in September (*NZG* 99, 7 September 1916: 2955).

Protection was suspended for New Zealand pigeon, pūkeko, teal and grey duck (*Anas superciliosa*) from 1 May to 31 July 1911, allowing them to be hunted during the 1911 game season (*NZG* 30, 13 April 1911: 1276). This was the last time the New Zealand pigeon appeared on the game list. Protection was subsequently suspended for an amended list of native game (pūkeko, teal, grey duck, spoonbill duck [Australasian shoveler *Anas rhynchosotis*] and black swan) in 1912 (*NZG* 37, 24 April 1912: 1387), and each year through to 1921 (see Appendix 1).

Legislators determined that there was no need similarly to suspend protection for bar-tailed godwit, as 'Godwit [is] not indigenous' (marginal file note signed by Hugh Pollen, Under-Secretary for Internal Affairs, 1 April 1911, Archives New Zealand, IA1 1911/3752). The game season for 'godwits (curlew)' was set as January to March for 1912 (*NZG* 2, 11 January 1912: 23), with similar notices published in December 1914, September 1916, December 1917, January 1919 and January 1920.

The *New Zealand Gazette* notice published on 12 April 1916 (see above), reminded the public that 1916 was a closed season and that 'Under the Animals Protection Amendment Act of 1910 all indigenous birds are protected'. Rather confusingly, the notice then went on to list 'Birds not protected' (kea and the same three shag species), 'Native game protected in close seasons' (the same list as in 1907),

and ‘Indigenous birds absolutely protected’ (see below), without clarifying the status of those species that did not appear on any of the lists. The species listed as absolutely protected were:

Kiwis of all species, New Zealand quail and Chatham Island pigeon, rails and woodhens of all species, dabchick and grebe. Sea birds of all species, including penguins, petrels, storm petrels, shearwaters, fulmars, diving-petrels, albatross, terns, gulls, skuas, noddies, and shags (with exceptions noted above); also gannets, frigate-birds and tropic birds. Wading birds of all species, including turnstones, oyster-catchers, plovers, wrybill plovers, avocets, sandpipers, knots, snipe, herons, night-herons, reef-herons, and bitterns. Hawks, owls, and harriers of all species. Parakeets of all species, and the kaka and kakapo, kingfisher, shining cuckoo, and long-tailed cuckoo. Rifleman and wrens of all species, tomtits, warblers, robins, fantails, whiteheads, yellowheads and fern-birds of all species. North and South Island thrushes and crows, creepers, stitch-birds, makomako, tui, silver-eye, pipit or native lark, huia, and saddleback. Blue mountain duck and Auckland Island duck. Southern merganser, moho (or takahe) [see Appendices 2–4 for scientific names].

Short- and long-tailed bats were returned to the list of protected species – but only in the Rotorua Acclimatisation District – in July 1920, followed by two species of native frogs (Hamilton’s frog *Leiopelma hamiltoni* and Hochstetter’s frog *L. hochstetteri*) in May 1921.

Adopting the same approach as used in 1906 and 1916, the Animals Protection and Game Act 1921–22 (APGA 1921–22) provided a long list of species to be absolutely protected (reproduced here as Appendix 3). In addition to 175 bird taxa, the list included tuatara and the two species each of native bats and frogs recognised at the time. The native game species listed (using current nomenclature) were: black swan, New Zealand scaup, grey duck, Australasian shoveler, Pacific golden plover, bar-tailed godwit, lesser knot, and turnstone (*Arenaria interpres*). Paradise shelduck and pūkeko were removed from the First Schedule (animals absolutely protected) and were added to the Fourth Schedule (game list) in April 1923. The paradise shelduck was omitted from both lists in April 1924 (though a season was still set in parts of the South Island: NZG 21, 24 April 1924: 841), but was returned to the game list in April 1925.

Sixteen further species granted protection: 1927–48

The APGA 1921–22 listed a single shag species only as absolutely protected: ‘Chatham Island shag (*Phalacrocorax featherstoni*)’ (= Pitt Island shag *Stictocarbo featherstoni*).

Seven further marine shag species were added between 1927 and 1931: king shag (*Leucocarbo carunculatus*) in May 1927, Stewart Island shag (*L. chalconotus*) in April 1930, and Chatham Island shag (*L. onslowi*), Bounty Island shag (*L. ranfurlyi*), Auckland Island shag (*L. colensoi*), Campbell Island shag (*L. campbelli*), spotted shag (*Stictocarbo punctatus punctatus*), and blue shag (*S. p. oliveri*) in January 1931. This last *New Zealand Gazette* notice also provided protection for the recently discovered Chatham Island mollymawk (*Thalassarche eremita*). One freshwater shag species – the little black shag – was protected in November 1940.

The four species of Holarctic migrant waders listed as native game in the APGA 1921–22 were all granted absolute protection between August 1933 (Pacific golden plover, lesser knot and turnstone) and 1941 (bar-tailed godwit; The Animals Protection Warrant 1941). The New Zealand scaup was granted full protection in September 1934, and the recently colonised spur-winged plover (*Vanellus miles*) in September 1946.

The APGA 1921–22 provided absolute protection for the two native frogs species known in 1921 (Hamilton’s and Hochstetter’s frogs), but excluded Archey’s frog (*L. archeyi*), which was named in 1942. This omission was tidied up by the Animals Protection (Native Frogs) Warrant 1948, which stated that ‘Native frogs ... (all species of the genus *Leiopelma* [sic]) shall be deemed to be ... absolutely protected throughout New Zealand’, thereby also protecting the Maud Island frog (*L. pakeka*), which was yet to be discovered and named (Bell *et al.* 1998).

Wildlife Act 1953

The Wildlife Act 1953 (which remains in force today) avoided the pitfalls of inadvertently omitting overlooked and unnamed species by granting full protection to all terrestrial vertebrate species, unless they were listed in one of five schedules. The original wording of the Act provided legal definitions of ‘wildlife’ and ‘animal’ as follows: “‘Wildlife’ means all animals that are living in a wild state”; “‘Animal’ means any mammal (not being a domestic animal or a rabbit or a hare or a seal or other marine mammal), any bird (not being a domestic bird), any reptile, or any amphibian”; this wording made it clear that the Act did not provide protection to invertebrate species or fish.

Seventeen native bird species were listed in the original schedules (and therefore not absolutely protected):

First Schedule – Wildlife declared to be game included: black swan, grey duck, paradise shelduck, spoonbill duck (New Zealand shoveler) and pūkeko.

Second Schedule – Partially protected [‘when any injury or damage to any land or property on any land has arisen owing to the presence on the land of any wildlife ... specified in Schedule 2, the occupier of the land or any other person with the authority of the occupier may hunt or kill on the land any such wildlife’]: black-backed gull, sea hawk [subantarctic skua] (*Catharacta [antarctica] lonnbergi*), bush hawk [New Zealand falcon], white eye [silveryeye] (*Zosterops [lateralis]*).

Third Schedule – Wildlife that may be hunted or killed subject to Minister’s notification: mutton bird [sooty shearwater] (*Puffinus griseus*), grey-faced petrel (*Pterodroma macroptera*), little shag, pied shag (*Phalacrocorax varius*), weka (*Gallirallus [australis]*) on Chatham Islands and on islets off Stewart Island.

Fourth Schedule – Wildlife not protected, except in areas and during periods specified in Minister’s notification: introduced species only.

Fifth Schedule – Wildlife not protected: harrier hawk [swamp harrier] (*Circus approximans*), kea, black shag, all lizards.

Amendments to the schedules of the Wildlife Act 1953: 1955–2013

The native bird species listed in the schedules of the Wildlife Act 1953 have remained relatively stable for the past 60 years. The five game species remain unchanged; seven further species have remained in the same schedules throughout (brown skua [= subantarctic skua], silveryeye, sooty shearwater, grey-faced petrel, little shag, pied shag and weka); three species have moved between schedules (black shag, swamp harrier and black-backed gull); two species have been granted full protection (New Zealand falcon and kea); and two species have been added to the schedules (grey teal and spur-winged plover).

Major changes to the scope of the Act have included removing all native lizards from the Fifth Schedule (thereby granting them absolute protection), and adding schedules of terrestrial (and potentially freshwater) invertebrates and some marine species (invertebrates and fish). The definition in the Act of ‘animal’ was amended to include species listed in the two new schedules. Any species listed in schedules 7 or 7A are consequently ‘animals’ and thereby absolutely protected.

The Wildlife Order 1970 removed the New Zealand falcon from the Second Schedule of the Act, thereby granting it full protection. The kea was moved from the Fifth Schedule (not protected) to the Second Schedule (partially protected), and the black-backed gull was moved

from the Second Schedule (partially protected) to the Fifth Schedule (unprotected).

The Wildlife Amendment Act 1980 provided absolute protection to 29 species and two genera of terrestrial invertebrates (presented here in Appendix 5). The Wildlife Order 1981 provided absolute protection for all lizard species except the common skink *Leiopisma nigriplantare maccanni* (= *Oligosoma polychroma*), copper skink *Cyclodina aenea* (= *O. aeneum*), common gecko *Hoplodactylus maculatus* (= *Woodworthia maculata*) and forest gecko *H. granulatus* (= *Mokopirirakau granulatus*).

The Wildlife Order 1986 moved the ‘harrier hawk’ and black shag from the Fifth Schedule (not protected) to the Second Schedule (partially protected), and the kauri snail *Paryphanta busbyi busbyi* was added to the Seventh Schedule (i.e. declared to be an animal, and thereby fully protected). The Wildlife Order (No. 2) 1986 removed the kea from the Second Schedule, thereby granting it full protection. The Wildlife Order (No. 2) 1996 removed the common skink, copper skink, common gecko and forest gecko from the Fifth Schedule, thereby granting absolute protection to all New Zealand native lizard species.

Until 1996, those species protected by the Wildlife Act 1953 were covered by the Act only when on land or within New Zealand’s territorial waters (i.e. 12 nautical miles, or 22.2 km, from the coast). An obscurely worded provision in Section 316(1) of the Fisheries Act 1996 extended protection of wildlife to the outer limits of New Zealand fisheries waters (200 nautical miles, or 370 km, from the coast).

The Wildlife Order 2010 resulted in multiple changes to the schedules of the Wildlife Act 1953, most of which addressed outdated nomenclature of both common and scientific names. Substantive changes included full protection being provided to nine additional invertebrate species and three additional invertebrate genera (see Appendix 5), and the spur-winged plover being added to the Fifth Schedule (not protected). The Australasian harrier and black shag were moved from the Second Schedule (partially protected) to the Third Schedule (wildlife that may be hunted or killed subject to Minister’s notification), and the grey teal was placed in the Third Schedule. As a result of accumulated changes over 55 years, the first five schedules of the Wildlife Act 1953 included the following native bird species following notification of the Wildlife Order 2010:

First Schedule – Wildlife declared to be game included: black swan, Australasian shoveler, grey duck, paradise shelduck and pūkeko.

Second Schedule – Partially protected included: brown skua (subantarctic skua) and silvereye.

Third Schedule – Wildlife that may be hunted or killed subject to Minister's notification included: Australasian harrier (swamp harrier), grey teal, grey-faced petrel, black shag, little shag, pied shag, and sooty shearwater, and weka on the Chatham Islands and on islets off Stewart Island/Rakiura and in Foveaux Strait.

Fourth Schedule – Wildlife not protected, except in areas and during periods specified in Minister's notification: nil.

Fifth Schedule – Wildlife not protected included: black-backed gull and spur-winged plover.

Part 2: Why were wildlife species protected (or not)?

There was a complete shift in the protection status of New Zealand wildlife between 1885 and 1910. Before 1885, legal protection covered only species valued as game, and then only outside identified game seasons. A few species were granted full protection during the intervening period, until the Animals Protection Amendment Act 1910 effectively granted protection to all endemic birds (and any others considered to be 'indigenous'). This 25-year period coincided with a shift in societal attitudes from colonial conquering of the wilderness and introduction of desirable species from (especially) Britain, to concern about human impacts on the environment, development of national identity and greater appreciation of native birds. These themes have been widely explored by previous authors and researchers (Thomson 1922; Wynn 1979; Galbreath 1989a,b; McDowall 1994; Aramakutu 1997; Feldman 2001; Star 2002; Young 2004); here I focus on proximal triggers that can be linked to the change in legal status of species and species groups. Most of the information quoted was sourced from Internal Affairs/Colonial Secretariat files (series IA1, 25, 46 and 47, and WIL 1 and 33) held at Archives New Zealand in Wellington (a total of 49 files quoted herein), Department of Conservation (DOC) files (two files quoted) or from published volumes of *New Zealand Parliamentary Debates* (NZPD).

The compilation of rationale for protection (or removal of protection) of wildlife species presented here is incomplete, as files contain only written correspondence and replies, and NZPD contain only substantive comments made during Parliamentary debates. Any changes to schedules of native game or protected species resulting from verbal discussions held outside the debating chamber may not have left a paper

trail. However, the majority of decisions affecting the protected status of native wildlife between 1872 and 1986 can be linked to specific written requests, or comments made during debates. In many cases, correspondence seeking protection for particular species was written less than a month before the resulting *New Zealand Gazette* notice was published (Table 2).

Tūi: 1872 and 1878

The tūi was first mentioned in legislation when the Protection of Animals Act 1872 made it an offence to sell dead tūi. This provision was apparently added in response to concerns raised by the Member of the House of Representatives (MHR; MHRs became MPs following the passing of the Executive Titles Act in 1907) for Avon, William Rolleston, who commented:

It was well known that there was a large destruction of such [native] birds, which he would like to see prevented. One saw bundles of tuis hanging up for sale in shops, and heard of people dining off kiwis, which seemed to him to be a gross abuse of the present privilege to kill birds; and he would like to see some clause introduced into the Bill which would have the effect of preventing the loss of birds which were characteristic of the country. (Protection of Animals Bill 1872, NZPD 13: 204)

Tūi were listed as native game from 1873 to 1906, but were continuously excluded from hunting in all game season lists from 1878 (Fig. 1), and thus became the first New Zealand bird to be fully and continuously protected nationwide. This protection was initiated by a comment from the secretary of the Wellington Acclimatization Society (the only acclimatization society that adopted the American spelling): 'We should also wish the Tui to be excepted from native game' (letter to Colonial Secretary, 4 March 1878, IA1 78/1181). The request was made in relation to hunting of native game in the Wellington District, but was made at the start of a three-year period during which a single national game season notice was published. As each separate acclimatization society began to produce its own game season notices from 1880 on, the phrase 'excluding tuis' or similar was used consistently in every district through to 1903, after which game season notices were no longer published in the *New Zealand Gazette* (Fig. 1).

Bittern: 1885, 1896 and 1897

Bittern were listed as native game from 1867 to 1904. They were protected in Otago from 1885, after William Arthur, honorary secretary of the Otago Acclimatization Society,

Table 2 The time difference between requests to grant or remove legal protection to or from New Zealand wildlife (the date letters were written or a request made in Parliament) and the date resulting changes were published in the *New Zealand Gazette*. Note that the time difference includes mail delivery times and delays until publication of the next issue of the *New Zealand Gazette*. (Scientific names provided in text.)

Topic	Date of request	Date gazetted	Time difference (days)
Protection of white heron and crested grebe	9 March 1885	31 March 1885	22
Add pūkeko to game list	8 July 1886	12 August 1886	35
Removal of godwit from game list	12 November 1886	16 December 1886	34
Protection of kākā in Southland	23 February 1887	7 April 1887	43
Protection of kākā	13 August 1888	23 August 1888	10
Protection of morepork	10 November 1888	29 November 1888	19
Protection of gulls	17 July 1889	3 August 1889	17
Protection of huia	25 December 1891	25 February 1892	62
Protection of swallows and swifts	13 May 1893	25 May 1893	12
Protection of tuatara	24 January 1895	4 April 1895	70
Protection of rare native birds	25 January 1896	19 March 1896	54
Protection of tuatara eggs	29 August 1898	8 September 1898	10
Protection of gulls	17 July 1899	3 August 1899	17
Protection of blue duck	18 December 1902	19 February 1903	63
Protection of huia	8 December 1902	12 March 1903	94
Protection of certain birds, Akaroa	14 July 1903	27 August 1903	44
Protection of bittern in Canterbury	21 August 1903	17 September 1903	27
Protection of native bats	13 July 1904	28 July 1904	15
Protection of Chatham Island rail	20 January 1904	1 September 1904	225
Protection of bittern	30 August 1904	6 October 1904	37
Protection of albatrosses and their eggs	18 February 1907	7 March 1907	17
Protection of native bats	25 May 1920	1 July 1920	37
Protection of native frogs	2 May 1921	26 May 1921	24
Protection of king shag	28 October 1926	5 May 1927	189
Protection of Stewart Island shag	16 January 1930	24 April 1930	98
Protection of six marine shags and two other spp.	3 October 1930	9 January 1931	98
Protection of turnstone	31 October 1932	31 August 1933	248
Protection of lesser knot	10 December 1932	31 August 1933	208
Protection of New Zealand scaup	10 July 1934	6 September 1934	58
Protection of little black shag	18 October 1940	14 November 1940	27
Protection of spur-winged plover	28 May 1946	12 September 1946	106
Protection of New Zealand falcon	11 August 1967	18 June 1970	1042
Protection of New Zealand lizards	2 May 1969	9 March 1981	4329
Protection of kea	11 December 1980	13 November 1986	2162
Protection of remaining lizards	15 September 1994	19 September 1996	735

wrote to the Colonial Secretary on 9 March 1885 requesting that ‘Native game (excepting Tuis, White Herons, Bittern & Crested Grebe) to be shot from April 1st to July 31st 1885’ (IA1 85/946). Otago consistently excluded bittern from game season notices subsequently, apart from the years 1888 to 1891, when a single national game season notice was published. Southland protected bittern in 1896 and subsequently: ‘please ... insert, as regards Native Game, amongst the excepted & protected birds, the following – the More Pork (Ruru) and the Bittern (Matuku)’ (letter from Edward Tanner, secretary, Southland Acclimatisation Society, to Colonial Secretary, 21 February 1896, IA1 99/908).

Bittern were inadvertently protected in Marlborough in 1897, when a member of the Colonial Secretary’s staff used an Otago District shooting season *New Zealand Gazette* notice (with bittern protected) as the template for the Marlborough District notice, without crossing out ‘bittern’ (IA1 99/998). The error was not commented on, but bittern were not exempted from hunting in Marlborough in 1898 and subsequently.

Note that white heron and crested grebe were not added to the schedule of native game until 31 March 1885, five days after the Otago game season notice was published on 26 March (see following), and so were not excluded from hunting in Otago in 1885.

White heron and crested grebe: 1885 and 1888

The initiative for white heron and crested grebe to be protected came from the Otago Acclimatisation Society: ‘P.S. Simultaneously we would ask that White Herons & Crested Grebe should by proclamation be brought under the protection of the “Animals Protection Act 1880” as they are fast disappearing’ (William Arthur, honorary secretary, letter to Colonial Secretary, 9 March 1885, IA1 85/946 and 85/1027). The resulting *New Zealand Gazette* notice (published on 31 March 1885) stated ‘and I do further notify and declare that the said birds shall not be taken or killed within the said Colony of New Zealand’. However, apart from Otago (in 1886 and 1887), this was not promulgated nationwide until the combined game season notice of 1888 (Fig. 1).

Pūkeko: 1886

The pūkeko was added to the schedule of native game on 12 August 1886, following a request from the Canterbury Acclimatisation Society: ‘I am also to ask that you will at your earliest convenience have classed in the Fourth Schedule of the “Animals Protection Act” the native bird “Pukeko”

for protection during the close season’ (S.C. Farr, honorary secretary, letter to Colonial Secretary, 8 July 1886, IA1 86/2695).

Curlew (godwit): 1886

Bar-tailed godwits (referred to at the time as ‘curlew’) were first named as native game in 1867. They were removed from the schedule on 16 December 1886 following receipt of a letter from the secretary of the Auckland Acclimatisation Society (dated 12 November 1886, IA1 86/4255) pointing out that the season for native game usually extends from May to July, while ‘The Curlew, however, is a migratory bird [with] the greater number leaving this country about April’ and further suggesting that ‘it is unnecessary to protect a bird which does not breed in the country, and only spends a portion of the year in it’. The letter went on to ‘recommend to the Government that either Curlew should be removed from the list of native game, or else that a special season should be proclaimed for shooting it, to extend say over the months of December, January and February’. The former approach was chosen: ‘I think it will be best to remove curlew from the category of Native game’ (internal memo from G.S. Cooper to Colonial Secretary, 17 November 1886, IA1 86/4255).

Kākā: 1887 and 1888

Kākā were added to the schedule of native game in April 1887 following receipt of a letter dated 23 February from Aaron Blacke, honorary secretary of the Southland Acclimatisation Society: ‘The Council would further recommend that the “Kaka” be added to the list of native game’ (IA1 47/11/1 Part 1). When asked why, Blacke replied (letter dated 22 March, IA1 47/11/1 Part 1) ‘That the bird is harmless in its habits, and is being rapidly exterminated in this district – and it is very useful as an insect destroyer.’ The initial *New Zealand Gazette* notice (7 April 1887) protected kākā only in the Southland District, but the following year the Wellington Acclimatization Society made a similar request (letter dated 13 August 1888, IA1 47/11/1 Part 1): ‘This bird is rapidly being exterminated by constant shooting for sale and should be protected equally with our native pigeon. It is already gazetted as included with native game in the Southland District. Why not throughout the country?’ The resulting *New Zealand Gazette* notice was published on 23 August (Table 2).

Morepork: 1888 and 1896

The morepork was added to the schedule of native game in November 1888 following receipt of a letter dated

10 November from Thomas Cheeseman, secretary of the Auckland Acclimatisation Society:

I ... enquire what steps are necessary to obtain the protection of the New Zealand Owl or Morepork. The Society is convinced that it does a large amount of good by destroying moths and other night-flying insects, and that it should be guarded against indiscriminate slaughter by boys and others. The Society would therefore recommend that a proclamation should be issued rendering it illegal to destroy it. (IA1 88/3731)

Ironically, the Auckland Acclimatisation Society never excluded morepork from game season lists, but Southland did from 1896 onwards: 'please ... insert, as regards Native Game, amongst the excepted & protected birds, the following – the More Pork (Ruru) and the Bittern (Matuku)' (letter from Edward Tanner, secretary, Southland Acclimatisation Society, 21 February 1896, IA1 99/908).

Huia: 1892

The huia has the most historically rich and poignant protection narrative of any New Zealand species. William Onslow (Fig. 2), the 4th Earl of Onslow, was Governor of New Zealand from 1889 to 1892. His second son was the first vice-regal child born in New Zealand, on 13 November 1890 (Galbreath 2012). In this jubilee year (50 years after the signing of the Treaty of Waitangi, and the founding of the nation), the Onslows chose to give their third child a distinctly New Zealand name – and Victor Alexander Herbert Huia Onslow (1890–1922) was known as Huia Onslow for the rest of his life. At his baptism in Wellington in January 1891, 'the Hon. C.J. Johnston [the Mayor of Wellington] affixed a beautiful Huia feather in the baby's headdress, thus, according to Maori custom, creating him a chief of the land of his birth' (Onslow 1924: 7). On 19 September 1891, the 10-month-old Huia Onslow was presented to the Ngāti Huia people (a hapū, or sub-tribe, of Ngāti Raukawa, descended from the chief Huia) at their marae in Otaki (Galbreath 1989a: 179). During the welcome, one of the kaumātua (elders) entreated the young Governor: 'There yonder is the snow-clad Ruahine range, the home of our favourite bird! We ask you, O Governor, to restrain the Pakehas from shooting it, that when your boy grows up he may see the beautiful bird which bears his name.'

Lord Onslow held strong sentiments about the preservation of native birds, which had been fostered by his attendance at the Australasian Association for the Advancement of Science meeting in Christchurch in January 1891, where Professor Algernon Thomas spoke on the topic (Galbreath 1989a: 176). Onslow requested the ornithologist



Fig. 2 Lord Onslow, Governor of New Zealand, c.1890² (Alexander Turnbull Library, Herman John Schmidt Collection [PAColl-3059], 1/1-001596; G; reproduced with permission).

Sir Walter Buller to draft a memorandum on the preservation of New Zealand birds on island reserves, and for their legal protection, which Onslow edited and forwarded to Premier John Ballance in late 1891 (Galbreath 1989a: 182). The 'Onslow Memorandum' picked up on earlier suggestions by Potts (1872) and Martin (1886) for native birds to be transferred to island reserves, and advocated for protection of kiwi, kākāpō, kōkako, piopio, tuatara, bellbird, robin, whitehead, stitchbird, takahē (*Porphyrio hochstetteri*), and, particularly, huia (Onslow 1892). Onslow had already submitted his resignation as Governor, and as a parting gift, Ballance agreed to his request for the protection of huia. Onslow himself signed the draft warrant the day before he sailed back to England, and had his son Huia (then 15 months old) add his own mark on the document (Fig. 3; see also Galbreath 1989a: 184).

The huia was included in the Fourth Schedule of the Animals Protection Act 1880 (native game) by *New Zealand Gazette* notice on 25 February 1892, and although it was consistently excluded from game season schedules subsequently (Fig. 1), the last widely accepted sighting was only 15 years later (Gill *et al.* 2010).

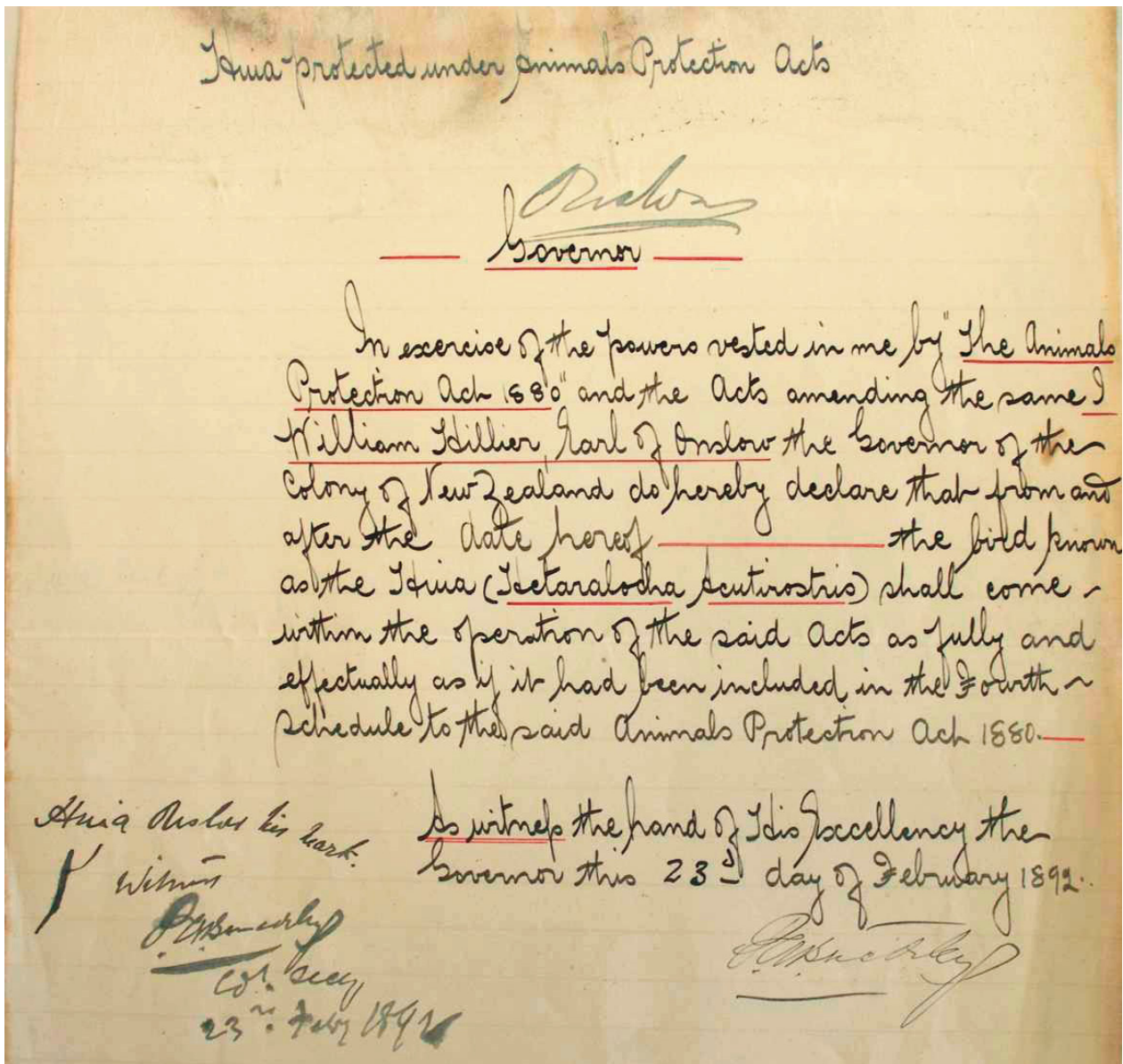


Fig. 3 The warrant to protect the huia, signed by Lord Onslow on 23 February 1892. The mark at lower left was made by Huia Onslow, aged 15 months, and witnessed by Patrick Buckley, the Colonial Secretary (Archives New Zealand, IA1 92/483).

Responding to the Onslow Memorandum, Ballance requested government scientist Sir James Hector to ‘suggest any action you may think fit’. Hector replied, ‘As Government has already made, or is making, the desired provision for reserves, I do not see that more can be done except to take advantage of any opportunity that may occur of stocking the two islands [Resolution Island and Hauturu/Little Barrier Island] that have been selected’, and recommended enlisting the services of acclimatisation services ‘with a moderate subsidy contributed by Government’ (Onslow 1892: 3).

Swallows and swifts: 1893

The secretary of the Canterbury Agricultural and Pastoral Association wrote to the Colonial Secretary’s Office on 13 May 1893, requesting ‘That all birds of the swallow tribe be protected’ (Internal Affairs registers & indexes, inwards correspondence January 1893–October 1893, IA 3-1-48). The original correspondence could not be located, but evidently referred to birds that had or were intended to be imported, as the resulting *New Zealand Gazette* notice (25 May 1893) placed ‘swallows, swifts & martins’ in the imported game schedule, rather than among native game.

Tuatara: 1895 and 1898

The tuatara was added to the native game list in April 1895 following receipt of a letter dated 24 January from John Shirley, general secretary of the Council of the Australasian Association for the Advancement of Science, Brisbane, requesting that 'Stephens Island, Cook Strait, may be proclaimed as a preserve for the Tuatara lizard, in order to prevent the extinction of this rare & interesting creature' (IA1 95/359, and see '[Advocating that Stephens Island be set aside]' 1895). Hugh Pollen (Colonial Under-Secretary)³ advised on 11 February that the Marine Department 'might be asked to instruct their Lightkeepers etc. to protect the lizards as far as possible, and the introduction of pigs and other animals likely to destroy the lizards could be prevented. The tuatara could also be declared "native game" under the Animals Protection Acts'. This course of action was supported by Sir James Hector, director of the Colonial Museum (file note, 13 March 1895, IA1 95/359): 'I think it most desirable that the suggested steps be taken. The Tuatara is one of the most interesting animals now surviving – and its last home is Stephens Island, & there they are being wantonly exterminated.'

Three years later, Dr W.P. Evans, president of the Philosophical Institute of Canterbury, wrote a letter dated 29 August 1898 (IA1 98/2537) advising of a resolution by the council of the institute urging 'the Colonial Secretary the necessity in the interests of Science of strictly protecting the eggs of the Tuatara (*Sphenodon punctatus*) as well as the adult animals', and suggesting a penalty of at least £20. Hugh Pollen commented that

It would be desirable to prohibit absolutely the destruction of these lizards but clause 3 of the Act of 1886 is limited to birds indigenous to the Colony and clause 58 of [the] Bill now before Parliament is also limited to birds. It would be as well to issue an amended notification protecting the eggs as well as the lizards and the Crown Law officers might be asked to draft the necessary warrant. (IA1 98/2537)

Leonard Reid (Assistant Crown Law Officer) advised on 31 August: 'Amended notification herewith. I have added a paragraph protecting the eggs of the tuatara, but strictly speaking I do not think the statute authorises this, tho it is manifestly desirable.' Pollen wrote to the Solicitor-General the same day: 'Recommended that Crown Law officers be requested to draft a clause similar to Clause 58 of the Animals Protection Bill now before the Council for the protection of the reptiles known as the tuatara and their

eggs', to which Reid replied (2 September), 'An alteration of Clause 58 of the present Bill would meet the case & I attach a copy of the Bill altered in red ink as required – namely, after the word "bird" section 58 line 23 insert "animal or reptile" and after the word "colony" in line 24 insert "or the eggs of such bird or reptile respectively"' (IA1 98/2537). The *New Zealand Gazette* notice purporting to 'absolutely' protect tuatara eggs was published on 8 September 1898, but the much-amended Animals Protection Act was not enacted until 1907.

Kiwi, kākāpō, kōkako, saddleback, stitchbird and bellbird: 1896

Alex Rutherford, the honorary secretary of the Wellington Acclimatization Society, wrote to the Colonial Secretary on 25 January 1896, forwarding a resolution 'That in view of the wholesale destruction of many of our rare Native Birds this Council desires to request the Government to take stringent measures for the protection of such birds, either by legislation or otherwise'. Hugh Pollen, Colonial Under-Secretary, responded by drafting a memo dated 29 January in which he requested staff to 'Prepare warrant declaring birds in attached list to be native game.' The list was: bellbird, North Island kōkako, South Island kōkako, kākāpō, kiwi, saddleback, stitchbird, and 'sea gulls of any species' (IA1 96/747). At some point it was noticed that gulls were already on the list of native game, and so the resulting *New Zealand Gazette* notice published on 19 March 1896 listed only the land birds mentioned above, a similar list to that proposed by Onslow in 1892 (see above).

Before the *New Zealand Gazette* notice was published, D. Russell, honorary secretary of the Otago Acclimatisation Society, wrote to Edward Tanner, secretary of the Southland Acclimatisation Society, on 6 March 1896 regarding Stewart Island brown kiwi (*Apteryx australis lawryi*):

It has come to our knowledge that a Taxidermist here is getting the skins of the large Kiwi, or Roa, from Stewart Island, & is offering them for sale at 30/- a skin. In talking the matter over with Mr Maitland we don't know whether it is illegal or not to kill these birds on Stewart Island, but we think they should be put on the protected list of birds, seeing Government are at considerable expense trying to save them from extinction altogether [this refers to Richard Henry's concurrent efforts to translocate South Island brown kiwi (*Apteryx australis australis*) to islands in Dusky Sound; Hill & Hill 1987]. (IA1 97/1167)

Tanner forwarded a copy of Russell's letter to the Colonial Secretary on 31 March 1897 'with a view to the Government

taking immediate steps for the purpose of protecting the great Kiwi, or Roa-roa in Stewart Island'. Tanner was aware of the *New Zealand Gazette* notice published on 19 March the previous year, declaring kiwi to be native game, and also of the limitations of the Animals Protection Act 1880 with regard to providing absolute protection:

It would appear therefore that these birds should be excepted in the Gazette notices of the opening of every season for shooting Native Game. This, it is believed, is not done. The only birds thus excepted hitherto in our District are the following: Morepork (ruru) bittern, tui, huia, white heron, & crested grebe. All these excepted birds have been brought under the Act in the same way. This 'excepting' seems to depend somewhat on the watchfulness of the Secretaries of the different Societies each year. Now, the Animals Protection Act Amendment Act 1886, Section 3, authorises the Governor to prohibit absolutely the destruction of any indigenous bird. It is therefore offered as a suggestion that a Proclamation should be inserted in the Gazette absolutely prohibiting in the whole of the Colony the destruction of any of the birds ... mentioned in the Proclamation gazetted 19 March 1896, and the above mentioned excepted birds. (IA1 97/1167)

This suggestion was not acted on until May 1906 (see Appendix 2), but the Southland Acclimatisation Society excluded 'great kiwi (roa-roa)' from annual lists of native game from 1898 onwards (Fig. 1 and Appendix 1): 'As regards Native Game I have to request that the following Native birds should be expressly excepted, namely the Tui, huia, white heron, crested grebe, more-pork-owl (ruru) bittern, and great Kiwi or Roa Roa' (letter from Edward Tanner, 7 February 1898, IA1 99/908).

Paradise shelduck: 1898 and 1899

On 9 February 1898, Alex Rutherford, by now chairman of the Wellington Acclimatization Society, wrote to the Colonial Secretary asking that the 'Paradise Duck be added to the list of native birds which may not be shot in the Wellington Acclimatization District' (IA1 98/394, and see Fig. 1 and Appendix 1 for subsequent *New Zealand Gazette* notices).

C. Griffiths, secretary of the Marlborough Acclimatisation Society, wrote to the Colonial Secretary's Office on 21 February 1899, requesting that 1899 be a closed season for 'Pigeons, Paradise Ducks and Pukekos in the Provincial District of Marlborough'. The closed season for paradise shelducks was challenged by a petition from 'sportsmen of Blenheim and surrounding districts', dated 29 March and addressed to the Colonial Secretary, stating that 'The past breeding season has been exceptionally good & reports from

the country districts tend to show that Paradise are more numerous than they have been for many years ... We would point out that closing of Paradise means depriving many shootists of their sport as the Grey Duck are only accessible to young and hardy sports' (IA1 99/998). In his reply, dated 10 April 1899, Griffiths stated:

the committee ... were unanimous in their opinion that these birds are annually becoming more scarce & that to prohibit their destruction during this season is in the future interests of sportsmen ... I regret to say there are many persons here who are not members of the Society who care little about this principle so long as they can get a few days sport. The members of the society who are mostly shooting men are on the contrary anxious to preserve the game & prevent the wholesale slaughter which annually takes place in places where Paradise Ducks congregate. (IA1 99/998)

The season remained closed.

Blue duck: 1898 and 1903

Alex Rutherford, chairman of the Wellington Acclimatization Society, wrote to the Colonial Secretary on 12 March 1898, recommending that the blue duck be placed on the schedule of protected birds: 'This is an extremely interesting variety of duck, and is very scarce' (IA1 98/726). The blue duck (as a variety of 'wild duck') was already included in 'native game' under the Animals Protection Act 1880, and was excluded from hunting in the Wellington District from 1898 to 1902 (Fig. 1 and Appendix 1).

Thomas Donne, superintendent of the Department of Tourist and Health Resorts, wrote to the minister in charge of the department on 18 December 1902, seeking nationwide protection for the blue duck:

The native Blue Mountain Duck is rapidly decreasing in numbers and unless some measure of protection is given these birds will at the present rate soon become extinct. They have already been protected in the Wellington Acclimatisation District, and I would recommend that the question of their general protection throughout the Colony be submitted for the Hon. Colonial Secretary's favourable consideration. (IA1 1903/410)

Sir Joseph Ward forwarded the letter to Hugh Pollen (Colonial Under-Secretary), who replied on 13 January 1903: 'There is no objection to this bird being protected and notice will be prepared accordingly if you approve' (IA1 1903/410). In the meantime, Pollen recommended 'that the Solicitor General be requested to revise the attached form of warrant absolutely protecting indigenous birds under Section

3 of the Animals Protection Act 1886' (file note, 7 January 1903, IA1 1903/410). The resulting *New Zealand Gazette* notice, published on 19 February 1903, was the first to utilise the powers of the Governor under the Animals Protection Act 1880 Amendment Act 1886, and as a result, the blue duck was the first New Zealand bird to be absolutely protected.

Gulls: 1899

H.A. Bruce, secretary of the Canterbury Acclimatisation Society, wrote to the Colonial Secretary on 17 July 1899, asking the government to protect 'seagulls' in the North Canterbury Acclimatisation District:

The Society has had the matter brought before it by the wholesale slaughter of these birds on the Sumner Estuary and the River Heathcote ... I need hardly point out to you the value of these birds, especially in the Lyttelton Harbour and the Estuary, where so much refuse is being deposited from the shipping at Lyttelton and the Woolscouring & Tannery works at the Heathcote and Woolston ... Sea Gulls have been protected in Auckland for some years past. (IA1 1904/2725)

The matter had first been raised by James Crawford, town clerk of Sumner Borough Council, writing to the Lyttelton Harbour Board on 19 June 1899 and drawing to the board's attention 'the wilful destruction of Seagulls on the Estuary by young men and boys', and requesting that the board 'put a stop to the shooting of birds which are an advantage to the place'. C. Hood Williams, secretary and treasurer of the Lyttelton Harbour Board, referred the matter to the Canterbury Acclimatisation Society on 21 June, seeking the society's support in protecting gulls throughout the whole of the district. Williams also wrote to the Colonial Secretary on 17 July, recommending that 'Seagulls should be protected within the Province of Canterbury' (IA1 1904/2725).

The resulting *New Zealand Gazette* notice, published on 3 August 1899, protected 'sea-gulls of any species' throughout the entire country (or, at least, made them native game), which was not universally welcomed. Frederick Flatman, MHR for Geraldine, asked in the House on 15 September 1899 why gulls had been protected, 'and at whose instance?' He alleged 'that the larger kinds of seagulls attack young and weakly lambs and also sick and disabled sheep on farms and sheep stations near the coast'. Even the Canterbury Acclimatisation Society had second thoughts, requesting on 31 January 1901 that 'the embargo placed on the destruction of Sea Gulls be removed in so far as it applies to Gulls found inland two miles from seaboard. The reason

being that much damage is done by these birds to sheep, lambs, and trout, when they travel inland' (IA1 1904/2725).

C.A. FitzRoy, honorary secretary of the Hawke's Bay Acclimatisation Society, wrote to the Colonial Secretary on 28 June 1902 asking that gulls no longer be protected in the district 'owing to the immense number of newly dropped lambs they destroy, also the number of trout that they kill' (IA1 1904/2725). This was later narrowed to the 'Tuki Tuki River' from the bridge at Clive to its source, due to the gulls' 'destruction amongst the trout in the River especially in the summer months when the River is low' (letter from C.A. FitzRoy, 25 November 1902, IA1 1904/2725). The resulting *New Zealand Gazette* notice published on 6 August 1903 removed protection for 'seagulls' within half a mile (0.8 km) of the Tukituki River from 3 miles (4.8 km) above Waipawa to the sea.

The appropriately named Alexander Herdman, MHR for Mt Ida, wrote to the Minister of Lands on behalf of the Maniototo Branch of the New Zealand Farmers' Union on 28 October 1903, asking that protection be removed from gulls: 'From your own personal knowledge of Central Otago you will recognise that the services which the seagulls render as scavengers is small whilst the great damage which they do in flocks during the lambing season is extensive'. The letter was referred to the Colonial Secretary's Office, which asked Herdman to identify 'a specified area in which it is believed that injury is likely to arise through the presence of seagulls'. The matter apparently lapsed for a year, but following further lobbying from the Maniototo Branch of the New Zealand Farmers' Union, Herdman wrote direct to the Colonial Secretary on 10 September 1904 seeking removal of protection from seagulls in Maniototo County (IA1 1904/2725), which was agreed to and enacted by a *New Zealand Gazette* notice published on 22 September.

Huia: 1903

Thomas Donne, superintendent of the Department of Tourist and Health Resorts, wrote to the minister in charge of the department on 8 December 1902, seeking 'to arrange for absolutely prohibiting traffic in huia feathers', as the birds were 'being destroyed for the sake of their tail feathers' (IA1 1903/667). The letter was forwarded to the Crown Law Office, where in a memo dated 21 February 1903, Leonard Reid commented:

A notification declaring that any particular bird or variety of bird is deemed to be included in the 4th Schedule to the 'Animals Protection Act 1880' does not absolutely protect such birds. It merely makes them Native game, so that

in the notice issued each year with reference to the shooting of native game it is necessary to exempt such birds specifically or they may be shot as Native game. The only proper and complete way to protect the Huia and other rare Native birds is to issue a notification under The Animals Protection Act Amendment Act 1886. I pointed this out to the Colonial Secretary's Department years ago, but all that was done was to issue in 1896 a notification bringing the Bell bird, Crow [kōkako], Kiwi and other birds within the Fourth Schedule. I do not think proceedings would be successful as [*sic*] against a person merely in possession of huia feathers without a further amendment of the law which would specifically include feathers and the eggs of a bird in the definition [*sic*] of that term. (IA1 1903/667)

Donne considered that it would be 'manifestly unfair' to make it an offence to be in possession of huia feathers, 'but the sale or purchase should be absolutely prohibited' (letter to Colonial Under-Secretary, 27 February 1903, IA1 1903/667). The resulting *New Zealand Gazette* notice published on 12 March made the huia the second New Zealand bird to be absolutely protected (21 days after blue duck), but made no mention of feathers or eggs.

Certain native birds on Banks Peninsula: 1903

Henry (Harry) Ell, MHR for Christchurch (Fig. 4), wrote to Hugh Pollen, Colonial Under-Secretary, on 14 July 1903 seeking absolute protection for 15 bird species in Akaroa County, and for bittern to be protected in Selwyn County as well (IA1 1903/2639). The list was forwarded to the Canterbury Acclimatisation Society on 30 July, which was 'in accord', and further suggested that

the Bittern should be absolutely protected in the whole of the Canterbury district ... This bird is getting very scarce, and it is only a matter of a few years when it will become extinct as far as Canterbury is concerned at any rate. The bird is so tame that there is no difficulty in capturing it, and it is a great shame that it is not protected absolutely. (Letter from H.A. Bruce, secretary of the Canterbury Acclimatisation Society, to the Colonial Secretary, 21 August 1903, IA1 1903/2639)

A *New Zealand Gazette* notice absolutely protecting 15 bird species within the counties of Akaroa and Mt Herbert was published on 27 August (Appendix 1).

Bittern: 1903 and 1904

Following receipt of the letter from H.A. Bruce referring to bittern (see above), a *New Zealand Gazette* notice absolutely protecting bittern throughout Canterbury was published on

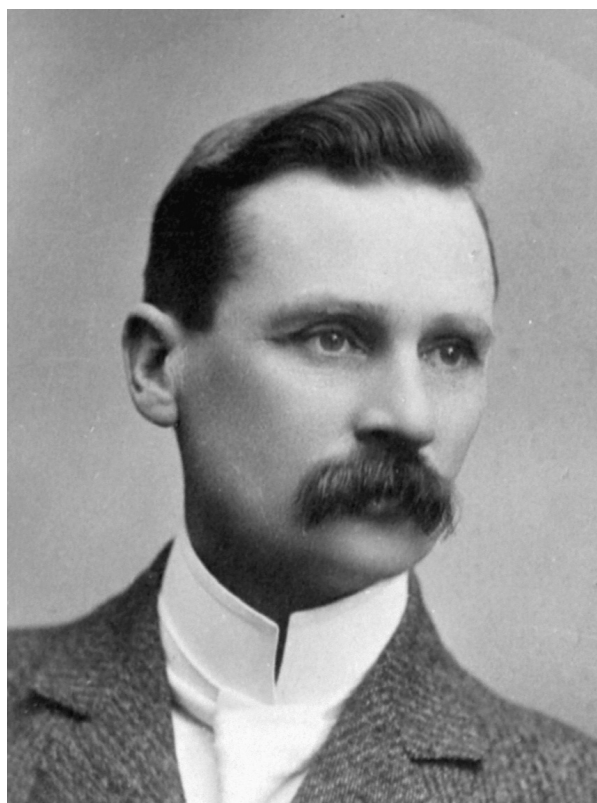


Fig. 4 Henry (Harry) Ell, c. 1902⁴ (Alexander Turnbull Library, General Assembly Library Collection [PAColl-0838], 35mm-00188-C; F; reproduced with permission).

17 September 1903. On 30 August 1904, Harry Ell asked in Parliament whether the Colonial Secretary 'will extend the protection now given to that interesting native bird the bittern throughout the Province of Canterbury to the whole colony?', to which the answer was given: 'As the bird is becoming rare, it has been decided to extend the protection' (7 September 1904, IA1 1904/2848). The resulting *New Zealand Gazette* notice (published on 6 October 1904) extended absolute protection to both Australasian bittern and little bittern throughout the country.

Native bats: 1904 and 1920

On 13 July 1904, Harry Ell asked in Parliament whether the Colonial Secretary 'will take the necessary steps immediately to prohibit the taking or killing of native bats ... which ... will shortly become extinct?' (IA 46/33/24). The resulting *New Zealand Gazette* notice adding native bats to the schedule of native game was published on 28 July 1904.

Protection for bats ceased when the Animals Protection Act 1907 passed into law, but on 25 May 1920, B.M. Wilson, general manager of the Department of Tourist

and Health Resorts, wrote to the Under-Secretary of Internal Affairs requesting that native bats be absolutely protected throughout the Dominion, 'as I understand that these interesting animals are extremely rare ... [if this is not possible] then I shall be glad if you will arrange for their absolute protection within the Rotorua Acclimatisation District' (IA 46/33/24). A memo from James Hislop, Under-Secretary of Internal Affairs, dated 16 June 1920, included:

From enquiries made it has been ascertained that these bats are unknown in the South and it is extremely unlikely that they will be found South of the Rotorua Acclimatisation District. As they are so rare, it is most improbable that they would commit any damage either to flora or fauna, and it is certainly desirable that, if possible, they do not become all together extinct. The request that they be protected throughout the Dominion cannot, of course, be considered, coming from one district Society. (IA 46/33/24)

The resulting *New Zealand Gazette* notice published on 1 July 1920 protected native bats in the Rotorua Acclimatisation District, but within two years they were protected nationwide by the APGA 1921–22.

Chatham Island rail: 1904

Colonel Vincent Legge of Cullenswood, Hobart, Tasmania, wrote to the Colonial Secretary on 20 January 1904 suggesting that 'steps be taken for the preservation of the Chatham Island rail, a rare and interesting bird found only on one of the Chatham Islands' (IA1 1904/2544). Legge had recently retired as commandant of the Tasmanian Defence Forces; his reasons for taking an interest in the Chatham Island rail are unknown, but he was the founding president of the Royal Australasian Ornithologists' Union (1901–02), vice-president of the Royal Society of Tasmania, and had earlier authored *A History of the Birds of Ceylon* (1878–80) (see Robin 2001). The *New Zealand Gazette* notice absolutely protecting the 'Mangare rail' was published on 1 September 1904.

Certain native birds: 1906

The first attempt to comprehensively protect most New Zealand birds began in 1904, but it is not known what sparked the initiative. The earliest evidence is a hand-written internal memo, 'Certain native birds absolutely protected', signed by Hugh Pollen, Colonial Under-Secretary, on 18 July 1904 (IA1 1905/632). A printed list of 141 species names was attached to the memo before it was sent to 32 acclimatisation societies for their comment on 4 April 1905.

Earlier draft species lists in the same file included annotations next to 43 species (or groups of species), explaining why they were to be excluded from the potential list of species to be protected (Table 3). Feedback was received from 20 of the acclimatisation societies, and a Cabinet briefing paper summarising the responses and providing comment was prepared by Pollen on 24 March 1906.

The Ashburton Acclimatisation Society suggested the exclusion of black-backed gull as 'being destructive to young lambs', and Pollen added that they destroy young trout. The Coromandel, Hawera and Ashburton societies suggested the exclusion of 'blightbird' (silveryeye) as being destructive to fruit. The Feilding and Ashburton societies suggested the exclusion of ground lark (New Zealand pipit *Anthus novaeseelandiae*), without giving a reason (Pollen thought they should be protected). Two further species were suggested for exclusion, but were dismissed by Pollen as follows (Pollen's comments in parentheses and quotes): bittern (Ashburton), as being destructive to trout ('this bird was never very numerous and is becoming rare'); and kingfisher (Mangonui, Hawera and Stratford) as destructive to young trout ('I am doubtful whether they really do much damage').

Cabinet considered the report and the suggested list of protected species on 24 April, and determined that black-backed gull, silveryeye and pipit be removed from the list. The resulting list of 138 absolutely protected bird species was published on 10 May 1906 (Appendix 2).

Albatrosses and their eggs: 1907

The delightfully named George Allport, secretary of the Marine Department, wrote to the Colonial Under-Secretary on 18 February 1907:

I am informed by Captain Post, who has recently visited Campbell Island, that the persons on the Island collect a great many albatross eggs for sale as curios, and kill a great many of the birds, and that therefore there are not nearly so many of the birds as formerly. I would suggest that it is advisable that the birds and their eggs should be protected. (IA1 1907/395)

The letter was received on 19 February, the same day as a copy of a letter from Lord Plunket, Governor of New Zealand, dated 17 February and sent to Acting Premier William Hall-Jones. Plunket had been on the same trip to the subantarctic island aboard the government steamer *Tutanekai* under Captain Post, which was at Campbell Island/Motu Ihupuku on 4 February, and remarked that the albatross 'both the Royal and the Wandering' was not protected, and that 'At the Campbells the Shepherds there have collected in

Table 3 New Zealand bird species explicitly marked for exclusion from a draft schedule of species to receive absolute protection, from lists prepared in 1904 or 1905 by the Colonial Secretary's Office, with the reasons why each species or group of species was to be excluded from protection. The original lists are in Internal Affairs file IA1 1909/1288, held by Archives New Zealand, Wellington. The common names and grammar are as in the original, with scientific names updated where necessary (following Gill *et al.* 2010).

Species	Reason for exclusion from protection
Quail, native (<i>Coturnix novaezelandiae</i>)	extinct
Ducks of all species including	Open season fixed annually
Whistling (<i>Dendrocygna eytoni</i>)	ditto
Paradise, Putangitangi (<i>Tadorna variegata</i>)	ditto
Little Teal, Tete (<i>Anas gracilis</i>)	ditto
Brown, Pateke (<i>Anas chlorotis</i>)	ditto
Grey, Parera (<i>Anas superciliosa</i>)	ditto
Shoveller, Kuruwhengi (<i>Anas rhynchosotis</i>)	ditto
Whitewinged, Karakahia (<i>Aythya australis</i>)	ditto
Black Teal, Papango (<i>Aythya novaeseelandiae</i>)	ditto
Albatross of any species (Toroa) including	Ocean birds
Wandering albatross (<i>Diomedea antipodensis</i>)	ditto
Yellow-nosed albatross (<i>Thalassarche carteri</i>)	ditto
Grey headed (<i>Thalassarche chrysostoma</i>)	ditto
Mollymawk (<i>Thalassarche impavida</i>)	ditto
Shy (<i>Thalassarche cauta</i>)	ditto
Cape Hen (<i>Phoebastria palpebrata</i>)	ditto
<i>Procellaria antarctica</i> (<i>Thalassoica antarctica</i>)	[No reason given]
Soft plumaged petrel (<i>Pterodroma mollis</i>)	[No reason given]
Mutton-Bird, Sombre Shearwater (<i>Puffinus griseus</i>)	Maori food
Amokura (<i>Phaethon rubricauda</i>)	Casual visitor, non resident
Shags of any species including	
Frilled, White-throated (<i>Phalacrocorax melanoleucos</i>)	Preys on fish (trout)
Black (<i>Phalacrocorax carbo</i>)	ditto
Pied (<i>Phalacrocorax varius</i>)	ditto
Roughfaced (<i>Leucocarbo carunculatus</i>)	ditto
[Stewart Island] (<i>Leucocarbo chalconotus</i>)	ditto
[Campbell Island] (<i>Leucocarbo campbellensis</i>)	ditto
Spotted (<i>Stictocarbo punctatus</i>)	ditto
Chatham Island [= Pitt Island] (<i>Stictocarbo featherstoni</i>)	ditto
Darter, Southern (<i>Anhinga melanogaster</i>)	rare visitor?
Frigate Bird (<i>Fregata minor</i>)	omit
Small Frigate Bird (<i>Fregata ariel</i>)	omit
Spoonbill, Royal (<i>Platalea regia</i>)	[No reason given]
Harrier, Kahu (<i>Circus approximans</i>)	Bird of prey
Hawks of any species including	Bird of prey
Bush, Karewarewa (<i>Falco novaeseelandiae</i>)	ditto
Quail, Sparrow, Kaiaia (<i>Falco novaeseelandiae</i>)	ditto
Woodhen, Weka (<i>Gallinallus australis</i>)	Not necessary to protect
Swamp Hen, Pukeko (<i>Porphyrio melanotus</i>)	Open season

continued on following page

Table 3 *continued from previous page*

Species	Reason for exclusion from protection
Godwit, Kuaka (<i>Limosa lapponica</i>)	Special open season
Curlew, Australian (<i>Numenius madagascariensis</i>)	rare visitor?
Australian Whimbrel (<i>Numenius phaeopus</i>)	Only one instance of bird being seen in NZ
Pigeon, Wood, Kuku, Kereru (<i>Hemiphaga novaeseelandiae</i>)	Open season
Parrot, Brown, Kaka (<i>Nestor meridionalis</i>)	Open season
Parrot, Mountain, Kea (<i>Nestor notabilis</i>)	Bird of prey
Dollarbird, Australian Roller (<i>Eurystomus orientalis</i>)	one specimen?
Thrush, Shrike (<i>Coracina novaehollandiae</i>)	Casual visitor, not resident

their spare time many hundred eggs ... His Excellency would suggest his Government should consider whether it would not be advisable to include these magnificent and harmless birds in the schedule' (IA1 1907/395).

Plunket signed the *New Zealand Gazette* notice absolutely protecting 'albatross (*Diomedea [sic]*) of any species' and their eggs himself on 27 February, and it was published on 7 March. This was the first protective legislation referring to birds' eggs: 'and [I] do also prohibit absolutely the taking or destroying of the eggs of such birds' (NZG 22, 7 March 1907: 844).

Animals Protection Act 1907

James Carroll, MHR for Waiaapu, was the champion of the Animals Protection Bill 1907, which was the first legislation to include a schedule of protected wildlife (other than game). The bill was strongly supported by Harry Ell, MHR for Christchurch South, and Thomas Mackenzie (Fig. 5), MHR for Waikouaiti. Ell sought the same penalties to apply to protected species as for game, and Mackenzie declared: 'I desire to protect the native birds, for which there is ample bush if the birds are left alone ... I think the time is coming when Parliament will have to take power by Act to protect the pigeon, the kaka, the parrakeet [*sic*], the blue mountain and paradise duck, teal, and many other birds' (NZPD 142: 788, 790). While the resulting Act listed 100 fewer protected bird species than the May 1906 *New Zealand Gazette* notice, it did provide year-round protection for tuatara (and, ironically, brushtail possum *Trichosurus vulpecula*).

The Animals Protection Act was passed on 25 November 1907, six days after the Executive Titles Act, after which Members of the House of Representatives became Members of Parliament, and the Colonial Secretary's Office became the Department of Internal Affairs (Bassett 1997).



Fig. 5 Thomas Mackenzie, c.1903⁵ (Alexander Turnbull Library, General Assembly Library Collection [PAColl-0838], 35mm-00171-A; F; reproduced with permission).

Animals Protection Amendment Act 1910

The loss of protection for many native bird species following the repeal of the Animals Protection Act 1880 and its amendments in 1907 caused concern among some MPs and the wider community. William Field, MP for Otaki, stated in 1908 that 'He was one of those who believed that all our

native birds, with the exception of the harmful ones, should be rigorously protected' (*NZPD* 145: 64). In July 1910, the Philosophical Institute of Canterbury suggested numerous modifications to the Animals Protection Act 1907 (and as consolidated in 1908), including (1) reinsertion of the May 1906 list of absolutely protected birds as a schedule (to replace the shortened schedule in the Act); (2) protection of native bats, New Zealand quail, New Zealand pipit, Lyall's wren (*Traversia lyalli*), brown teal, New Zealand scaup, grey noddy (*Procelsterna cerulea*), black noddy (*Anous minutus*), albatrosses and mollymawks, Auckland Island teal (*Anas aucklandicus*), and all the shags except the black shag; and (3) removal of dotterel, stilts and plovers from the schedule of native game (IA1 1910/1869; 'Animals Protection Act' 1909).

The 1910 Bill was introduced by David Buddo, Minister for Internal Affairs, but the need to protect native birds was strongly supported by many MPs, including Harry Ell, Thomas Mackenzie, Heaton Rhodes (Fig. 6), Sir William Steward, George Laurensen, Josiah Hanan, George Thomson and William Field (*NZPD* 151: 263–267; *NZPD* 152: 323–326; *NZPD* 153: 115–116). Ell stated, 'I trust ... that safeguards may be provided, if possible, to insure [*sic*] the preservation of the bird-life of this country, in which not only I, but I feel sure the majority of the people of this country are deeply interested' (*NZPD* 151: 264), while Mackenzie said:

In my opinion, the time has arrived when with few exceptions – perhaps the case of the shags or hawks and keas – none of the native birds should be allowed to be destroyed – at any rate not by Europeans. The beauty and rarity of our birds is such that they form one of the most attractive features in connection with our country; and there can be no doubt that ... many are becoming speedily extinct ... if you go away to the large areas of the forests primeval you will hardly ever see kakas at all; and for this reason: that those vermin, stoats and weasels, can easily reach the nesting-places of those birds – for they nest in hollow trees. (*NZPD* 151: 266)

Buddo commented that 'Great care should be taken to keep [native birdlife] protected, so that our young people may be brought up to know the bird-life of their own country' (*NZPD* 152: 326), while Field 'only wished they could pass a law which would effectively save the native birds, which were fast dying out' (*NZPD* 153: 115).

The concept of protecting all native birds, then making certain exceptions (i.e. Section 10.1 of the Animals Protection Amendment Act 1910), was proposed by Heaton



Fig. 6 Heaton Rhodes, c. 1901⁶ (Alexander Turnbull Library, General Assembly Library Collection [PAColl-0838], 35mm-00171-F; F; reproduced with permission).

Rhodes during the second reading, and was strongly supported by Steward (particularly), Hanan and Thomson among others (*NZPD* 152: 323). The clause was inserted before the final reading (*NZPD* 153: 115) and agreed to by Parliament.

Removal of protection for kea, hawks and shags: 1911

The blanket protection for indigenous birds provided by the Animals Protection Amendment Act 1910 when it was enacted in November of that year was soon rescinded for selected species considered injurious to livestock and trout. F.S. Pope, Secretary for the Department of Agriculture, Commerce, and Tourists, wrote to the Under-Secretary of Internal Affairs on 16 December 1910 seeking removal of protection for kea 'which are recognised as a great pest to sheep-owners' (IA1 1910/3241), and letters to newspapers requested removal of protection for hawks and shags (file note, 16 December 1910, IA1 1910/3241). Hugh Pollen (the Under-Secretary), sought the opinion of Augustus

Hamilton, director of the Dominion Museum, on the removal of protection for shags. Hamilton recommended:

As some of our Shags are not found elsewhere and are highly interesting forms, I think only those which frequent the main islands & the inland waters should be destroyed when found doing injury to trout etc. The species that do most harm are *P. sulcirostris* Brandt. The Black Shag [little black shag]; *P. brevirostris* Gould. The White throated Shag [little shag] *P. novaehollandiae* Stephens. The Sea shag [black shag] (To a small extent only); *P. carbo* L. [black shag] (To a small extent only). For any of these species, proof of damage should be required. (File note, 22 January 1911, IA1 1910/3241)

These same four (or three) species, along with kea and 'hawks of all species', were deemed not to be protected in a *New Zealand Gazette* notice published on 16 February 1911.

Removal of protection for gamebirds: 1911 and 1912

With all indigenous birds protected, it was also necessary to suspend protection for gamebirds for the duration of the hunting season. For the 1911 season, Hugh Pollen (Under-Secretary for Internal Affairs) identified four species that could be hunted (native pigeon, pūkeko, 'teal' and grey duck). It was deemed unnecessary to remove protection for bar-tailed godwit, as it was 'not indigenous' (file note, 1 April 1911, IA1 1911/371), and therefore not protected by the Act. Subsequently, acclimatisation societies were invited to identify species of native game, with their replies collated in April 1912 (IA1 1911/3752). The resulting list of native game for 1912 was: 'Pukeko, teal, grey duck, spoonbill duck [shoveler], black swan, wild geese [and] Paradise duck' (*New Zealand Gazette* notice, 24 April 1912). With the exception of paradise shelduck, the same list was used for the next decade.

New Zealand pigeon: 1912

Hunting and protection of 'native pigeons' was more intensely debated by Parliamentarians than for any other species, particularly in relation to their importance as a food source for Māori and settlers (Aramakutu 1997; Feldman 2001; Marr *et al.* 2001). For example, on 11 September 1908 the House of Representatives debated the subject for over an hour – unrelated to any Bill – with at least 20 members speaking (*NZPD* 145: 61). Yet, rather surprisingly, the end of legal hunting of pigeons occurred with minimal public record that the decision had been made, or why.

Internal Affairs ran a robust process to determine which species to include as native game in 1912 (IA1 1911/3752; see above). All 31 acclimatisation district councils were

invited to list the species they wished included as native game in their district; 26 replied, with 22 requesting that native pigeons (or just 'pigeons') be listed as game (the four exceptions were Canterbury, Ashburton, South Canterbury and Waitaki-Waimate). James Hislop (recently appointed Under-Secretary for Internal Affairs) signed a memo to David Buddo, Minister of Internal Affairs, on 12 April 1912 recommending native pigeon among the schedule of native game. A draft *New Zealand Gazette* notice including native pigeon among 'birds indigenous to New Zealand not to be deemed protected [for the duration of the game season]' was prepared on 15 April, but native pigeon had disappeared from the list when it was published on 24 April.

The published *New Zealand Gazette* notice contained the information that the Order in Council was discussed by Cabinet on 15 April, with the Hon. Thomas Mackenzie presiding. Mackenzie was the Prime Minister at the time, and was well known as one of the most ardent advocates for the protection of native birds in Parliament (Brooking 2012; see also *NZPD* 151: 266 and *NZPD* 152: 325, both dated 1910). Details of the debate that led to native pigeon being removed from the schedule have not been located, but the decision was a surprise to hunters. The *Auckland Star* reported on 24 April that 'Cabinet has seen fit to declare a close season for pigeons. Very strong exception is taken to the latter provision, and a deputation will probably wait upon the minister in charge of acclimatisation affairs (the Hon. G.W. Russell) in connection with the matter during his present visit to Auckland' ('Preparing to shoot' 1912). W.H. Hazard, chairman of the Auckland Acclimatisation Society, stated in the same article that

the closing of the pigeon season had been sprung as a great surprise on the society, who had not even been consulted on the matter. Under the Act it was compulsory for every third year to be a close one, but the next was not due until 1913. Telegrams containing vigorous protests had been received from several sporting bodies affiliated with the society, including those at Ohinemuri, Te Aroha, Karangahake, and Waihi. ... The Minister, in replying to a telegram from us on Saturday [20 April] stated that it was too late to alter the decision of Cabinet, which had only been come to after due inquiries. Well, no inquiries were made to our society, which has a membership of 800 members. I would like to ask what the functions of our Acclimatisation Society are if not to advise on matters of this nature.

Hazard considered that as pigeons were reported to be plentiful in the district, a closed season was quite uncalled

for. Despite such protestations, native pigeons were not returned to the game list in 1912 or subsequently.

Kākā: 1914 and 1931

Although kākā were absolutely protected by the Animals Protection Act 1907, a memo from the Department of Internal Affairs to the minister dated 12 May 1914 suggested that 'As the Animals Protection Act of 1908 provides that all warrants etc. originating under any of the Acts repealed by the 1908 Act enure for the purpose of that Act. Kaka is therefore possibly native game in spite of the fact that it is not included as Native game in the Schedule to the 1908 Act' (IA1 47/11/1 Part 1). A subsequent memo in the same file from E.Y. Redward, Assistant Law Officer, Crown Law Office, dated 22 May, stated:

I do not however agree with the Magistrate's decision that the notification in the Gazette of 23rd August 1888 declaring kakas to be native game has been nullified ... The fact that the kaka has been included in the list of birds that under section 25 of the 1908 Act be absolutely protected ... does not nullify the notification declaring kaka to be native game ... The provisions of the Animals Protection Act are very confusing ... I think the Department of Internal Affairs ... should decide whether kaka are to continue to be native game or should be protected under section 25.

In response, James Hislop, Under-Secretary for Internal Affairs, drafted a memo dated 10 June noting that 'It is some years now since Kaka has been allowed to be shot', and recommending that it was 'desirable to declare such bird to cease to be native game' (IA1 47/11/1 Part 1). The resulting *New Zealand Gazette* notice that 'Kaka to cease to be native game' was published on 25 June 1914.

On 3 October 1930, W.R. Brook Oliver, director of the Dominion Museum (Fig. 7), wrote a report to Internal Affairs recommending eight further species of birds be included in the schedule of absolutely protected birds in the APGA 1921–22 (IA 25/28/5 Part 3; see also 'Remaining marine shags: 1930 and 1931' and 'Chatham Island molly-mawk: 1931', below). One of the species was the 'brown or North Island kaka (*Nestor occidentalis*)'. Oliver continued:

According to my views there are two species of kaka in New Zealand and only one appears in the list. Although any argument that the Act as it now stands only applies to the green kaka could not be upheld it would be safer to have the name adopted in my book [i.e. Oliver 1930] for the brown or North Island species gazetted. (IA 25/28/5 Part 3)



Fig. 7 W.R. Brook Oliver, 1934⁷ (Alexander Turnbull Library, S.P. Andrew collection [PAColl-3739], 1/1-018168; F; reproduced with permission).

All eight species were protected by a *New Zealand Gazette* notice published on 9 January 1931.

Native frogs: 1921 and 1949

Robert Speight, curator at the Canterbury Museum, wrote to the Minister of Internal Affairs on 7 February 1921 seeking a permit to obtain three or four specimens of the recently discovered Stephens Island frog (Hamilton's frog). James Hislop, Under-Secretary for Internal Affairs, sought a legal opinion on the request, and was advised 'A frog is not an animal under the Animals Protection Act', yet a draft warrant to protect the species was prepared under Section 25 of the Animals Protection Act 1908: 'The Governor may from time to time by notification declare that any animal or bird mentioned in the Sixth Schedule hereto, or any animal or bird in addition to those so mentioned, shall be protected absolutely or for a specified time' (IA 25/173). The 1908 Act did not define the term 'animal', but the Sixth Schedule (Birds, Animals and Reptiles to be protected) listed only birds, one mammal and one reptile.



Fig. 8 Robert Falla (left)⁸ and Edgar Stead (right)⁹, with Herbert Guthrie-Smith in Stead's garden, Ilam, November 1937 (Canterbury Museum, David Macmillan archive, 2001.59.6; reproduced with permission).

Hamilton's frog was named in 1919 after Harold Hamilton, who collected the first specimens and was a staff member of the Dominion Museum. Following a newspaper report of two live frogs being sent to Canterbury Museum ('[Stephens Island frogs]' 1921), Hamilton wrote to the Dominion Museum's acting director, James McDonald, on 2 May 1921 recommending that the species be protected (IA 25/173). McDonald forwarded the suggestion to Hislop, who immediately sought McDonald's advice on whether the only other known species in the genus (*Leiopelma hochstetteri*) should be also protected. Hamilton advised 'It is certainly very desirable that *Liopelma [sic] hochstetteri* should also be protected' (IA 25/173). The resulting *New Zealand Gazette* notice protecting both species was published on 26 May 1921.

Two decades later, Graham Turbott of the Auckland Institute and Museum described the third species of native frog, *Leiopelma archeyi*, naming it after the director of the museum, Gilbert Archey, who had previously published on

the species without realising its distinctiveness (Archey 1922; Turbott 1942). In August 1948, Archey wrote to Internal Affairs, commenting that *L. archeyi* 'is not included in the schedule of protected animals [in the APGA 1921–22], and ... I beg to suggest that notice in the Gazette should be made to cover the protection of this species ... All three New Zealand species [of *Leiopelma*] should be covered under the Protection Act' (IA 46/22). Arthur Harper, Acting Under-Secretary for Internal Affairs, asked Robert Falla, director of the Dominion Museum (Fig. 8), for his views on the protection of New Zealand frogs (letter dated 10 August 1948, IA 46/22). Falla replied on 30 August: 'I have no hesitation in confirming your suggestion that the only satisfactory way to afford adequate protection for New Zealand species of frogs would be to include them all under the generic name *Liopelma [sic]*. This procedure will become increasingly necessary in drafting amendments to the schedule of protected animals as minute distinctions and new species are detected' (IA 46/22). A warrant protecting

‘all species of the genus *Liopelma* [*sic*]’ was notified in the *New Zealand Gazette* on 13 January 1949.

Animals Protection and Game Act 1921–1922

The APGA 1921–22 reverted to the system of providing a schedule of protected wildlife, rather than protecting everything and then making exceptions. The original draft list of ‘Animals absolutely protected’ (dated 29 August 1921, IA 25/85/1 Part 2) was apparently based on the May 1906 list, as amended in April 1916 and April 1919. Differences from the 1919 list included the addition of New Zealand pigeon, tree martin (*Petrochelidon nigricans*), tuatara and two species of native frogs as fully protected, and omission of all species of shags, frigatebirds and Chatham Island pigeon (i.e. they were no longer to be protected). The knot was listed as game (it was previously protected).

The draft Act, including the schedules, was sent out to other government departments and acclimatisation societies for comment in late September 1921. Resulting comment on the schedules came almost entirely from two men: ranger W. Cobeldick of the Department of Tourist and Health Resorts, Rotorua, and the Canterbury ornithologist Edgar Stead (Fig. 8). Cobeldick made his comments via his manager, William Hill (letter dated 17 October 1921), while Stead made his views known through multiple channels on at least five occasions before the Bill passed into law five months later. Stead first wrote to MP for Ellesmere (and personal friend) Heaton Rhodes on 28 September 1921. After making a few suggestions on the schedules, he remarked, ‘However, I’ll get the Acclimatisation Society to put forward the recommendations when they will carry more weight’. The North Canterbury Acclimatisation Society made extensive comment on the Bill on 11 October, including an appended five-page report on the schedules written by Stead. The society’s secretary wrote that Stead was ‘one of the few men in New Zealand with the necessary qualifications’ to comment on the schedules. The detailed comments from North Canterbury resulted in two members (Edgar Stead and Michael Godby) being invited to Wellington to attend the Acclimatisation Societies’ Conference on 8 December, where they joined Cyril Dasent (secretary of the Acclimatisation Societies’ Conference) and E.J.C. Wiffen (chairman of the Wellington Acclimatization Society). The resulting submission prepared for Internal Affairs included further comment on the schedules that closely aligned with Stead’s previous submissions. Not content with this, Stead

wrote directly to William Downie Stewart (Minister of Internal Affairs) about the schedules on 10 December 1921 and again on 22 January 1922 (IA 25/28/5 Part 2).

Cobeldick’s comments contributed to six species being added to the schedule of absolutely protected wildlife (Table 4): black stilt, pied stilt, New Zealand dotterel, banded dotterel, long-tailed bat and short-tailed bat. He provided no rationale other than noting that the four bird species had been protected since May 1906.

Stead’s individual and collective submissions contributed to 12 species being added to the schedule of absolutely protected wildlife, four species being removed from the schedules, and two species being added to the schedule of game species (Table 4). His reasons for protecting five species included that the white-winged black tern (*Chlidonias leucopterus*) had bred on the Rakaia riverbed on at least two occasions, and was a ‘beautiful and harmless species’, that the brown teal was very scarce and had no chance of surviving if declared game as it nested during the game season, that the black stilt was of rare occurrence and the grey teal very scarce, and that the New Zealand dotterel ‘now breeds only on the high plateaux on some of the mountain ranges and is certainly deserving of protection’ (letter to the president of the North Canterbury Acclimatisation Society, 11 October 1921, IA 25/28/5 Part 2).

Stead’s interests as a sportsman and also as a scientific collector (Miskelly 2012) are evident in his rationale for the removal of three species of migratory waders from the First Schedule: the turnstone and Pacific golden plover were summer migrants that ‘occur fairly plentifully in suitable localities ... both are strong fliers and good birds on the table’, while the red-necked stint (*Calidris ruficollis*) was ‘very common in Northern Hemisphere ... as there has been only one authenticated record of its occurrence in New Zealand ... it is desirable from a scientific standpoint that some more specimens should be obtained’. Stead also successfully lobbied for the silveryeye to be removed from the First Schedule as ‘this little bird is also a great enemy of the fruit-grower, eating fruit of all kinds and damaging a great deal more than it actually eats’, and the Arctic skua (*Stercorarius parasiticus*) ‘as there are, no doubt, cases where it would be desirable to destroy these birds owing to their depredation among the smaller sea birds’ (letter to William Downie Stewart, 10 December 1921, IA 25/28/5 Part 2).

Stead did not achieve all that he sought. Despite ardent lobbying for the protection of king shag and Stewart Island shag (see below), and for paradise shelduck and pūkeko to

Table 4 Changes in species listings between the first draft of the schedules for the Animals Protection and Game Bill and the final Act (APGA 1921–22). Most of the changes were in response to submissions by ranger W. Cobeldick, and/or the Canterbury ornithologist Edgar Stead. In addition to submissions bearing only his name, Stead was one of four attendees at the Acclimatisation Societies' Conference.

Species	First draft	APGA 1921–22	Who requested the change?
Masked booby (<i>Sula dactylatra</i>)	Unprotected	Protected	Acclimatisation Societies' Conference
Pitt Island shag (<i>Stictocarbo featherstoni</i>)	Unprotected	Protected	Acclimatisation Societies' Conference
White-winged black tern (<i>Chlidonias leucopterus</i>)	Unprotected	Protected	Edgar Stead
Chatham Island pigeon (<i>Hemiphaga chathamensis</i>)	Unprotected	Protected	Edgar Stead
Long-tailed bat (<i>Chalinolobus tuberculatus</i>)	Unprotected	Protected	Acclimatisation Societies' Conference and W. Cobeldick
Short-tailed bat (<i>Mystacina tuberculata</i>)	Unprotected	Protected	Acclimatisation Societies' Conference and W. Cobeldick
Paradise shelduck (<i>Tadorna variegata</i>)	Game	Protected	Legislative Council (contra Stead and Cobeldick)
Grey teal (<i>Anas gracilis</i>)	Game	Protected	Edgar Stead
Brown teal (<i>Anas chlorotis</i>)	Game	Protected	Edgar Stead
Pūkeko (<i>Porphyrio melanotus</i>)	Game	Protected	George Thomson, MP (contra Stead)
Pied stilt (<i>Himantopus himantopus</i>)	?Game	Protected	Acclimatisation Societies' Conference and W. Cobeldick
Black stilt (<i>Himantopus novaezelandiae</i>)	Game	Protected	Edgar Stead and W. Cobeldick
New Zealand dotterel (<i>Charadrius obscurus</i>)	Game	Protected	Edgar Stead and W. Cobeldick
Banded dotterel (<i>Charadrius bicinctus</i>)	Game	Protected	Acclimatisation Societies' Conference and W. Cobeldick
Ruddy turnstone (<i>Arenaria interpres</i>)	Protected	Game	Edgar Stead
Pacific golden plover (<i>Pluvialis fulva</i>)	?Protected	Game	Edgar Stead
Red-necked stint (<i>Calidris ruficollis</i>)	Protected	Unprotected	Edgar Stead
Arctic skua (<i>Stercorarius parasiticus</i>)	Protected	Unprotected	Edgar Stead
Black-backed gull (<i>Larus dominicanus</i>)	Protected	Unprotected	Acclimatisation Societies' Conference
Silvereye (<i>Zosterops lateralis</i>)	Protected	Unprotected	Edgar Stead

be listed as game, the shags were excised from the schedules before the Bill was passed (they were present in the draft sent to the Legislative Council; IA 25/28/5 Part 2), and paradise shelduck and pūkeko were added to the First Schedule (animals absolutely protected).

The length of the First Schedule (Appendix 3) was commented on by Sir William Fraser (Member of the Executive Council) when the Bill was debated in the House of Representatives: 'in drafting this Bill an attempt has been made ... to make the lists as complete as possible; but if it is found that the schedules are still incomplete, or if there are any animals in one schedule that ought to appear in another, the Governor-General has the power ... to make the necessary alteration' (*NZPD* 193: 632). George Thomson (who at this time was serving on the Legislative Council) summarised the level of support in the Legislative Council (i.e. the Upper House) for protecting native wildlife: 'the majority of the members of this Council will belong to [those who are desirous almost exclusively of retaining every form of the native fauna, as far as the birds are concerned, intact], and that not only for sentimental but also for scientific reasons they desire to protect our fauna as largely as possible' (*NZPD* 193: 633). Pūkeko was added to the First Schedule (and removed from the native game list) after a motion by Thomson was supported by the House (*NZPD* 193: 643). Heaton Rhodes expressed concern that the Legislative Council had removed king shag and Stewart Island shag from the First Schedule (*NZPD* 193: 809): 'These were very rare birds indeed, and he proposed to ask the House to have them reinserted' (they weren't).

King shag: 1927

Edgar Stead made three (unsuccessful) attempts at getting the king shag protected in the APGA 1921–22, two of these submissions also including the Stewart Island shag (submissions dated 11 October and 3 November 1921, and 22 January 1922, IA 25/28/5 Part 2). The last was a letter to William Downie Stewart, Minister of Internal Affairs, written the day after the *New Zealand Times* reported that the Animals Protection Committee of the Legislative Council had struck out the king shag and the Stewart Island shag from the list of absolutely protected birds. Stead had seen the newspaper reports, and wrote:

it is particularly to be desired that protection should be given to some of the shags, notably the [king shag] ... this bird is very scarce, and, being of very local habitat might easily be exterminated. It is wholly a marine species, and

no damage can possibly be attributed to it ... The Bill as it left your Department, Sir, had these two interesting shags in Schedule I, and I hope you can get them put back there again.

However, the Act when enabled the following month contained only a single shag species (the Pitt Island shag).

Seven months later, the matter was again raised when G.P. Newton, Deputy Under-Secretary for Internal Affairs, wrote to his minister on 8 September 1922 regarding a proposed amendment to the APGA 1921–22, suggesting (among other changes) that the king shag and the Stewart Island shag be inserted in the First Schedule: 'With regard to the two shags named, possibly the Minister might desire to confer with the Hon. Sir Heaton Rhodes, who I understand is anxious that these birds should be included in the absolutely protected list, as Edgar Stead points out that they are somewhat rare' (IA 25/28/5 Part 2). The Bill did not proceed.

The New Zealand Native Birds Protection Society (founded in 1923) also sought to have the king shag protected, along with six other species of shags, suggesting that they were inadvertently omitted from the First Schedule of the APGA 1921–22 (letter from Val Sanderson, honorary secretary, 15 February 1924, IA 25/28/5 Part 3). The opinion of the director of the Dominion Museum was sought, and Brook Oliver (replying for the director) recommended that all shag species other than black shag, pied shag and little shag should be protected (letter dated 10 March 1924, IA 25/28/5 Part 3). Newton wrote a memo to the Under-Secretary (i.e. his manager) on 17 March explaining the circumstances by which king shag and Stewart Island shag were struck out of the First Schedule by the Statutes Revision Committee of the Legislative Council, where some members were of the opinion 'that a shag was a shag, and that they should all be struck out'. Some intervening correspondence is apparently missing from the file, but Sanderson was informed on 31 October 1924 that it was not desirable to seek the Governor-General to override the decision of Parliament by using his powers to protect species that Parliament had specifically excluded from protection (IA 25/28/5 Part 3).

Stead again sought the protection of king shags on 28 October 1926, when he wrote to Richard Bollard, Minister of Internal Affairs, about his recent visit to the Chetwode Islands, and a brief landing on nearby Sentinel Rock:

I visited one of the last remaining nesting places of the Rough faced [= King] Shag in Cook Strait. There were

only seven nests in the Colony, and the birds were very timid, showing that they had been much harassed. I understand from some Fishermen, that there is only one other nesting site of these birds, containing one or two nests, which is on some little Islands called the Trios. It is obvious, that unless some immediate steps are taken, to protect the remnant of this interesting Shag, the bird will very soon be totally extinct. As it forms an exceedingly interesting link between some of the Shags which are found in the Southern Seas, it is of the utmost importance from a scientific standpoint, that the birds be preserved ... I would strongly urge that the bird be given protection forthwith. (IA 46/62/16)

Stead's letter prompted a briefing to Bollard from Internal Affairs staff (dated 2 November), including the comments:

When the [APGA 1921–22] Bill was before the Statutes Revisions Committee of the Legislative Council, that Committee decided that only the [Pitt Island] Shag should be protected and this was subsequently agreed to by the House ... The Governor-General has power ... to include additional birds [as] absolutely protected, but in view of the fact that Parliament decided that only one species of shag should be protected, it is just a question of whether His Excellency should be asked to add the names of additional Shags, or whether the matter should not wait until an amendment of the Act is being dealt with. (IA 46/62/16)

Bollard chose the latter inaction (memo dated 27 November), and this was communicated to Stead on 30 November. He was not impressed with the response, replying to Bollard on 6 December:

With regard to the Carunculated [= King] Shag, I consider that the matter of protection of this bird is too urgent to wait for the next Session of Parliament, even if one could be sure that the Act would be amended then. It is four years now since it was pointed out that the Act required amending so that Golden Plover and Turnstone should be put into the list of Game to be shot during the Godwit Season [i.e. acclimatisation societies could set a January–February season for godwits and knots, while all other gamebird species could be hunted only in May–July], and this amendment has never gone through. Unless protection is afforded to these Shags sooner than four years hence, the birds will be extinct. At the present time any collector, who is sufficiently mercenary-minded could shoot every one of these shags that exists today, within the next three months; and show a very nice profit on the transaction by having for sale the only available skins of an extinct bird. But apart from this contingency, which is not as unlikely as some people might think, the ordinary ravages of the picnic parties that visit the Sounds during

the Xmas Season are quite enough to put the Carunculated Shags into immediate danger of being practically exterminated.

I would go as far as to urge you, Sir, to take it on yourself to have this bird protected forthwith, and if Parliament won't agree to the protection when the Animals Protection Act is being discussed then the protection can be removed, and Parliament, not you, will have to bear the stigma of standing by while an exceedingly interesting and harmless bird was exterminated. (IA 46/62/16)

But Bollard was not to be budged, with James Hislop (Under-Secretary for Internal Affairs) replying to Stead on 20 December: 'the Hon. Minister of Internal Affairs is unable to take action against the express wish of Parliament, and this matter will have to stand over for consideration when the Act is being amended' (IA 46/62/16).

Stead touched on the matter again in his reply on 9 January 1927 (IA 46/62/16), apparently goading Hislop into investigating further. In a memo to Bollard dated 1 April 1927 (IA1 25/28/5 Part 3), Hislop reported that the king shag and Stewart Island shag had been excluded from the APGA 1921–22 in error, based on the recollection of Heaton Rhodes, who was placed in charge of the Bill by William Downie Stewart, the then Minister of Internal Affairs, and who had attended a conference between members of both Houses on the matter: 'Sir Heaton subsequently intimated that it was agreed at the Conference that both the Carunculated and the Pink-footed [Stewart Island] shag should be protected, but the report of the Committee made no reference to the matter and consequently the birds ... were not included in the absolutely protected list.' Hislop therefore concluded that asking the Governor-General to protect the two species 'would not, under the special circumstances, be flouting Parliament'. Hislop and Bollard discussed the matter on 8 April, after which Bollard annotated the memo 'Following on your interview with me this morning I approve of Carunculated Shag being included in the schedule of protected birds' (IA1 25/28/5 Part 3). The *New Zealand Gazette* notice protecting the king shag was published on 5 May 1927.

Remaining marine shags: 1930 and 1931

With the precedent set for flouting Parliament's 1922 decision, the process for protecting the Stewart Island shag was more straightforward. On 16 January 1930, Captain Frank Yerex (inspector for the Animals Protection and Game Act, Internal Affairs) sent a memo to the Under-Secretary of his department:

As these birds are not plentiful, do not appear to visit the mainland and cannot be regarded as inimical to the fresh-water fisheries, I recommend that they be declared to be absolutely protected ... I am informed that at present many of these birds are being shot by launch parties and that their beaks are used to claim the bonus of 2/6 per head from the Southland Acclimatisation Society, as the beaks alone cannot be readily distinguished from those of the destructive shags ... These birds are naturally tame so fall an easy prey to the guns of shootists and there appears to be a danger that they may some day become extinct which would be a misfortune as they are very handsome and interesting ... I understand that they all nest on a small rocky island near Stewart Island so it will be seen that their preservation appears to require special protection... Mr. Oliver, Director of the Dominion Museum concurs in my opinion that these birds should be absolutely protected. (IA 25/28/5 Part 3)

G.P. Newton, the Under-Secretary, sought Oliver's opinion, and also that of the Marine Department (memo dated 31 January, IA 25/28/5 Part 3). Oliver provided further detail about the shag's distribution, and concluded, 'On account of the Stewart Island and Bronze Shags [now recognised as two colour morphs of the same species] breeding together they are, from a scientific point of view, the most interesting pair of species of shags in the Dominion. Accordingly I support Mr. Yerex's recommendation' (letter dated 12 February, IA 25/28/5 Part 3). The Marine Department concurred (memo dated 21 February, IA 25/28/5 Part 3) and the resulting *New Zealand Gazette* notice was published on 24 April 1930.

Later that year, two or three independent requests set the ball rolling on a process that led to six further shag species (or subspecies) being protected. On 17 September 1930, the ornithologist Robert Falla wrote a two-page report on the spotted shag, suggesting that it was in danger of extermination, with certain colonies in the Hauraki Gulf declining from 100 birds in 1923 to about 25 birds in 1928: 'The damage is done mainly by launch parties, campers and fishermen who do not discriminate between one species of shag and another. The species should not only be placed on the protected list, but some effort should be made to enforce the protection' (IA 25/28/5 Part 3; the report was written on Auckland Institute and Museum letterhead, although Falla was not appointed to the staff until the following year). The council of the Auckland Institute and Museum directed Gilbert Archey (the museum's director) to write to the Under-Secretary for Internal Affairs urging that the spotted shag be protected, and appending Falla's report (letter dated 28 October 1930, IA 25/28/5 Part 3).

Independently, Brook Oliver (director of the Dominion Museum) wrote on 3 October recommending that eight birds be added to the schedule of absolutely protected birds, including Chatham Island shag, Bounty Island shag, Auckland Island shag, Campbell Island shag, spotted shag and blue shag (IA 25/28/5 Part 3).

The Auckland Acclimatisation Society also wrote, on 30 October, requesting that the spotted shag be protected, stating that

The Council have referred the matter to Mr. R.A. Falla and Mr. Edgar Stead, both of whom are strongly in favour of these birds being absolutely protected ... Their chief food is minute crustaceans, molluscs, and small weed fish and they are quite incapable of catching large active fish. No record exists of their coming inland to fresh water streams and feeding on trout so that no harm can come to trout fishing through the birds being protected. (IA 25/28/5 Part 3)

Colin Gordon, secretary of the Auckland Acclimatisation Society, wrote again on 14 November 1930 asking the minister to consider also protection of the blue shag. Meanwhile, G.P. Newton, Under-Secretary for Internal Affairs, sought the views of the Marine Department on 4 November regarding requests for all six taxa of marine shags mentioned in Oliver's letter (including spotted and blue shags) to be protected. G.C. Godfrey, Secretary of the Marine Department, replied on 14 November 'that it is considered desirable that the spotted shag be placed on the list of absolutely protected birds', without commenting on the other species. After Newton specifically requested the Marine Department's views on protection of the blue shag in a memo dated 20 November, A.E. Hefford, the Chief Inspector of Fisheries, wrote on 22 November that 'I believe there would be no serious objection from the fisheries point of view to the addition [to the protected list] of the other rare species of shag mentioned, besides the spotted shag, namely the Chatham Island Shag, Bounty Island Shag, Auckland Island Shag, Campbell Island Shag and the Blue Shag' (IA 25/28/5 Part 3). This was achieved by a *New Zealand Gazette* notice published on 9 January 1931.

Chatham Island mollymawk: 1931

Brook Oliver's letter of 3 October 1930 (see above) also sought protection for the Chatham Island mollymawk 'which was omitted [from the APGA 1921–22] merely because it was not discovered until the visit of the Whitney South Seas Expedition [from the American Museum of

Natural History] in 1926' (IA 25/28/5 Part 3). The Chatham Island mollymawk and the 'brown kaka' were both protected, along with five species and one subspecies of marine shag, on 9 January 1931.

Pacific golden plover, knot and turnstone: 1933

Pacific golden plover, lesser knot and turnstone were all listed as native game species in the APGA 1921–22. A remit to ask the Department of Internal Affairs to protect the 'lesser golden plover', moved by Cecil Whitney, was passed at the Conference of the New Zealand Acclimatisation Societies in Wellington in October 1932 (memo from Malcolm Fraser, Under-Secretary for Internal Affairs, to the director of the Dominion Museum, 29 October 1932, IA 47/14). The memo sought advice on the correct name for the birds occurring in New Zealand, 'together with your views'. Brook Oliver (director of the Dominion Museum) replied, 'Personally I would like to see the Lesser Golden Plover as well as the other two small species listed in the Third Schedule [native game], namely the Knot and the Turnstone, placed in the list of absolutely protected birds. These birds are very small and consequently more are required to be shot for eating than in the case of the Godwit' (letter dated 31 October 1932, IA 47/14).

Colin Gordon, secretary of the Auckland Acclimatisation Society, wrote to the Under-Secretary for Internal Affairs on 10 December 1932, requesting that knots be protected: 'At the meeting of my Council a resolution was passed recommending the absolute protection of the knot (*tringa canutus*) on the ground that these birds are few in number and continued shooting will result in their extermination. This view was supported by Mr. R.A. Falla [ornithologist at Auckland Museum]' (IA 47/13).

Based on this correspondence, Malcolm Fraser, Under-Secretary for Internal Affairs, wrote a memorandum to his minister, James Young, on 19 July 1933 recommending that knots, lesser golden plovers and turnstones be protected (IA 47/13). All three species were absolutely protected by a *New Zealand Gazette* notice published on 31 August 1933.

New Zealand scaup: 1934

New Zealand scaup (under the name 'black teal') were listed as a game species in the APGA 1921–22. On 10 July 1934, Arthur Pycroft (president of the Auckland Zoological Society) and Robert Falla (ornithologist at Auckland Museum) wrote to the Minister of Internal Affairs on behalf of the Board of Managers of the Auckland Zoological Society, seeking protection for scaup:

Records show that it has progressively decreased in numbers up to the present time, and disappeared entirely from some districts. In many of these districts there is still suitable water and in the opinion of many sportsmen of experience its disappearance can be ascribed to shooting in the days of unlimited bags. This has occurred in the Wellington district and districts immediately north of it. There are other settled districts where the bird has been long protected and is still very common, as at Rotorua ... The districts where the bird may still be killed are now mainly north of Auckland and the scaup are decreasing there with the increase of settlement. North Auckland also is one of the last homes of the rare Brown Duck (*Elasmonetta chlorotis*) and its preservation is a difficult matter in view of the fact that many licence holders do not distinguish it from the so-called black teal ... The scaup is not in any sense a 'good sporting bird' and its habits are such that it must decrease wherever it is regularly shot. (IA 47/19)

This initial letter was backed up by Colin Gordon, secretary of the Auckland Acclimatisation Society, who wrote on 20 July 1934, stating that the society's council had been sent a copy of the Auckland Zoological Society letter, and 'The Meeting was of the unanimous opinion that this bird is in danger of extinction and therefore [we] endorse the application of the Zoological Society, for its absolute protection' (IA 47/19). Malcolm Fraser, Under-Secretary for Internal Affairs, sought the opinions of Brook Oliver (director of the Dominion Museum) and Captain Frank Yerex (inspector for Internal Affairs) on the matter. Both men fully supported the proposal (letters dated 30 July and 3 August, respectively, IA 47/19), with Oliver concluding, 'It appears to me that the time has arrived to place the Black Teal on the absolutely protected list.' The resulting *New Zealand Gazette* notice fully protecting New Zealand scaup was published on 6 September 1934.

Little black shag: 1940

Little black shags were formerly rare and poorly known in New Zealand. In 1930, they were known only from the Bay of Islands, and no breeding location was known (Oliver 1930). In 1931, a breeding site was found at Lake Waikare, northern Waikato (Falla 1932), and five years later Robert Falla (ornithologist at Auckland War Memorial Museum) issued a plea for the bird's protection at a meeting of the Auckland Acclimatisation Society, as he had information on past and planned shag shoots at Lake Waikare ('Not protected' 1936): 'There was no proof that the small black shag destroyed trout and it was a wrong principle to destroy

a harmless bird.’ The matter was not brought to the attention of Internal Affairs until a meeting of the Council of the North Island Acclimatisation Societies held at Wellington on 18 October 1940, where it was resolved ‘That the little black shag ... be placed upon the absolutely protected list’ (IA 46/31/1). Joseph Heenan, Under-Secretary for Internal Affairs, sought the view of Brook Oliver, director of the Dominion Museum, on 31 October, who replied on 1 November: ‘I do not hesitate to recommend that the Little Black Shag [be protected] ... The fact that the Council of the North Island Acclimatization Societies recommends that it be protected is evidence that it does not harm fresh-water fishes. I am informed that numbers of these shags are shot on Waikare Lake – apparently for sport. It would be advisable to have this practice stopped’ (IA 46/31/1). The regulation protecting the little black shag was notified in the *New Zealand Gazette* on 14 November 1940.

Bar-tailed godwit: 1941 – a centennial gift to the nation

The bar-tailed godwit was the last of the ‘game’ species of waders to receive absolute protection, after a long campaign by many participants. McDowall (1994: 295) and Woodley (2009: 126) referred to some of the protectionist lobby, dating back to James Drummond in 1908. They gave prominence to the efforts of the Royal Forest and Bird Protection Society, although the society is not evident in the Internal Affairs file of correspondence immediately preceding godwit protection (IA 47/6 Part 2). Ardent lobbyists in the media and to the Minister of Internal Affairs included Major J.R. Kirk of Te Marua, Upper Hutt (Kirk 1938, and multiple letters to the minister), Captain Harold Rushworth, MP for Bay of Islands (question in the House, 10 August 1938), Leo Fanning (1939), C.R. Caverhill of Paraparaumu (letter dated 11 March 1940), the Federation of New Zealand Societies for the Prevention of Cruelty to Animals (letter dated 19 March 1940), Stephen Keruse of Wellington (letter dated 21 March 1940), and B.T. Wilson of Christchurch (letter dated 14 January 1941).

William Parry, the Minister of Internal Affairs, announced in December 1940 that ‘it was proposed, as a Centennial gesture, to place the godwit on the protective list’ (‘Shooting season’ 1940). He added, ‘I feel the decision would impose no sacrifice among shooters ... as this intelligent godwit is not a sporting bird in any sense of the term. With confidence I make my appeal to my fellow shooters to give our little immigrant immunity from the gun from the year 1940.’

Parry’s request, repeated in *New Zealand Outdoor* (‘The godwit’ 1941), and *The Press* (‘Shooting of godwits’ 1941), was for sportsmen to voluntarily forgo a two-week season that had already been notified for February 1941. Parry informed B.T. Wilson in a letter dated 20 January 1941 that ‘it is intended ... to include the godwits in the list of absolutely protected birds ... at the close of the open season, which extends from 1st to 14th February 1941’ (IA 47/6 Part 2). The warrant protecting the bar-tailed godwit was signed by Parry on 17 February 1941, and came into effect on 1 March.

Spur-winged plover: 1946

Spur-winged plovers were not listed in the APGA 1921–22 as they did not breed in New Zealand until the early 1930s, when a pair settled at Invercargill Borstal farm (a training farm for young offenders) (Barlow 1972). From 1934, their establishment was monitored by the Very Reverend C.J. Tocker, with 30–50 birds present by 1946 (report in file IA 46/62/15). Tocker was concerned that several birds had been shot as they spread from the sanctuary of the borstal farm, and he sought the support of Southland Acclimatisation Society to have the birds protected. On 28 May 1946, George Osborne, secretary of the society, wrote to Internal Affairs stating that the society’s council recommended that spur-winged plovers be placed in the list of absolutely protected birds (IA 46/62/15).

Arthur Harper, Under-Secretary for Internal Affairs, sought the views of Brook Oliver, director of the Dominion Museum, and E.J. Fawcett, Director-General of Agriculture (letters dated 4 June and 28 June 1946, respectively, IA 46/62/15). Oliver replied on 13 June that

All Australian authorities that I have consulted agree in stating that this species lives on insects and is not known to be in any way harmful. The only objection made is that by its harsh call notes it gives warning of the presence of sportsmen, giving ducks and other birds an opportunity to escape. Accordingly, I recommend that the species be placed on the list of absolutely protected birds. (IA 46/62/15)

Fawcett replied that his staff had sought the opinion of Mr Christie, the farm manager of the Borstal Institute Farm, who had watched the birds for the last 15 years (i.e. since 1931), and who reported that there been no evidence of them being harmful in any way. He concluded, ‘In view of the above [the Department of Agriculture] would offer no objection to the Australian Spur-Winged Plover being placed

on the list of absolutely protected birds' (letter dated 24 July, IA 46/62/15). The warrant protecting the spur-winged plover was notified in the *New Zealand Gazette* on 12 September 1946.

Wildlife Act 1953

The 1953 Act reverted to the 1910 system of protecting everything, then making a few exceptions in schedules of game species, partially protected species and unprotected species. This meant a switch in emphasis from which species to protect to which species to list as unprotected. The 17 native bird species that were not absolutely protected by the Wildlife Act 1953 are listed in Part 1; none of these was among those species granted absolute protection under the APGA 1921–22 or subsequently.

The Bill was introduced to Parliament by Minister of Internal Affairs William Bodkin, who glibly dismissed more than 50 years of conservation battles won, and the existing extensive list of protected species: 'When legislation governing wildlife was first introduced in the Animals Protection and Game Act 1921, the primary objective was the protection of game-birds. The attitude has now changed completely and the objective of the present legislation is in conformity with public opinion, which now attaches the greatest importance to the protection of native bird life' (*NZPD* 300: 1698). In this statement, Bodkin overlooked the lengthy schedules of protected native species published in May 1906 and in the Animals Protection Act 1907, the Animals Protection Amendment Act 1910 (protecting all indigenous birds), subsequent amendments in April 1916 and April 1919, and the APGA 1921–22. However, the default protection provided by the 1953 Act did mean that all vagrant and colonising bird species were automatically protected. Henceforth, efforts to secure additional legal protection of wildlife species could focus on the few unprotected birds, plus taxon groups excluded by the original Act.

New Zealand falcon: 1970

The New Zealand falcon was partially protected by the Wildlife Act 1953, meaning that the occupier of any land could hunt or kill falcons that were causing injury or damage to property (e.g. to homing pigeons and poultry). Efforts to grant full protection to the New Zealand falcon apparently started with a letter from Gisborne ornithologist Archie Blackburn to the Under-Secretary for Internal Affairs, dated 17 May 1961:

For some years I have become increasingly concerned about the status of the N.Z. Falcon, & think it might be advisable to put the matter on an agenda of the Fauna Protection Advisory Council ... Discussing the Falcon recently with a prominent ornithologist, he expressed the opinion that the North Island population might be 100 birds. Whilst I would put the figure at double this number, it is of very local occurrence & has become one of the world's rarest birds of prey. (IA 46/42/6)

Blackburn was a long-standing member of the Fauna Protection Advisory Council (Sibson 1990), an advisory body to the Wildlife Branch (later Wildlife Service) of Internal Affairs. Established in 1948 as the Native Bird Preservation Committee, its foundation members included Robert Falla, Edgar Stead and Robert Stidolph (IA1 47/91/1 Part 1). The name was changed to the Rare Birds Advisory Committee in 1949, then the Rare Animals Advisory Committee in 1951 (IA1 47/91/1 Part 1), before being reconstituted under the Wildlife Act 1953 as the Fauna Protection Advisory Council (Fauna PAC) in 1955 (IA1 47/91/1 Part 2). Blackburn spoke on the topic of falcon protection at the 28 July 1961 Fauna PAC meeting, suggesting that there were possibly no more than 2000 birds, and that as the falcon will attack farm dogs and poultry, it 'does not endear itself to farmers who often shoot it on sight' (IA 46/42/6). Although Fauna PAC resolved to prepare a suitable article for publication (presumably advocating for falcon protection), the matter appears to have stagnated until C.M. Broad, secretary of Southland Acclimatisation Society, wrote to Internal Affairs on 11 August 1967 mentioning that the society's Native Birds Committee was growing concerned at the scarcity and decline of New Zealand falcons in Southland, and asking that the species be removed from the Second Schedule of the Wildlife Act (i.e. fully protected) (IA 46/42/6). This was further discussed by Fauna PAC on 3 November 1967, who carried a motion 'That this council recommends that the N.Z. falcon be put on the fully protected schedule' (IA 46/42/6). Note that the Wildlife Act had no such schedule – every New Zealand bird was absolutely protected *unless* on a schedule.

The Wildlife Branch of Internal Affairs began the process of granting legal protection for New Zealand falcon, drafting an undated memo that included the statement that full protection for the falcon was opposed in 1953 by sections of the Royal Forest and Bird Protection Society 'because the falcon preyed on New Zealand pigeon. However a more enlightened view of predation is being accepted in most circles and especially towards birds of prey. This is evident

from the fact that protection was raised by an Acclimatisation Society' (IA 46/42/6).

Brian Bell, senior conservation officer of the Wildlife Branch, was able to report back to Fauna PAC on 15 May 1968 that the North Island and South Island councils of acclimatisation societies supported protection of the falcon (IA 46/42/6). The New Zealand falcon was protected by the Wildlife Order 1970, notified in the *New Zealand Gazette* on 18 June 1970.

Invertebrates: 1980 and 2010

It is unknown if any single request triggered the process leading to protection of selected invertebrate species. As early as October 1969, Graham Adams, assistant fauna conservation officer of the Wildlife Branch of Internal Affairs, made suggestions for consideration of a review of the Wildlife Act that included amending the definition of wildlife to include certain land molluscs, specifically the large-bodied *Paryphanta* (including *Powelliphanta*) and New Zealand *Placostylus* species. At the same time, Fauna PAC were seeking additional protection for 'bush snails, paryphanta, placostylus and lizards' (both memos in file WIL 1/1/1 Part 1). In January 1971, Brian Bell, senior conservation officer of the Wildlife Branch, prepared a draft memo recommending legislation to extend the definition of 'wildlife' to include *Paryphanta* and *Placostylus* (WIL 33/5/47 Part 1). This did not proceed until a Cabinet paper on proposed amendments to the Wildlife Act was prepared by the (renamed) Wildlife Service in June 1979 (WIL 1/1/1 Part 5). This recommended amending the definition of 'animal' to protect threatened species of terrestrial and threatened invertebrates 'specified from time to time in a new schedule to be included in the Act', with four candidate examples given: *Placostylus ambagiosus*, *Deinacrida rugosa*, *Cucumerunio websteri websteri* and *Powelliphanta* (formerly *Paryphanta*) *gilliesi*.

On 2 July 1979, Cabinet agreed that protection should be extended to 'certain types of terrestrial or freshwater invertebrates', and a draft schedule of 33 species and five genera was prepared by Wildlife Service staff by 9 August (WIL 1/1/1 Part 5). Although not explicitly referenced, the list was very similar to a list of endangered invertebrates recommended for protection that had been published in the newsletter *The Weta* by Graeme Ramsay and Norman Gardner two years earlier (Ramsay & Gardner 1977). The main difference between the lists was that Ramsay and Gardner (1977) included the landsnails *Wainuia clarki* and *W. edwardsi*, which were both missing from the draft

schedule, and they did not include the mayfly *Oniscigaster wakefieldi*, the staphylinid beetle genera *Paratrochus* and *Nototrochus*, the freshwater snail *Physastra variabilis*, or any spiders.

Public submissions on the draft Amendment Act, including the schedule of invertebrates recommended for protection, were called for on 12 December 1979 in an advertisement in *The Dominion*, with comments due by 8 February 1980. Substantive comments were received from John Gibbs (Wildlife Service officer, fisheries), the Entomology Department of Lincoln College, the Entomology Division of the Department of Scientific and Industrial Research (DSIR), and the Auckland Institute and Museum. As a result, one further species was added to the list (the Kaikoura giant weta *Deinacrida parva*, requested by Auckland Museum as it was recently rediscovered, and 'may be more rare and more in need of protection than other [giant weta] species listed'), and several species and genera were removed (Table 5; submissions on file WIL 1/1/1 Part 5). These changes resulted in the schedule being even more similar to Ramsay and Gardner's original list.

Several submissions questioned where the list of invertebrates to be protected originated from, including (rather surprisingly) the submission from Entomology Division of DSIR, where Graeme Ramsay was listed as one of four contributors (along with John Dugdale, Beverley Holloway and Charles Watt). The Auckland Institute and Museum's submission recognised the list as being based on the list published by Ramsay and Gardner (1977): 'As such it represents a reasonably personal, albeit perhaps well-informed view of the need for the protection of invertebrates, a view which cannot be taken as representative without wider consultation.' The summary of submissions to the Lands and Agriculture Select Committee included the annotation that 'The list was compiled with expert advice' (unpublished Wildlife Service report, c.23 May 1980, WIL 1/1/1 Part 5).

The Bill still had to survive the cut and thrust of the Parliamentary debating chamber. While the Hon. Allan Highet (Minister of Internal Affairs) and opposition MP Sir Basil Arthur attempted to make worthy statements about the 'concern expressed by a number of notable scientific and conservation organisations that such species are threatened with extinction' and the need to get scientific names correct (NZPD 432: 2470), the Speaker, Richard Harrison, struggled to control the House. Eventually, in exasperation he exclaimed, 'I am surprised that members are so excited about such long names and such small things' (NZPD 432:

Table 5 Taxa deleted from an initial list of endangered and rare New Zealand invertebrate species suggested for protection, before the amended list was published as a new Seventh Schedule of the Wildlife Act 1953 ('terrestrial and freshwater invertebrates declared to be animals') in September 1980. Reasons why each taxon was deleted from the list, and at whose suggestion, are given where known. Comments attributed to Lincoln College were from a joint submission from members of the Entomology Department (Gordon Williams, Rowan Emberson, David Penman, Eric Scott, John Waller, Mike Butcher, John Early and Susan Worner). Comments attributed to Auckland Museum are from a submission from the Auckland Institute and Museum.

Taxon	Who asked for change?	Reasons given
Insecta		
Ephemeroptera (mayflies)		
Siphonuridae		
<i>Oniscigaster wakefieldi</i>	Lincoln College Auckland Museum	Difficult to identify from common relatives, likely to be killed inadvertently during stream sampling. Species is difficult to identify rather than rare
Coleoptera (beetles)		
Staphylinidae (rove beetles)		
<i>Paratrochus</i> (all species of genus)	?	Deleted 31 October 1979 without explanation
<i>Nototrochus</i> (all species of genus)	?	Deleted 31 October 1979 without explanation
Curculionidae (weevils)		
<i>Unas piceus</i>	?	A very small (<3 mm) species that has not been relocated since it was described in 1908 (from Mt Manaia, Whangarei Heads)
Arachnida		
Araneae (spiders)		
Periegopidae		
<i>Periegops suteri</i>	?	Some doubt amongst experts as to the taxonomic status of the species
Mollusca		
Gastropoda (snails)		
<i>Paryphanta busbyi busbyi</i> (kauri snail) [as part of <i>Paryphanta</i> – all species]	Auckland Museum	Subspecies moderately abundant; its inclusion is not warranted
<i>Liarea bicarinata</i> (a small land snail)	Auckland Museum	Species quite abundant; wider distribution than previously thought
<i>Physastra variabilis</i> (a freshwater snail)	?	Deleted 31 October 1979 without explanation
Bivalvia (mussels)		
<i>Cucumerunio websteri websteri</i> (a freshwater mussel)	Koro Wētere, MP	Difficult to distinguish from other mussels collected as food by Māori

2472). The Bill was eventually passed, and the revised schedule was included in the Wildlife Amendment Act 1980 (Appendix 5).

In July 2006, the Department of Conservation (which replaced the Wildlife Service in 1987) initiated a review of the schedules of the Wildlife Act 1953 by releasing the public discussion document *Review of level of protection for*

some New Zealand wildlife. Of the 361 submissions received, nearly 30 were detailed submissions from the New Zealand entomological research community (Department of Conservation 2008). For invertebrates, the review used the following criteria to decide whether or not a species should be protected. First, a species needed to be rare. Second, the species also needed to be (1) iconic, interesting or attractive

to the general public; or (2) regarded as collectable by overseas invertebrate collectors; or (3) iconic and living in a vulnerable location and vulnerable to deliberate harm by humans; or (4) have conservation management needs that would be assisted by protection. 'Rare', 'iconic' and 'collectable' were all defined. Two additional criteria were that species needed to have been formally described and their threat status assessed. A total of 309 invertebrate taxa were assessed against the criteria, from which an additional three genera and nine species were added to the Seventh Schedule (terrestrial and freshwater invertebrates 'declared to be animals' and thereby protected) when the Wildlife Order 2010 was enacted (Appendix 5).

Lizards: 1981 and 1996

The need for protection of New Zealand lizards was raised by Professor Joan Robb of Auckland University in a conversation with Brian Bell, senior conservation officer for the Wildlife Branch, Internal Affairs, on 2 May 1969 (file note in WIL 33/5/47 Part 1). The main concerns stressed were competitive collecting by schoolchildren (apparently encouraged by some teachers), and collecting for exchange by members of the newly formed New Zealand Herpetological Society (NZHS). The topic was discussed at a Fauna PAC meeting on 23 May, where it was mentioned that Dick Dell, director of the Dominion Museum, held similar concerns. Gordon Williams, Acting Controller of the Wildlife Branch, agreed that the Department of Internal Affairs would look into the matter. Tony Whitaker of the Animal Ecology Division of DSIR provided some thoughts on lizard protection to Bell in a two-page letter on 25 July 1969 (WIL 33/5/47 Part 1), but the matter was put on hold for a year, until the Wildlife Branch convened a meeting in Wellington on 16 July 1970. The six attendees were Robb, Whitaker, Jock Moreland (Dominion Museum), Mike Meads (secretary of the NZHS), and Ian Crook and Bell from the Wildlife Branch. The meeting proposed that a new schedule, 'Wildlife with limited protection', be added to the Wildlife Act 1953, rather than granting full protection to any lizard species (WIL 33/5/47 Part 1). Note that protection could have been achieved by amending the Fifth Schedule 'Wildlife not protected', which listed 'Lizards – Skink (family Scincidae). Gecko lizard (family Geckonidae [*sic*])'.

Despite occasional enquiries (e.g. letters from Dennis Keall, secretary of the NZHS, on 24 July 1972, and lizard enthusiast Pat Miller on 7 September 1979, WIL 33/5/47 Part 1), there was no progress with legal protection of lizards until 19 October 1979, when a file note by Bell referred to

another round of consultation with Robb, Meads, Whitaker and Moreland, plus Bruce Thomas (Ecology Division, DSIR) and Rod Rowlands (NZHS). This note suggested 11 species to be listed in the Fifth Schedule (Table 6), meaning that any species not listed would be absolutely protected (WIL 33/5/47 Part 1). A letter dated 14 November 1979 and sent to the people consulted (WIL 33/5/47 Part 1) stated that the proposal had been accepted by Fauna PAC, but the draft Order in Council sent to the Minister of Internal Affairs a year later (10 December 1980) listed only four species (Table 6). File WIL 33/5/47 provides no explanation for why full protection was granted to the remaining seven species listed in the table.

The four species placed on the Fifth Schedule by The Wildlife Order 1981 were 'Common skink (*Leiopisma nigriplantare maccanni* [*sic*]), Copper skink (*Cyclodina aenea*), Common gecko (*Hoplodactylus maculatus*), Forest gecko (*Hoplodactylus granulatus*)' (current nomenclature is given in Table 6; note that all four names are now known to have covered species complexes, and so the names as applied in 1981 each contained three or more currently recognised species). The briefing memo provided to Allan Highet, Minister of Internal Affairs, on 10 December stated:

The four unprotected species are common and widely distributed. They are the normal lizard found and kept by young people. This allows such activity, from which a deep appreciation of wildlife and conservation often stems, and can continue into later life. The protection of the rare species brings the lizard fauna into line with the other vertebrate groups (mammals, birds, amphibians) which already have protection. (WIL 33/5/47 Part 1)

By the early 1990s, several problems with having these four lizard 'species' unprotected became apparent. The first was the realisation that some of the taxa listed contained cryptic species complexes, some species of which may have been threatened, and all of which were difficult to distinguish. This first became apparent when Patterson and Daugherty (1990) split '*Leiopisma nigriplantare maccanni*' into four species (see Hudson 1994a). The second was the difficulty that non-specialists had in identifying many New Zealand lizard species (i.e. identifying whether an individual animal belonged to a protected species or not; Hudson 1994b). The third was a marked increase in collecting of the unprotected species from the wild for sale and export, with the level of harvest severely impacting populations at some localities (Hudson 1994b; Whitaker & Freeman 1994; multiple letters on DOC file ACT 0039 Vol. 3).

Table 6 Lizard species proposed to remain as 'wildlife not protected' in a memo to the director of the Wildlife Service dated 19 October 1979 (Archives New Zealand, WIL 33/5/47 Part 1). Only the four species shown in bold were included in the Wildlife Order 1981, meaning that the remaining seven became absolutely protected. Note that most of the species recognised in 1979 are now known to contain multiple species; the names in the right-hand column do not cover all taxa implied by the 1979 name for at least nine species. The counts of extra species (given as '+ *n* spp.')

Name as given in the 1979 memo	Current name
Gekkonidae	
<i>Hoplodactylus pacificus</i> (Gray, 1842) <i>sensu</i> Robb & Rowlands (1977)	<i>Dactylocnemis pacificus</i> (Gray, 1842) + 5 spp.
<i>Hoplodactylus maculatus</i> (Boulenger, 1885) <i>sensu</i> Robb & Rowlands (1977)	<i>Woodworthia maculata</i> (Gray, 1845) + 10 spp.
<i>Hoplodactylus granulatus</i> (Gray, 1845) <i>sensu</i> McCann (1955)	<i>Mokopirirakau granulatus</i> (Gray, 1845) + 9 spp.
<i>Naultinus elegans</i> (Gray, 1842) <i>sensu</i> McCann (1955)	<i>Naultinus elegans</i> Gray, 1842 + 3 spp.
Scincidae	
<i>Leiopisma smithi</i> (Gray, 1845) <i>sensu</i> Hardy (1977)	<i>Oligosoma smithi</i> (Gray, 1845) + 1 sp.
<i>Leiopisma moco</i> (Dumeril & Bibron, 1885) <i>sensu</i> Hardy (1977)	<i>Oligosoma moco</i> (Duméril & Bibron, 1839)
<i>Leiopisma zelandicum</i> (Gray, 1843) <i>sensu</i> Hardy (1977)	<i>Oligosoma zelandicum</i> (Gray, 1843)
<i>Leiopisma nigriplantare maccani</i> (Hardy, 1977) <i>sensu</i> Hardy (1977)	<i>Oligosoma polychroma</i> (Patterson & Daugherty, 1990) + 18 spp.
<i>Leiopisma lineocellatum</i> (Dumeril & Dumeril, 1851) <i>sensu</i> Hardy (1977)	<i>Oligosoma lineocellatum</i> (Duméril & Duméril, 1851) + 3 spp.
<i>Cyclodina ornata</i> (Gray, 1843) <i>sensu</i> Hardy (1977)	<i>Oligosoma ornatum</i> (Gray, 1843) + 1 sp.
<i>Cyclodina aenea</i> (Girard, 1857) <i>sensu</i> Hardy (1977)	<i>Oligosoma aeneum</i> (Girard, 1857) + 2 spp.

From September 1994, Bruce Hudson (editor of *Moko*, the newsletter of the NZHS) and Tony Whitaker (editor of *SRARNZ Notes*, the newsletter of the Society for Research on Amphibians and Reptiles in New Zealand) encouraged letter-writing campaigns to DOC seeking full protection for all New Zealand lizards. (DOC had replaced the Wildlife Service in 1987.) DOC staff from Canterbury also requested their own Head Office Protected Species Policy Division to seek full protection, as they were aware of a commercial collector who was removing 1000–2000 common geckos from Banks Peninsula every year for export. In response, a memo was drafted to Denis Marshall, Minister of Conservation, on 14 October 1994, proposing that a separate Order in Council protecting all lizard species be prepared immediately, rather than waiting on the outcome of a wider review of protected species that was underway. Yet still the matter languished for another two years, until 12-year-old NZHS member Andrew Stanaway lobbied his

local MP to ask the Minister of Conservation why protection for all lizard species was not forthcoming (Whitaker 1996). The resulting media coverage got an immediate response in the lead-up to the 1996 election, and the Wildlife Order protecting the last four New Zealand lizard species was eventually published on 19 September 1996.

Kea: 1970 and 1986

The kea was one of only three native bird species that received no level of protection from the Wildlife Act 1953 (along with black shag and swamp harrier), and it was widely persecuted due to its reputation for harming and killing sheep (Marriner 1908). Kea received partial protection in 1970 following a recommendation from Fauna PAC. The Fauna PAC chairman's report of 16 May 1968 recorded that both island acclimatisation society councils supported the change, and a letter in the same file (WIL 33/5/46 Part 4) from Gordon Williams (Acting Controller of the Wildlife Branch of Internal Affairs) dated 21 May

1969 and addressed to county clerks noted that the South Island High Country Committee of Federated Farmers had no objection to the proposed change. The Wildlife Order granting partial protection was published in the *New Zealand Gazette* on 18 June 1970. While this had little impact on farmers (who could still kill kea if they were harming stock), the major effect was that the payment of bounties on kea beaks was discontinued. This was the reason why Internal Affairs wrote to county clerks again on 30 June 1970, as most kea bounty payments at the time were made by county councils (WIL 33/5/46 Part 4).

The campaign to gain full protection for the kea had its genesis in a letter from the author Philip Temple to Ralph Adams, director of the Wildlife Service, on 11 December 1980 (WIL 33/5/46 Part 4). At the time, Temple was writing his anthropomorphic novel about kea, *Beak of the moon* (Temple 1981), and expressed concern at kea not having 'the full protection that such a unique native bird deserves'. Temple wrote again on 23 January 1981, suggesting that 'every opportunity should be taken to put out well argued 'propaganda' on behalf of these birds, and to assist in education which might help to eradicate entrenched prejudice ... it is about time the most conscientiously slaughtered of our native birds received more enlightened treatment' (WIL 33/5/46 Part 4).

On 12 December 1983, P.H.C. 'Bing' Lucas, Director-General of the Department of Lands and Survey, wrote to Adams expressing concern about declining kea numbers in traditional kea habitat in the South Island, based on a conversation with Philip Temple (WIL 33/5/46 Part 4). Five months later, Lynn Harris, information officer for the Wildlife Service, wrote to Temple offering him a contract to prepare a brochure about kea: 'we think the time is ripe to produce some publicity about the bird. What we have in mind is an informative and colourful brochure which stresses the positive aspects of the Keas and the fact that this much maligned bird is protected' (letter dated 15 May 1984, WIL 33/5/46 Part 4).

While working on the brochure, Temple produced a newspaper feature published under the titles 'Who are the kea killers?', 'Kea killing must be stopped', and 'Killings threaten to wipe out kea' (Temple 1984a–c), which included the phrase 'The time has come for the kea to be fully protected before the prejudice, ignorance and cupidity of the kea killers push another of our unique native birds towards extinction.' The article also referred to the alleged practice of some runholders putting out pink fibreglass insulation on the

hillsides: 'When keas pull it apart, they ingest the glass fibre and die slowly from asphyxiation.' This provoked a minor flurry of letters to Peter Tapsell, Minister of Internal Affairs, calling for full protection for kea, and also an indignant 'please explain' from the manufacturer of Pink Batts (WIL 33/5/46 Part 4). In their reply (7 December 1984, WIL 33/5/46 Part 4), the Wildlife Service admitted that they were collaborating with Temple in producing a pamphlet, and stated 'we were under the impression that Mr Temple would not make public any controversial issues which may have been discussed in camera with Wildlife Service staff'.

The colour pamphlet *Keas need your help* was published by the Wildlife Service in mid-1985. While not openly advocating for full protection, it did include the comment 'There is increasing pressure for this unique bird to be fully protected.' On 30 May, Brian Bell (assistant director, protected fauna) drafted an internal memo, concluding 'I fully support any move to have this species given total protection' (WIL 33/5/46 Part 4), and Adams stated the same in a letter to Temple on 18 June 1985 (WIL 33/5/46 Part 4).

The Royal Forest and Bird Protection Society (Forest & Bird) became involved in the kea protection campaign about this time, with an article 'Group wants complete protection for kea' published in *The Press* on 11 June. In August, Gerry McSweeney, the society's conservation director, wrote background notes for a Forest & Bird executive meeting held on 30 August, entitled 'Keas – preservation campaign needed', and stating that the Wildlife Service had approached the society for support in the campaign to protect the kea (WIL 33/5/46 Part 4). The executive agreed to congratulate the Wildlife Service on its production of an excellent pamphlet on kea, and further agreed that the society embark on a campaign to seek protection for the kea and 'undertake appropriate publicity effort to increase public awareness about kea'. McSweeney met with Brian Bell, Richard Anderson and Malcolm Crawley (all of the Wildlife Service) on 23 October 1985, and they agreed on a strategy for seeking protection for kea, which was supported by Fauna PAC on 5 November (WIL 33/5/46 Part 4).

In a curious twist to the tale, the Wildlife Service inadvertently added considerable fuel to the campaign by taking into captivity five kea that were causing damage to equipment on the recently opened Remarkables ski field in October 1985. This was immediately condemned by Neil Simpson, senior ranger for the Lands and Survey Department ('Remaining keas' 1985), and provoked a barrage of complaints and considerable media coverage, all

of which was in support of kea protection. Over the next four months at least four cabinet ministers received (and replied to) numerous letters seeking the release of the 'Remarkable Five': Peter Tapsell (Internal Affairs), Koro Wētere (Lands), Russell Marshall (Environment) and Mike Moore (Tourism), and letters on the subject from Murray Jones (two), Tony Pullar (two), Paul Powell and Michael Floate were published in the *Otago Daily Times* during November (WIL 33/5/46 Part 4). McSweeney's letter to Tapsell (29 November, WIL 33/5/46 Part 4) was particularly damning, coming 'at a time when our Society has been working quietly with your officers at a national level to seek full legal protection for ... our magnificent mountain parrot'. After deploring the actions of Alan Hall, the Southern Lakes conservator of wildlife, McSweeney stated that the attendees at the 17 November 1985 Forest & Bird Council meeting (representing 52 branches and 48,000 members) widely condemned the removal of kea from the Remarkables, and that they had passed a unanimous resolution to urge the 'Minister of Internal Affairs to require his department to immediately return the keas to their natural homes'.

However, less than a month later, McSweeney wrote to the director of the Wildlife Service congratulating him on the initiative he had taken to protect kea, and pledging the society's full support (letter dated 24 December 1985, WIL 33/5/46 Part 4). This was evidently in response to a letter that Ralph Adams sent to 21 stakeholder groups on 9 December stating the Wildlife Service's intention to seek a change in status of the kea from partially protected to fully protected, and inviting their comment (WIL 33/5/46 Part 5). No dissenting responses were received, and on 18 June 1986, Adams received a letter from M.R. Murchison, chairman of the South Island High Country Committee of Federated Farmers, stating that the South Island High Country Conference had agreed that the kea be 'accorded fully protected status on condition that high country farmers reserve ... the right to control Keas when damage to stock or property occurs' (whilst recognising that they would need to seek authority to do so from the Wildlife Service on a case-by-case basis) (WIL 33/5/46 Part 5). The Order in Council protecting the kea was published on 13 November 1986.

The proactive campaign to protect the kea was the legal swansong of the New Zealand Wildlife Service, which ceased to exist when the Department of Conservation was created on 1 April 1987.

Spur-winged plover: 2010

As described at the end of the 'Invertebrates: 1980 and 2010' section above, DOC managed a robust consultation process regarding the schedules of the Wildlife Act 1953 during 2006–08, leading to gazettal of the Wildlife Order 2010. While this process affected many marine species, terrestrial invertebrates and introduced bird species, the only native bird that was significantly affected was the spur-winged plover. The plovers had become widespread and abundant throughout New Zealand since colonising from Australia in the 1930s (see above), and the review discussion document specifically sought comment on their appropriate level of protection (Department of Conservation 2006). The document stated that DOC had received a significant number of requests to review the protection status of spur-winged plovers over the previous decade, including from private individuals, regional councils, conservation organisations and hunting interests. The issues raised were mainly 'the hazard spur-winged plovers pose to aircraft, the damage they cause to crops, and their alleged adverse effects on other native species'. A summary of New Zealand bird strike data was presented, showing that the spur-winged plover was the species most commonly involved in bird strikes and near misses in New Zealand, with 1406 incidents (37% of a total of 2221) between October 1999 and September 2004.

While DOC could (and did) issue permits allowing airport authorities to control spur-winged plovers, the status quo (fully protected) and the option of making spur-winged plovers partially protected would allow control only on land owned or managed by the airport authority, with separate authority required if control was sought on adjacent land where the birds might nest or roost. Spur-winged plovers were also considered an agricultural pest in some market gardens, causing damage to cauliflower, broccoli and lettuce in particular, but their impacts on native plant species were not considered significant (Department of Conservation 2006).

Of the 116 submissions received that referred to spur-winged plover, 10 wished absolute protection to be retained, 35 requested listing in the Second Schedule (partial protection), and 65 sought listing in the Fifth Schedule (unprotected), including all 11 submissions from the aviation industry (representing 35 airports and about 30 airline operators; Department of Conservation 2008). Four submitters requested listing the species in the First Schedule (game), and one in the Third Schedule (able to be hunted or killed subject to Minister's notification). Fish & Game

New Zealand did not make a specific recommendation, but expressed no interest in having spur-winged plover listed as a gamebird.

After detailed consideration of the threat posed by spur-winged plovers at airports, and control options, the report concluded:

DOC is completely satisfied that all other avenues for controlling spur-winged plover have been thoroughly examined and tested, and that a protection status of 'not protected' is appropriate for this species. The New Zealand Conservation Authority's recommendation is that the spur-winged plover be placed on Schedule 5 'which would enable regional councils to include this species on pest management strategies where they are a nuisance'.

And it recommended: 'That "Spur-winged plover (*Vanellus miles*)" be added to Schedule 5 of the Wildlife Act, thereby moving the protection status of the spur-winged plover from "absolutely protected" to "not protected".'

When the Wildlife Order 2010 was gazetted on 8 July 2010, the spur-winged plover became the first native New Zealand bird to lose absolute protection in 88 years. This was only 79 years after the species first bred in New Zealand, and 64 years after it was specifically protected by The Animals Protection (Australian Spur-winged Plover) Warrant 1946. In addition, the grey teal was moved to the Third Schedule (wildlife that may be hunted or killed subject to Minister's notification), in recognition that this species is frequently shot in error by recreational duck shooters. There has been no subsequent notice authorising hunting of grey teal. Listing in the Third Schedule had the effect of reducing the maximum penalty for shooting a grey teal from \$100,000 to \$5000 (i.e. the same penalty as for shooting a gamebird out of season).

Part 3: The history of legal protection of species and taxonomic groups of New Zealand's native birds, bats, reptiles, frogs and terrestrial invertebrates

The sequence below approximately follows Gill *et al.* (2010) for birds. See Appendix 1 for full references for Acts, statutory regulations and *New Zealand Gazette* notices.

Kiwi (*Apteryx* spp.)

Kiwi were protected by *New Zealand Gazette* notice in March 1896, but this was not backed up by exclusion from game season notices, and so they could be legally taken

during game seasons through to May 1906, when a *New Zealand Gazette* notice granted them absolute protection. They have been continuously protected since.

New Zealand quail (*Coturnix novaeseelandiae*)

It is unclear whether the 'quail' mentioned in the Protection of Certain Animals Act 1861 and the Birds Protection Act 1862 was intended to include the endemic New Zealand quail in addition to imported game species. Quail were included among native game in the Protection of Animals Act 1867 and the Animals Protection Act 1880, and there is no doubt that this referred to New Zealand quail: 'The native quail ... which was formerly abundant in all the open country, afforded the early colonists excellent sport, and it was not an uncommon thing to bag twenty brace in the course of a single afternoon' (Anglo-New-Zealander 1872). New Zealand quail were implicitly protected by the Animals Protection Amendment Act (APAA) 1910, and explicitly in a *New Zealand Gazette* notice published in April 1916, some 40 years after the last accepted sighting of this extinct species (Tennyson & Martinson 2007).

Waterfowl (Anatidae)

'Native ducks' were included as game in The Wild Birds' Protection Act 1864 and the Protection of Certain Animals Act 1865, with the wording changed to 'wild duck of any species' in the Protection of Animals Act 1867. This continued for the next 39 years, with 'teal' (presumed to be black teal [= New Zealand scaup], but possibly including brown teal and grey teal) added as a game species in the Animals Protection Act 1880.

Paradise shelducks were presumably considered to be part of 'wild ducks', although they were exempted from hunting in Wellington Acclimatization District during 1898–1903 (and Marlborough in 1899, 1901 and 1904, Rotorua in 1903, and North Canterbury in 1904). *New Zealand Gazette* notices published on 20 April 1905 and 26 April and 20 December 1906 protected paradise shelducks nationwide during the 1905–07 game seasons, and the birds were listed as protected in the Animals Protection Act 1907 (and the Animals Protection Act 1908). This was reinforced before the 1908 game season (*NZG* 30, 16 April 1908: 1180), although the notice stated that the ducks were protected for a year, when they were fully protected by the Act.

The blue duck was exempted from hunting in Wellington Acclimatization District during 1898–1902, before being absolutely protected in February 1903 (with the decision reinforced in the 1903 game season notices; Fig. 1). The

New Zealand (= southern) merganser (*Mergus australis*) was absolutely protected in May 1906, four years after the last accepted sighting (Williams 2012). The Animals Protection Act 1907 continued protection for blue duck (as well as paradise shelduck). The same Act added black swan to the native game list for the first time, alongside wild duck and teal. Previously, 'swans' were considered imported game in the 1861, 1865, 1867, 1873 and 1880 Acts. Black swans were removed from the game list in July 1878 (until August 1880) and again in December 1890, before being returned to most district game lists between 1891 and 1895.

All native waterfowl were protected by the APAA 1910, with protection suspended for grey duck and teal during the 1911 game season (*NZG* 30, 13 April 1911: 1276), and teal, grey duck, Australasian shoveler, black swan and paradise shelduck during the 1912 game season, with only a two-week season for paradise shelduck. Protection was similarly suspended for teal, grey duck, Australasian shoveler and black swan during every game season from 1913 to 1921 (*New Zealand Gazette* notices published in March or April each year). Paradise shelducks were protected from 1912 to 1917, but there were restricted shooting seasons in Otago and Southland in 1918 (*NZG* 5, 17 January 1918: 154) and in several South Canterbury and North and Central Otago districts in 1919 (*NZG* 39, 1 April 1919: 886; *NZG* 45, 14 April 1919: 1019; and *NZG* 53, 1 May 1919: 1251). A *New Zealand Gazette* notice published in April 1916 included 'blue mountain duck, Auckland Island duck [(= Auckland Island teal) and] southern merganser' as absolutely protected species.

The Animals Protection and Game Act (APGA) 1921–22 provided full protection to Auckland Island teal, brown teal, grey teal, blue duck, New Zealand merganser and paradise shelduck, and listed black swan, New Zealand scaup, grey duck and shoveler as native game. Paradise shelduck was added to the game list in 1923 (*NZG* 32, 9 April 1923: 1004–1005), though it was omitted in 1924 (*NZG* 21, 9 April 1924: 841–843), apart from a restricted season in Otago and Southland (*NZG* 28, 24 April 1924: 1045). The species was returned permanently to the game list in 1925 (*NZG* 22, 1 April 1925: 947), with a closed season in 1928 (*NZG* 21, 14 March 1928: 675).

New Zealand scaup were granted absolute protection in September 1934. Most native waterfowl species (including New Zealand scaup, Campbell Island teal *Anas nesiotis* and all vagrant species) were absolutely protected by the Wildlife Act 1953, with black swan, grey duck, Australasian shoveler

and paradise shelduck listed as game species. The grey teal was moved to the Third Schedule of the Wildlife Act 1953 in 2010 (wildlife that may be hunted or killed subject to Minister's notification), to reduce the maximum fine for birds killed in error by recreational duck shooters.

Grebes (Podicipedidae)

The crested grebe was added to the game list in March 1885, with protection reinforced through exclusion from hunting in annual game season notices continuously from 1888 (Fig. 1). The New Zealand dabchick (*Poliocephalus rufopectus*) was protected from May 1906 to 1907 (it was excluded from the Animals Protection Act 1907), then continuously since the APAA 1910. Eastern little grebe (*Tachybaptus novae-hollandiae*) and hoary-headed grebe (*P. poliocephalus*) were both first detected in New Zealand after the Wildlife Act was passed in 1953 (Gill *et al.* 2010), and so were automatically protected.

Penguins (Spheniscidae)

With the apparent exception of Snares crested penguin (*Eudyptes robustus*), all penguin species breeding in the New Zealand region (including Macquarie Island) were protected from May 1906 to 1907 (when they were excluded from the Animals Protection Act 1907). All penguin species were protected by the inclusive APAA 1910, although the APGA 1921–22 again omitted the Snares crested penguin, which was at the time lumped with Fiordland crested penguin (*E. pachyrhynchus*; see Oliver 1930). It is likely that the 1906 *New Zealand Gazette* notice and the APGA 1921–22 were intended to cover all crested penguin species breeding in the region, but the distinctiveness of the Snares crested penguin was not recognised until 1953 (Oliver 1953), the same year that the inclusive Wildlife Act was enacted, which thereby protected all vagrant penguin species also. Until 1996, penguins were protected only when on land or within 12 nautical miles (22.2 km) of the coast; the area within which they are protected was pushed out to 200 nautical miles (370 km) from the coast by the Fisheries Act 1996.

Albatrosses (Diomedidae)

Albatrosses were a surprising omission from the 138 protected species listed in the *New Zealand Gazette* in May 1906, although the larger (*Diomedea*) species and their eggs were granted protection in March 1907. All 'indigenous' albatross species were protected by the inclusive APAA 1910 (and specifically mentioned in April 1916), with eight species listed in the APGA 1921–22 (Appendix 3), including one

non-breeding migrant species (yellow-nosed mollymawk *Thalassarche chlororhynchos*, which would include *T. carteri*). Protection was extended to the newly described Chatham Island mollymawk in 1931 (*NZG* 1, 9 January 1931: 13), but the white-capped mollymawk (*T. cauta steadi*), which was described in 1933 (Falla 1933), was not protected until 1953. The Wildlife Act 1953 also extended protection to all vagrant albatross species. Until 1996, albatrosses were protected only when on land or within 200 nautical miles (22.2 km) of the coast; the area within which they are protected was pushed out to 200 nautical miles (370 km) from the coast by the Fisheries Act 1996.

Petrels (Procellariidae, Hydrobatidae and Pelecanoididae)

Most New Zealand breeding petrels were protected from May 1906 to 1907 (when they were excluded from the Animals Protection Act 1907). The 31 petrel species listed in 1906 included three species that do not breed in New Zealand (Wilson's storm petrel *Oceanites oceanicus*, Antarctic fulmar *Fulmarus glacialis* and blue petrel *Halobaena caerulea*; see Appendix 2). All 'indigenous' petrel species were protected by the inclusive APAA 1910, with 28 species listed in the APGA 1921–22 (Appendix 3). The APGA 1921–22 list was almost identical to the 1906 list, differing only in the absence of one prion (*Prion banksi* [*Pachyptila desolata*]), one diving petrel (*Pelecanoides* [*urinatrix*] *exsul*) and one shearwater (*Puffinus obscurus* [*P. gavia*]), and including the same three non-breeding migrant species (i.e. Wilson's storm petrel, Antarctic fulmar and blue petrel).

These lists excluded 13 petrel species that breed in New Zealand (based on 2010 taxonomy), including five endemic species. Among the species excluded was the sooty shearwater, the chicks of which were (and are) traditionally harvested as muttonbirds or tītī on islands around Stewart Island/Rakiura. Four further species were at the time considered conspecific with sibling taxa, namely northern giant petrel (*Macronectes halli*) with *M. giganteus*, Hutton's shearwater (*Puffinus huttoni*) with *P. gavia*, subantarctic little shearwater (*Puffinus elegans*) with *P. assimilis*, and Kermadec storm petrel (*Pelagodroma albiclunis*) with *P. marina*, and it is likely that the fulmar prion (*Pachyptila crassirostris*) was similarly confused with the fairy prion (*Pachyptila turtur*). Three species that breed elsewhere were not recognised as having New Zealand breeding populations until after 1922: soft-plumaged petrel (*Pterodroma mollis*), white-bellied storm petrel (*Fregetta gallaria*) and South Georgian diving

petrel (*Pelecanoides georgicus*). Two endemic species (Chatham Island tāiko *Pterodroma magentae*, and New Zealand storm petrel *Fregetta maoriana*) were at the time known from only one and three specimens, respectively, collected at sea, with their breeding grounds not confirmed until 1987 and 2013, respectively (Imber *et al.* 1994; Gaskin 2013). The two remaining species (Pycroft's petrel *Pterodroma pycrofti* and Westland petrel *Procellaria westlandica*) were unknown in 1922, and were named in 1933 and 1946, respectively (Falla 1933, 1946). All these species remained unprotected until covered by the Wildlife Act 1953. Until 1996, petrels were protected only when on land or within 12 nautical miles (22.2 km) of the coast; the area within which they are protected was pushed out to 200 nautical miles (370 km) from the coast by the Fisheries Act 1996.

The sooty shearwater and grey-faced petrel were included in the Third Schedule of the Wildlife Act 1953, allowing traditional harvest of their chicks (muttonbirds) by Māori. Harvest of sooty shearwaters (tītī) is currently regulated by The Titi (Muttonbird) Notice 1978, the Rakiura Titi Islands Bylaws 2005, the Titi (Muttonbird) Notice 2005, and The Titi (Muttonbird) Islands Amendment Regulations 2007. Harvest of grey-faced petrels (northern muttonbirds) is currently regulated by The Grey-faced Petrel (Northern Muttonbird) Notice 1979 and The Grey-Faced Petrel (Northern Muttonbird) Amendment Notice 2009.

Tropicbirds (*Phaethon* spp.), gannets and boobies (Sulidae), and frigatebirds (*Fregata* spp.)

The Australasian gannet (*Morus serrator*) was protected from May 1906 to 1907. Breeding species (i.e. red-tailed tropicbird *Phaethon rubricauda*, Australasian gannet and masked booby *Sula dactylatra*) were covered by the APAA 1910, which apparently also included frigatebirds as indigenous species (see *NZG* 42, 12 April 1916: 1034). All three breeding species were listed as protected in the APGA 1921–22, but frigatebirds were excluded. All species have been protected when on land or within 12 nautical miles (22.2 km) of the coast since 1953, and protected out to 200 nautical miles (370 km) from the coast since the passing of the Fisheries Act 1996.

Shags and cormorants (Phalacrocoracidae)

All shag species were protected by the APAA 1910. Within three months, protection was removed for little shag, black shag and little black shag. The only shag species listed in the APGA 1921–22 was Pitt Island shag. New Zealand king

shag was protected in May 1927, Stewart Island shag in April 1930, the four remaining *Leucocarbo* shags and spotted shag (including blue shag) in January 1931, and the little black shag in November 1940. The little shag and pied shag were included in the Third Schedule on the Wildlife Act 1953 (able to be hunted or killed subject to Minister's notification), and black shag was not protected. Black shag was moved to the Second Schedule (partially protected) in 1986, and to the Third Schedule (with little and pied shags) in 2010. The circumstances under which black shags and little shags may be killed is covered by the Wildlife (Black Shag and Little Shag) Notice 2012.

Hérons, bitterns, ibises and spoonbills (Ciconiiformes)

The white heron was added to the game list in March 1885, with protection reinforced through exclusion from hunting in annual game season notices continuously from 1888 (Fig. 1). Australasian bittern was protected in Canterbury in September 1903, and both that species and the extinct New Zealand little bittern have been protected nationwide since October 1904. White-faced heron (*Egretta novaehollandiae*), reef heron (*E. sacra*) and nankeen night heron were protected in May 1906, with 'bittern', reef heron and white heron also listed in the Animals Protection Act 1907 (i.e. white-faced heron and nankeen night heron were no longer protected). All species were protected by the inclusive APAA 1910, with 'herons, night-herons, reef herons and bitterns' explicitly listed as protected in April 1916. The same six species listed in 1906 were included in the APGA 1921–22, meaning that ibises and spoonbills (Threskiornithidae) and remaining vagrant herons were not protected until 1953.

Diurnal birds of prey (Accipitridae and *Falco* spp.)

All birds of prey were protected by the APAA 1910. Within three months, protection was removed for 'hawks of all species'. This suppression of protection was continued annually until 1916 (*NZG* 145, 23 December 1915: 4105–4106), with 'Hawks, owls, and harriers of all species' listed as protected in April 1916. 'Hawks of all species' were returned to the list of unprotected species in January 1917. New Zealand falcon was included in the Second Schedule of the Wildlife Act 1953 (i.e. partially protected), while swamp harrier was listed in the Fifth Schedule (not protected). The falcon was granted full protection in June 1970 (Wildlife Order 1970), and the harrier was moved to the Second Schedule in January 1986 (Wildlife Order 1986), then to the Third Schedule (able to be hunted or killed subject to Minister's notification) in July 2010

(Wildlife Order 2010). The circumstances under which swamp harriers may be killed is covered by the Wildlife (Australasian Harrier) Notice 2012.

Rails, gallinules and coots (Rallidae)

Pūkeko were listed as native game from August 1886 until the APAA 1910, with closed seasons in 1901, 1904, 1907 and 1910 (Animals Protection Acts Amendment Act 1900, Animals Protection Act 1908, reinforced through annual game season notices). The Chatham Island rail was protected in 1904, 11 years after the last confirmed sighting (Tennyson & Martinson 2007). Eight rail taxa were listed as protected in May 1906: takahē, banded rail (*Gallirallus philippensis*), Macquarie Island banded rail (*G. p. macquariensis*) (already extinct), Chatham Island rail (already extinct), Dieffenbach's rail (*G. dieffenbachii*) (already extinct), Auckland Island rail (*Lewinia muelleri*), marsh crake (*Porzana pusilla*) and spotless crake (*P. tabuensis*). Of these, only banded rail was listed as protected in the Animals Protection Act 1907. All rails were protected by the APAA 1910, with protection suspended for pūkeko during the May–July game season in 1911, 1914, 1915, 1916, 1917, 1919, 1920 and 1921. The same eight rail species (or subspecies) as in 1906 were listed as protected in the APGA 1921–22, with the addition of pūkeko and weka (*Gallirallus australis*). Pūkeko was declared to be native game in April 1923, with 1929, 1930, 1931, 1934 and 1935 being closed seasons. Pūkeko have remained as a game species ever since (i.e. in the First Schedule of the Wildlife Act 1953), with weka on the Chatham Islands and islets off Stewart Island/Rakiura listed in the Third Schedule (able to be hunted or killed subject to Minister's notification). Vagrant rail species and Australian coots (*Fulica atra*) have been protected since 1953. Hunting of weka on the Chatham Islands is regulated by The Chatham Islands (Wildlife) Notice 1977 (which replaced the 1955, 1956 and 1975 notices).

Waders (Scolopacidae, *Rostratula* sp., *Haematopus* spp., Recurvirostridae, Charadriidae)

Waders of various species were included on the New Zealand game list from 1867 to 1941. Pied stilt, black stilt and 'curlew' (bar-tailed godwit) were listed as native game in the Protection of Animals Act 1867, with 'dotterell [*sic*]' (probably New Zealand dotterel and banded dotterel) added in the Protection of Animals Act 1873. Godwits (as 'curlew') were taken off the game list in December 1886, removing constraints on shooting them outside the May–July game season. The godwit hunting season was set as February–April

in the Animals Protection Act Amendment Act 1889, then as January–March in *NZG* 1, 7 January 1904: 12 and subsequently in the Animals Protection Act 1907 and *NZG* 84, 7 October 1909: 2535. The season was returned to February–April in *NZG* 78, 18 August 1910: 3189–3190, then back to January–March in *NZG* 2, 11 January 1912: 23, *NZG* 133, 10 December 1914: 4265–4266 (except Southland), *NZG* 103, 14 September 1916: 2997 (except Opotiki, Southland and Auckland), *NZG* 180, 20 December 1917: 4544 (except Opotiki, Southland and Auckland, with the Auckland season set at 15 January–14 April), *NZG* 1, 9 January 1919: 13, and *NZG* 1, 8 January 1920: 34 (except Opotiki and Southland).

Nineteen species of waders were listed as absolutely protected in May 1906, including red-necked avocet (*Recurvirostra novaehollandiae*), New Zealand dotterel, banded dotterel, lesser knot, South Island pied oystercatcher (*Haematopus finschi*), variable oystercatcher (*H. unicolor*), Pacific golden plover, shore plover (*Thinornis novaeseelandiae*), wrybill (*Anarhynchus frontalis*), sharp-tailed sandpiper (*Calidris acuminata*), red-necked stint, Snares Island snipe (*Coenocorypha huegeli*), Auckland Island snipe (*C. aucklandica aucklandica*), Chatham Island snipe (*C. pusilla*), pied stilt, black stilt and turnstone (see Appendix 2 for a full list). Only the two oystercatcher species were listed as protected in the Animals Protection Act 1907, with black stilt, pied stilt, dotterel and both ‘curlew’ and ‘godwit’ included in the game list.

The APAA 1910 protected all ‘indigenous’ waders. As godwits were not considered indigenous (‘Godwit [is] not indigenous’ [marginal file note signed by Hugh Pollen, Under-Secretary for Internal Affairs, 1 April 1911, Archives New Zealand, IA1 1911/3752]), it follows that no Holarctic migrant waders were protected by the APAA 1910 (and note the game seasons set for godwits between 1912 and 1920 listed above). Confusingly, five wader species were listed as ‘Native game protected in close seasons’ in April 1916 (black stilt, curlew, ‘dotterel’, godwit and pied stilt), while ‘Wading birds of all species, including turnstones, oyster-catchers, plovers, wrybill plovers, avocets, sandpipers, knots [and] snipe’ were listed as ‘Indigenous birds absolutely protected’.

The APGA 1921–22 listed 16 wader species as absolutely protected, including New Zealand dotterel, banded dotterel, black stilt, pied stilt, South Island pied oystercatcher, variable oystercatcher, shore plover, wrybill, sharp-tailed sandpiper and four taxa of *Coenocorypha* snipe (Appendix 3). Notable omissions included South Island snipe (*Coenocorypha*

iredalei, which was described in 1921), Chatham Island oystercatcher (*Haematopus chathamensis*, which was described in 1927), and all remaining Holarctic migrant species.

Pacific golden plover, bar-tailed godwit, lesser knot and turnstone were included as native game in the APGA 1921–22, with game seasons for godwit and knot (only) set annually from 1923 on (e.g. *NZG* 84, 16 November 1922: 2986–2991). Lesser knot, Pacific golden plover and turnstone were added to the schedule of absolutely protected wildlife in March 1934, bar-tailed godwit in February 1941, and the spur-winged plover in September 1946. All wader species were granted absolute protection by the Wildlife Act 1953, until the spur-winged plover was placed in the Fifth Schedule (wildlife not protected) in 2010 (Wildlife Order 2010).

Skuas (Stercorariidae) and gulls (*Larus* spp.)

‘Sea-gulls of all species’ were declared to be native game in April 1877, and ‘henceforth protected within Wellington Provincial District’. This status was annulled three years later, when gulls were not included in the Fourth Schedule of the Animals Protection Act 1880. ‘Seagulls’ were again declared to be game in January 1890, and ‘henceforth protected within the Provincial District of Auckland’. They were declared protected nationwide in August 1899, but this was not backed up by subsequent game season notices. Protection was removed along the Tukituki River, Hawke’s Bay, in August 1903, and Maniototo in September 1904, meaning that gulls could be killed year-round at these localities.

Red-billed gull, black-billed gull, Arctic skua and subantarctic skua were listed as absolutely protected in May 1906, meaning that southern black-backed gull was no longer protected. No gulls or skuas were listed in the Animals Protection Act 1907. All breeding (i.e. ‘indigenous’) species were likely covered by the APAA 1910, and ‘gulls, skuas’ were listed as ‘indigenous birds absolutely protected’ in April 1916. Only red-billed gull, black-billed gull and subantarctic skua were listed as protected in the APGA 1921–22. Both the black-backed gull and subantarctic skua were placed in the Second Schedule (partially protected) of the Wildlife Act 1953, with the black-backed gull moved to the Fifth Schedule (unprotected) in the Wildlife Order 1970, due to their predatory impacts on more threatened bird species (Brian Bell, pers. comm., 10 February 2014). Those skuas and gulls protected by the Wildlife Act 1953 were protected only when on land or within 12 nautical miles (22.2 km of the coast); the area within which they are

protected was pushed out to 200 nautical miles (370 km) from the coast by the Fisheries Act 1996.

Terns and noddies (Sternidae)

Seven tern species were listed as absolutely protected in May 1906. Using current nomenclature these were: white tern (*Gygis alba*), sooty tern (*Onychoprion fuscatus*), fairy tern (*Sternula nereis*), Caspian tern (*Hydroprogne caspia*), black-fronted tern (*Chlidonias albobristatus*), white-fronted tern (*Sterna striata*) and Antarctic tern (*Sterna vittata*). No terns were listed in the Animals Protection Act 1907. All breeding (i.e. 'indigenous') species were likely covered by the APAA 1910, with 'terns' listed among 'indigenous birds absolutely protected' in April 1916. The same seven species as in 1906 were listed in the APGA 1921–22, with the addition of black noddy, grey noddy and white-winged black tern. These 10 species plus all other breeding, migrant and vagrant tern and noddy species have been fully protected since 1953. Until 1996, terns and noddies were protected only when on land or within 12 nautical miles (22.2 km) of the coast; the area within which they are protected was pushed out to 200 nautical miles (370 km) from the coast by the Fisheries Act 1996.

Native pigeons (*Hemiphaga* spp.)

The New Zealand pigeon was listed as native game in The Wild Birds' Protection Act 1864, the Protection of Certain Animals Act 1865, and the Protection of Animals Act 1867, but was excluded by the Protection of Animals Act Amendment Act 1868, before being returned to the game list in the Protection of Animals Act 1872. It remained there until the APAA 1910, with closed seasons in 1896 (Animals Protection Act Amendment Act 1895), 1901, 1904 and 1907 (Animals Protection Acts Amendment Act 1900), and 1910 (Animals Protection Act 1907), with the closed seasons reinforced via annual game season notices. Exemptions were granted allowing Māori to kill pigeons in seven counties in the Bay of Plenty and Taupo regions during the 1901 closed season (NZG 48, 16 May 1901: 1068), and in the Urewera and Taupo districts during the 1910 closed season (NZG 35, 15 April: 1222, and NZG 46, 12 May 1910: 1418). Both native pigeon species were protected by the APAA 1910, with protection for New Zealand pigeon suspended during the May–July 1911 game season (NZG 30, 13 April 1911: 1276), which was the last time that they could be legally hunted. The Chatham Island pigeon was listed as absolutely protected in April 1916, when 'native pigeon' was listed as 'Native game protected in

close seasons'. There were no further open seasons before both the New Zealand pigeon and the Chatham Island pigeon were listed as absolutely protected in the APGA 1921–22. Note that the wording used in the Acts and *New Zealand Gazette* notices between 1864 and 1911 was 'pigeon indigenous in the Colony', 'wood pigeon' or 'native pigeon', and so would apply equally to *H. novaeseelandiae* and *H. chathamensis* (the latter was named in 1891).

Parrots (Psittaciformes)

Kākā were added to the list of native game in Southland in April 1887, and nationwide in August 1888. This did not provide protection during game seasons, as protection was not promulgated via game season notices. Also, the Animals Protection Acts Amendment Act 1900 listed kākā as a species for which there was to be a closed season in 1901 and every third year thereafter, meaning that they could be killed during game seasons other than in those years. The closed seasons were reinforced via game season notices in 1901, 1904 and 1907. Kākāpō was added to the list of native game in March 1896 (Fig. 1), and listed as absolutely protected in May 1906. Both kākāpō and kākā were among the relatively short list of bird species protected by the Animals Protection Act 1907. They have been protected continuously since (with kākā removed from the game list in June 1914).

All *Cyanoramphus* parakeets were protected in May 1906, but were excluded from the Animals Protection Act 1907. They were protected by the APAA 1910, and listed among absolutely protected species as 'Parakeets of all species' in April 1916. The seven taxa listed as protected in the APGA 1921–22 (Appendix 3) apparently excluded Reischek's parakeet (*C. hochstetteri*), unless it was considered conspecific with *C. novaeseelandiae*. All taxa have been protected since 1953.

The kea received automatic protection as an indigenous bird species in the APAA 1910, but within three months was listed as 'not deemed to be protected' (NZG 13, 16 February 1911: 642), with the listing repeated annually until the APGA 1921–22, where the bird was not listed (i.e. it was not protected). The kea was placed in the Fifth Schedule (not protected) of the Wildlife Act 1953, moved to the Second Schedule (partially protected) in the Wildlife Order 1970, and granted full protection in the Wildlife Order (No. 2) 1986.

Cuckoos (Cuculidae)

Both shining cuckoo and long-tailed cuckoo were first granted protection in May 1906, and (as 'cuckoo (Family

Cuculidae') were included in the Animals Protection Act 1907. Whether they were considered 'indigenous' under the APAA 1910 is unclear. During the Parliamentary debate regarding the Bill, the Hon. Sir W.J. Steward stated, 'No; they were not indigenous to New Zealand. Such birds as the shining cuckoo and another class of birds would not be protected, because they were not native birds or [were] migratory birds' (*NZPD* 153: 115), while William Field argued that 'the cuckoo, which came here and laid its eggs and hatched its young, was as much a native of this country as the country from which it migrated in the spring' (*NZPD* 153: 116). Shining cuckoo and long-tailed cuckoo were both listed as 'indigenous birds absolutely protected' in April 1916, and were listed in the APGA 1921–22.

Vagrant cuckoos were briefly protected (as members of the family Cuculidae) between November 1907 and November 1910, after which they were clearly not regarded as indigenous. All cuckoos have been protected since 1953.

Owls (Strigiformes)

The morepork was added to the native game schedule in November 1888, but was rarely mentioned as excluded from game lists (i.e. meaning that it could be killed during the game season). Between 1896 and 1903, moreporks were exempted from hunting in Southland District only (Fig. 1).

Laughing owl (*Sceloglaux albifacies*) and morepork were both listed as protected in May 1906, but only the morepork was included in the Animals Protection Act 1907. Both were covered by the APAA 1910, and were included under 'owls ... of all species' in April 1916, as well as being listed in the APGA 1921–22. The vagrant barn owl (*Tyto alba*) has been protected since 1953.

Swifts (Apodidae), and swallows and martins (Hirundinidae)

'Swallows, swifts, and martins (*Hirundo*) of every kind' were added to the Third Schedule (game) of the Animals Protection Act 1880 in May 1893, but were never mentioned as excluded from hunting in game season notices. Only the tree martin (as 'swallow (*Hirundo nigricans*)') was listed in May 1906, and no species were included in the Animals Protection Act 1907. As non-breeding vagrants, all were excluded from protection in the APAA 1910. No species were listed in April 1916, but the tree martin and 'martin (*Chelidon urbica*)' (i.e. the common house martin *Delichon urbicum*, a European species) were listed in the APGA 1921–22. All species have been protected since 1953.

Sacred kingfisher (*Todiramphus sanctus*) and New Zealand wrens (*Acanthisittidae*)

The kingfisher, bush wren (*Xenicus longipes*), rock wren (*X. gilviventris*) and rifleman (*Acanthisitta chloris*) were listed as absolutely protected in May 1906, but only the kingfisher and bush wren were included in the Animals Protection Act 1907. All were included in the APAA 1910, with kingfisher and 'Riflemen and wrens of all species' listed in April 1916. All four species plus Lyall's wren were listed in the APGA 1921–22. Lyall's wren had been covered since 1910, about 15 years after its extinction (Tennyson & Martinson 2007).

Wattlebirds (Callaeidae), stitchbird (*Notiomystis cincta*) and piopio (*Turnagra* spp.)

The huia was added to the Fourth Schedule of the Animal Protection Act 1880 in February 1892, and subsequently listed as not to be taken or killed during game seasons. This protection was reinforced in March 1903, when the taking or killing of huia was prohibited absolutely.

North Island kōkako, South Island kōkako, saddleback (as a single species) and stitchbird were all 'protected' in March 1896, but as they were not excluded from game season notices, they could be hunted during game seasons (Fig. 1). All four species plus huia, South Island piopio (*Turnagra capensis*) and North Island piopio (*T. tanagra*) were listed as protected in May 1906, and again (as 'crow (kokako), (*Glaucopis*), huia (*Heteralocha acutirostris*), native thrush (*Turnagra tanagra* and *Turnagra crassirostris* [*sic*], saddleback (tieke, (*Creadion carunculatus*), and stitchbird (ihi), (*Pogonornis cincta*')) in the Animals Protection Act 1907. All were included in the APAA 1910, and were listed (as North and South Island thrushes and crows, stitch-birds, huia and saddleback) as absolutely protected in April 1916, and all were listed in the APGA 1921–22 (Appendix 3).

Honeyeaters (Meliphagidae)

The tūi was protected from commercial hunting in October 1872, when the Protection of Animals Act 1872 stated:

Every person who shall sell offer for sale or expose for sale, and every holder of a license to sell game, who shall have in his possession or shall in any manner dispose of ... any dead tui, shall on conviction forfeit and pay for every such act a sum not exceeding twenty pounds; and if such person hold a license to kill or sell game, such license shall, on conviction, become *ipso facto* void.

Tūi were listed as native game in the Protection of Animals Act 1873 and the Animals Protection Act 1880, and became the first New Zealand bird to be fully and permanently

protected when they were consistently excluded from hunting in annual game season listings from 1878 onwards (Fig. 1; Appendix 1).

Bellbird was added to the schedule of native game in March 1896 (and therefore could still be hunted during the game season). Bellbird, Chatham Island bellbird (*Anthornis melanoccephala*) and tūi were all listed as absolutely protected in March 1906. Bellbird and tūi were also included as protected in the Animals Protection Act 1907, and all three were covered by the APAA 1910, although it is unclear whether 'makomako' listed in April 1916 covered both bellbird species. All three were listed in the APGA 1921–22 (Appendix 3).

Whitehead, yellowhead and brown creeper (*Mohoua* spp.), warblers (*Gerygone* spp.), New Zealand fantail (*Rhipidura fuliginosa*), tomtit and robins (*Petroica* spp.), and fernbirds (*Bowdleria* spp.)

Brown creeper (*Mohoua novaeseelandiae*), yellowhead (*M. ochrocephala*), whitehead (*M. albicilla*), New Zealand fantail (*Rhipidura fuliginosa*), fernbird (*Bowdleria punctata*), Chatham Island fernbird (*B. rufescens*), grey warbler (*Gerygone igata*), Chatham Island warbler (*G. albofrontata*) and all *Petroica* taxa were listed as protected in May 1906. Of these, only fantail, fernbird, robin and tomtit (*P. macrocephala*) were included in the Animals Protection Act 1907. All were covered by the APAA 1910, and this was summarised as 'tomtits, warblers, robins, fantails, whiteheads, yellowheads and fern-birds of all species [plus] creepers' in April 1916. All currently recognised taxa were listed in the APGA 1921–22 (Appendices 3 and 4).

Silvereye (*Zosterops lateralis*) and New Zealand pipit (*Anthus novaeseelandiae*)

Only the Antipodes Island pipit (*Anthus novaeseelandiae steindachneri*) was listed in May 1906, and no taxa were included in the Animals Protection Act 1907. Indigenous taxa were covered by the APAA 1910, but it is unclear whether this included the silvereye. Before the Bill was passed, the Hon. Sir W.J. Steward stated, 'No; they were not indigenous to New Zealand. Such birds as the shining cuckoo and another class of birds would not be protected, because they were not native birds or [were] migratory birds. He referred them to the little white-eye [silvereye]. They were immigrants like ourselves, having come here years ago from the South Sea Islands' (NZPD 153: 115). However, 'silver-eye, pipit or native lark' were included as absolutely protected indigenous birds in April 1916.

All pipit taxa were listed as absolutely protected in the APGA 1921–22, but the silvereye was excluded. The silvereye was included in the Second Schedule of the Wildlife Act 1953 (partially protected), where it remains.

Remaining bird species recorded from New Zealand before 1921

The *New Zealand Gazette* notice published on 10 May 1906 provided absolute protection for 14 migrant or vagrant species that do not (or did not) breed in New Zealand: king penguin, gentoo penguin, royal penguin, Antarctic fulmar, blue petrel, Wilson's storm petrel, nankeen night heron, lesser knot, sharp-tailed sandpiper, red-necked stint, turnstone, red-necked avocet, Arctic skua and tree martin (see Appendices 2 and 4 for scientific names). None of these was listed in the Animals Protection Act 1907, and it seems unlikely that any would meet the strict definition of indigenous in use at the time the APAA 1910 was enacted. Somewhat surprisingly, the *New Zealand Gazette* notice published on 12 April 1916 listed the following among 'indigenous birds absolutely protected': fulmars, frigatebirds, turnstones, avocets, sandpipers, knots and night herons.

The APGA 1921–22 provided absolute protection for a similar list of migrant or vagrant species as the May 1906 *New Zealand Gazette* notice (minus lesser knot, red-necked stint, turnstone and Arctic skua, and with the addition of sooty albatross, yellow-nosed mollymawk and white-winged black tern; see Appendices 3 and 4 for scientific names). At least 45 additional naturally occurring migrant and vagrant bird species were recorded from New Zealand before 1921 (Miskelly, unpublished data), 37 of which were listed by Stidolph (1927) – i.e. they were recognised contemporaneously as occurring in New Zealand. All remaining migrant, vagrant and colonising bird species were granted automatic protection by the Wildlife Act 1953.

Tuatara (*Sphenodon punctatus* [including '*S. guntheri*'])

The 'tuatara lizard' was added to the Fourth Schedule of the Animals Protection Act 1880 in April 1895, but there was no exclusion from hunting mentioned in subsequent game season lists (Fig. 1; Appendix 1), meaning that they were protected for only nine months of the year. A *New Zealand Gazette* notice on 8 September 1898 claimed to provide absolute protection for tuatara and their eggs, but this exceeded the limited powers of the Animals Protection Act 1880, and so tuatara were not adequately protected by legislation until the passing of the Animals Protection Act 1907. They have been continuously protected since.

Geckos (Gekkonidae) and skinks (Scincidae)

The Wildlife Order 1981 provided protection to all but four of New Zealand's native lizard species, which were placed in the Fifth Schedule (wildlife not protected) of the Wildlife Act 1953. The four species excluded (Table 6) were all considered to be widespread and common, and the geckos at least were widely kept in captivity. All have since proven to be species complexes containing cryptic taxa. They were removed from the Fifth Schedule by the Wildlife Order (No. 2) 1996, thereby granting absolute protection to all native New Zealand lizards.

Native bats (*Mystacina* spp. and *Chalinolobus tuberculatus*)

The lesser short-tailed bat (*Mystacina tuberculata*) and long-tailed bat were included in the Fourth Schedule of the Animals Protection Act 1880 in July 1904, but were not mentioned in the Animals Protection Act 1907. The taking of the same two species was prohibited in the Rotorua Acclimatisation District in June 1920, and they were protected nationwide by the APGA 1921–22. The greater short-tailed bat (*M. robusta*) was not named until 1962, by which date all New Zealand bats were protected by the Wildlife Act 1953.

New Zealand frogs (*Leiopelma* spp.)

Hamilton's frog and Hochstetter's frog were granted protection by *New Zealand Gazette* notice on 26 May 1921, and within nine months were included in the schedule of absolutely protected wildlife in the APGA 1921–22. All species in the genus *Leiopelma* were protected by the Animals Protection (Native Frogs) Warrant 1948, and subsequently by the Wildlife Act 1953.

Invertebrates

Twenty-nine species and two genera of large terrestrial invertebrates were provided absolute protection by the Wildlife Amendment Act 1980, by creation of the Seventh Schedule of the Wildlife Act 1953 (Appendix 5). A further subspecies of kauri snail (*Paryphanta busbyi busbyi*) was added by the Wildlife Order 1986, and nine additional invertebrate species and three additional genera were added by the Wildlife Order 2010 (Appendix 5).

Discussion

This compilation and review of 150 years of New Zealand wildlife protection has revealed some of the patterns, themes and people behind New Zealand's current comprehensive

protection of native terrestrial vertebrates. The main finding of the review was how little accurate information on the legal protection of New Zealand wildlife exists in the conservation literature. The accounts that mention the topic (e.g. for white heron, tuatara, kiwi, New Zealand pigeon, godwit, kea and invertebrates) are for the most part inaccurate, incomplete or incorrect (Peat 1990, 2006; Galbreath 1993; McDowall 1994; Diamond & Bond 1999; Brown 2000; Young 2004; Woodley 2009; Watts *et al.* 2012), while most conservation monographs make no mention of when or why the focal species or species group was protected (e.g. Butler 1989; Fuller 1990; Butler & Merton 1992; Lee & Jamieson 2001; Williams 2006; Young 2006; Ballance 2010). Even the fascinating accounts of huia protection given by Phillipps (1963) and Galbreath (1989a) overlooked the detail that for the 11 years between 1892 and 1903 the huia required annual listing in game season notices to prevent it being hunted for three months of the year. Indeed, the only complete account of protection found during this review was Barlow's (1972) description of spur-winged plover protection. This limited published information is not because the information does not exist – details of when, why and how New Zealand wildlife species were protected are remarkably well preserved in government archives (51 files referenced herein). Perhaps Thomas Potts (1882) was right when he dryly observed that it is difficult to get folks interested in this subject.

Development of a protectionist ethos

One of the more unlikely discoveries of this review was that the tūi was the first native bird to be fully and continuously protected (from 1878), although it was not specifically mentioned in legislation as an absolutely protected species until 1906. While the genesis of tūi protection is known (a request to the Colonial Secretary's Office from the Wellington Acclimatization Society), the reason for its ongoing exclusion from game lists nationwide for the following quarter of a century is less apparent. A likely explanation is the fortuitous timing of the initial protection, at the start of a three-year period with a single national game schedule (Fig. 1), followed by bureaucratic inertia (or sticking with the status quo) when separate games lists were prepared for each acclimatisation district from 1881 on – i.e. the phrase 'excepting tuis' was accepted without question by all acclimatisation societies. Such bureaucratic inertia is readily apparent among files of the Colonial Secretary's

Office, where annual game notices and other *New Zealand Gazette* notices were often based on previous published examples, with hand-written alterations revealing explicitly how phrases (and sometimes errors) were perpetuated over succeeding years.

With the exception of tūī, followed by white heron and crested grebe in 1888, protection of native wildlife between 1861 and 1891 was focused on their management as a hunting resource – ‘protection’ generally meant that a species could be shot for only three months of the year. This began to change with protection of the huia in 1892, and the simultaneous publication of the Onslow Memorandum (Galbreath 1989a; Young 2004). This open letter to the government from the Governor, Lord Onslow, advocated for protection for many of New Zealand's higher-order endemic birds (including kiwi, kākāpō, kōkako, piopio and stitchbird) and also tuatara. The memorandum was clearly influential in all these species being added to the schedule of native game in 1895–96, even if their absolute protection was not achieved for another decade.

The 14-year period between 1896 and 1910 marked an almost complete reversal in the protected status of native New Zealand birds, culminating in the remarkably progressive Animals Protection Amendment Act 1910, which (at least initially) protected all indigenous birds. Even the Animals Protection Act 1907 (absolutely protecting about three dozen species, including tuatara) was considered world-leading in providing protection for wildlife species for the benefit of the nation's ‘spiritual wealth’ rather than for their economic or game value (Caughley 1983: 146). While subsequent Acts and Amendment Acts removed confusion over the meaning of ‘indigenous’ and extended protection to vagrant birds, lizards and some invertebrates, comprehensive protection of nearly all those native bird species most strongly identified as uniquely from New Zealand can be traced back to legislation passed between 1896 and 1910.

The 1890s to early 1900s was a time when New Zealand matured as a nation, with the end of the colonial era marked symbolically by Dominion Day on 26 September 1907 (Bassett 1997: 65), implying the beginning of a sense of independent identity (King 2003: 279). This coincided with the development of nationalistic sentiment, and an appreciation of New Zealand scenery, flora and fauna as part of the heritage of being a New Zealander (Galbreath 1989b; Wynn 1979; Star 2002), alongside awareness of the damage wrought by land clearance and acclimatisation (Aramakutu 1997). The May 1906 Order in Council and the 1907 and

1910 Acts signalled the emergence of the conservation lobby, and a change in attitudes in animal protection from a focus on introduced game species to recognition of the need to protect indigenous birds (Aramakutu 1997).

Reactive protection, proactive protection and consultation

Most decisions to protect native wildlife that occurred between the major Acts were triggered by specific requests made in writing to the Colonial Secretary's Office or Department of Internal Affairs, or during Parliamentary debates. Between 1885 and 1946, decisions in response to requests were made rapidly (median 37 days between the date the request was made and publication of the resulting *New Zealand Gazette* notice, range 10–248 days, $n = 31$; Table 2). Initially these reactive decisions were made entirely within the Colonial Secretary's Office, but from 1892 to 1970 the director of the Colonial Museum (which became the Dominion Museum in 1907 and is now Te Papa) was the primary adviser on whether a request should be actioned, with 11 examples found. Over time, advice was sought from a wider base, including Crown Law (1898 and 1903), acclimatisation societies, the Marine Department (1930), and the Agriculture Department (1946). The Fauna Protection Advisory Council and its predecessors were the main sounding board for Internal Affairs from 1948 to 1987, and advised on protection of New Zealand falcon, lizards and kea. The protection process slowed considerably after the Wildlife Act 1953 was in place, with broader stakeholder consultation, and delays of many years between initial requests for protection and resulting legislation (Table 2).

A more proactive approach to protection of wildlife was taken by the government – either Parliament or the relevant government department – in 1906, 1907, 1910–12, 1921 and during preparation of the Wildlife Act 1953. The 1910 ‘blanket protection’ of indigenous wildlife resulted from debate in the House of Representatives, while the initial schedules of wildlife recommended for protection (or removal of full protection) in 1906, 1907, 1912 and 1921 were prepared by staff of the Colonial Secretary's Office or Internal Affairs before being sent to acclimatisation societies for comment. The most explicit public service-led campaign to achieve single-species protection was that for kea, by the Wildlife Service in 1984–86. This included contracting a pro-kea lobbyist (Philip Temple) to write an advocacy brochure, and inviting Forest & Bird to join the protection campaign.

The consultation process was expanded from identified stakeholders to the wider public in 1979 and 2006, when public submissions were sought on protection of invertebrates and changes to Wildlife Act 1953 schedules, respectively. It is notable that during 120 years of invited opinion on whether wildlife species should be protected (1885–2006), there is no record of any directed efforts to seek Māori opinion on any initiative. The only record of Māori involvement in the process to change the protected status of native wildlife was during the period 1889 to 1910, with regard to protection of huia (a request from Ngāti Huia to the Governor; Galbreath 1989a) and attempts by Māori Members of Parliament and their constituents to ease or alter restrictions on hunting of New Zealand pigeons (*NZPD* 145, 1908: 61; Aramakutu 1997; Feldman 2001; Marr *et al.* 2001; Young 2004).

Hunters, collectors and conservationists

Acclimatisation societies are often portrayed as having been instrumental in the deterioration of New Zealand's indigenous biodiversity, through their role in introducing a wide range of mammals and birds from other countries (Guthrie-Smith 1936; King 1984; Wilson 2004). McDowall (1994: 152) and Young (2004: 86) provided some balance to this view through documenting efforts by some acclimatisation societies to advocate for protection of native birds.

While acclimatisation societies did have a primary role in providing and managing a game resource for their members (McDowall 1994), this review revealed their extensive involvement in requesting partial or complete protection for many species of native birds. Of 64 case studies where a single request can be linked to protection of a species or group of species, 29 (45%) were initiated by acclimatisation societies. A further six requests (9%) were initiated by museums, and another six by Edgar Stead, the most active private collector of New Zealand birds during the first half of the twentieth century (Miskelly 2012; Miskelly, unpublished research material). In combination, these groups or individuals, who are traditionally perceived as having had a negative role in native bird preservation (Galbreath 1989a; Wilson 2004; Young 2004), were directly responsible for 64% of requests to protect native wildlife. Other requests came from within Internal Affairs (six cases), Members of Parliament (five), other private individuals (five), other government agencies (three), and scientific societies (three). Surprisingly, no successful protection

campaigns were initiated by the Royal Forest & Bird Protection Society of New Zealand (formed in 1923 as the Native Bird Protection Society), although it played a support role in campaigns to protect king shag, bar-tailed godwit and kea (data herein, and see McDowall 1994, Diamond & Bond 1999, and Woodley 2009), and was instrumental in getting seabird protection extended to 200 nautical miles (370 km) from the coast in 1996 (Alan Tennyson, pers. comm., 23 October 2013). Nineteen successful protection campaigns were initiated between 1926 and 1994, including five by acclimatisation societies, five by museums, and one by Stead.

In addition to acclimatisation societies and the independent ornithologist Edgar Stead, this review identified a small group of men in elected or appointed positions who had important roles in the legal protection of New Zealand wildlife. At the forefront were those who established an effective legislative base for absolute protection of most New Zealand birds, including Governor Lord Onslow (with his 1892 'Onslow Memorandum'), and the elected Parliamentarians Harry Ell, Thomas Mackenzie and Heaton Rhodes, who were influential advocates for wildlife protection during the period 1903–27. Ell lobbied for protection of many bird species in his home province (Canterbury) and nationally, and all three had prominent roles in the passing of the Animals Protection Act 1907, and the Animals Protection Amendment Act 1910, where Rhodes's Section 10(1) granted protection to all indigenous birds. Behind the scenes, Hugh Pollen (Colonial Under-Secretary 1892–1907, and Under-Secretary for Internal Affairs 1907–12) advised his minister on requests for protection received via correspondence and also had a key role in drafting the earliest schedules of protected species in 1896 and 1906.

Two directors of the Dominion Museum not only advised Internal Affairs in response to suggestions for species to be protected, but requested additions to the First Schedule of the Animals Protection and Game Act 1921–22. Brook Oliver sought protection for six marine shags and the Chatham Island mollymawk in 1930, and his successor Robert Falla (while employed by the Auckland War Memorial Museum) sought protection for spotted shag, New Zealand scaup and little black shag between 1930 and 1936.

Wild geese and ugly ducklings

Several unlikely species appear among the schedules of New Zealand's wildlife protection legislation. The most persistent phantom species was the 'wild geese' first included

in the native game schedule of the Protection of Animals Act 1867, and again in 1873, 1880, 1907 and 1908. Wild geese last appeared in a schedule in April 1916, and were finally extinguished in 1921–22 by an unknown MP stating, ‘There are no wild geese in New Zealand’ (*NZPD* 193: 634). It is not known whether this was a long-running in-House joke. The phrase ‘wild-geese chase’ was used in William Shakespeare’s tragedy *Romeo and Juliet*, published in 1597, and is singularly appropriate for non-existent game.

Six ‘non-native’ species were included in the First Schedule (Animals absolutely protected) of the Animals Protection and Game Act 1921–22: ‘Magpie (Australian), (*Gymnorhina tibicen*), Martin (*Chelidon urbica*), Little owl (*Athene noctua*), Lapwing (*Vanellus cristatus*), Common snipe (*Gallinago coelestis*) and Starling (*Sturnus vulgaris*)’ (see Appendix 4 for current scientific names), with the same list reprinted almost annually until 1952. All six were introduced to New Zealand by acclimatisation societies, but only the Australian magpie, little owl and starling became established (Thomson 1922).

Protection of invertebrates – an afterthought

This review has focused mainly on protection of terrestrial vertebrates. The Wildlife Act 1953 was not written with protection of invertebrates in mind. The definition of wildlife and animals in the original Act included only land mammals, birds, reptiles and amphibians. The exclusion of invertebrates was commented on by Galbreath (1993: 91): ‘Bugs did not arouse the sentiments of concern or attachment that birds did’. Protection of selected invertebrates required each named species or genus of insect, spider or snail to be legally defined as being an animal (Wildlife Amendment Act 1980), despite all being protostomes within the kingdom Animalia. The criteria used to make changes to the Seventh Schedule (‘terrestrial and freshwater invertebrates declared to be animals’) during the 2006 public submission process were apparently focused on those species that were desirable as collectable objects (Department of Conservation 2008). In this respect, the invertebrate species that are protected by the Wildlife Act 1953 are analogous with the subset of New Zealand vertebrates that are included in the schedules of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES 2013) – listing is a means to restrict trade in desirable objects. This is in marked contrast

to the comprehensive absolute or partial protection that the Wildlife Act 1953 provides to all but two of New Zealand’s native terrestrial vertebrates.

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Notes

- 1 The huia was not listed as excluded from hunting in game season notices for Kaikoura between 1892 and 1896. As huia did not occur in the South Island, this did not affect the nationwide fully protected status of the species.
- 2 Lord William Hillier Onslow (1853–1911), the 4th Earl of Onslow, was Governor of New Zealand in 1889–92. In addition to seeking protection for huia, his 1892 essay on

New Zealand birds (the ‘Onslow Memorandum’) led a change in attitude over the following two decades from the protection of a few native birds as game species to the absolute protection of most endemic birds.

- 3 Hugh Pollen (1851–1912) was Under-Secretary to the Colonial Secretary in 1892–1907, and Under-Secretary for Internal Affairs from 1907 until his death in 1912. Pollen led the government department responsible for the legal protection of wildlife for 20 years, and was influential in drafting the earliest schedules of protected wildlife in 1896 and 1904–06. (I was unable to locate a portrait of Hugh Pollen. The image used to illustrate him in Bassett [1997: 52] was of the unrelated H. Stewart Pollen.)
- 4 Henry (Harry) George Ell (1862–1934) was a Christchurch-based MHR/MP from 1899 to 1919. A tireless advocate for conservation, including of forests and scenery, Ell successfully sought protection for many bird species and native bats in 1903–04, and was one of several Canterbury- and Otago-based Parliamentarians who lobbied for the Animals Protection Act 1907 (the first Act to have a schedule of absolutely protected wildlife), and the Animals Protection Amendment Act 1910 (giving absolute protection to all indigenous birds).
- 5 Thomas Noble Mackenzie (1853–1930) was an Otago-based MHR/MP in 1887–96 and 1900–12, and a member of the Legislative Council in 1921–30. He was well known for exploring the wilds of Fiordland, and advocated for the protection of forests, landscapes and wildlife, including supporting the establishment of the New Zealand Native Bird Protection Society (later the Royal Forest and Bird Protection Society of New Zealand). Mackenzie was briefly Prime Minister in 1912, during which time he chaired the Cabinet meeting that unexpectedly declared 1912 to be a closed season for New Zealand pigeons (they have been fully protected continuously ever since).
- 6 Robert Heaton Rhodes (1861–1956) was MHR/MP for Ellesmere, Canterbury, from 1899 to 1925, and a member of the Legislative Council in 1925–32 and 1934–41. A personal friend of the naturalist Edgar Stead, Rhodes’s major contribution to wildlife protection was proposing the Animals Protection Amendment Act 1910 clause to provide default protection to all indigenous birds.
- 7 Walter Reginald Brook Oliver (1883–1957) had broad research interests, including in ornithology, botany, malacology, archaeology and geology. He joined the staff of the Dominion Museum in 1920, and was the director from 1928 to 1947. Between 1924 and 1946 he was the primary adviser on bird protection initiatives to the Department of Internal Affairs. Oliver also took the lead in proposing eight bird species for protection in 1930. (There has been confusion over the first name by which Oliver was known. The use of Brook Oliver herein [contra Gentry 2013, and Scofield & Stephenson 2013: 88, 198, 480] is based on Iredale’s [1912] etymology for the gastropod genus *Brookula*: ‘The genus is named after Mr. W. R. Brook

Oliver, my collecting companion for many years, and one of the members of the Kermadec Islands Expedition’.)

- 8 Robert Alexander Falla (1901–79) was an ornithologist who was appointed to the staff of the Auckland War Memorial Museum in 1931, before becoming director of the Canterbury Museum in 1937, then director of the Dominion Museum from 1947 to 1966. While at Auckland Museum, Falla successfully sought protection for spotted shag, New Zealand scaup and little black shag, and supported proposals to protect smaller species of migratory waders. As director of the Dominion Museum, Falla advised on the protection of native frogs, and (with Edgar Stead) was a founding member of the Native Bird Preservation Committee, which became the Fauna Protection Advisory Council.
- 9 Edgar Fraser Stead (1881–1949) was a Canterbury-based amateur naturalist and collector, of independent means. He was actively involved in bird conservation from 1908 until his death in 1949, including persistent lobbying for changes to the schedules of the Animals Protection and Game Act 1921–22, and for protection of the king shag. His extensive collection of bird skins and eggs forms the core of the Canterbury Museum bird collection.

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Appendix 1: Chronological sequence of New Zealand legislation relevant to nationwide protection of indigenous terrestrial wildlife

All amendments to the major Acts were checked and are listed, even where their content did not impact on absolute protection of indigenous terrestrial wildlife. Abbreviations: *NZG* = *New Zealand Gazette*; *RRB* = *Rules, Regulations & By-Laws under New Zealand Statutes*; *SDNZ* = *Statutes of the Dominion of New Zealand*; *SNZ* = *Statutes of New Zealand*; *SR* = *Statutory Regulations*.

To reduce repetition, some annual notices published during the time periods 1911–22, 1925–1933, 1936–40, and 1941–52 have been grouped together under the first date on which a similarly worded notice was published.

Protection of Certain Animals Act 1861 (24 and 25 Victoriae 1861 No. 28; *SNZ* 1861: 94–95).

Mainly regulated hunting of introduced game, but 'quail' would include New Zealand quail. 'Swans' included as imported game.

Birds Protection Act 1862 (26 Victoriae 1862 No. 9; *SNZ* 1862: 25–26).

Mainly regulated hunting of introduced game, but 'quail' would include New Zealand quail.

The Wild Birds' Protection Act 1864 (28 Victoriae 1864 No. 11; *SNZ* 1864: 25–26).

Regulated hunting of game, including native ducks, paradise shelduck and New Zealand pigeon.

Protection of Certain Animals Act 1865 (29 Victoriae 1865 No. 57; *SNZ* 1865: 211–213).

This repealed the Protection of Certain Animals Act 1861, the Birds Protection Act 1862, and the Wild Birds' Protection Act 1864.

Regulated hunting of game, including quail, native ducks and New Zealand pigeon. ‘Swans’ included as imported game.

Protection of Certain Animals Act Amendment Act 1866 (30 Victoriae 1866 No. 56; Supplement to *NZG* 47, 17 August 1866: 371–373).

No mention of native species.

Protection of Animals Act 1867 (31 Victoriae 1867 No. 35; Supplement to *NZG* 57, 1 November 1867: 437–442).

This repealed the Protection of Certain Animals Act 1865, and the Protection of Certain Animals Act Amendment Act 1866.

Native game included: wild duck of any species, bittern, pied stilt, wild geese, New Zealand pigeon, teal, black stilt, curlew (godwit), quail. ‘Swans’ included as [imported] game.

Protection of Animals Act Amendment Act 1868 (32 Victoriae 1868 No. 69; *SNZ* 1868: 379–381).

New Zealand pigeon excluded as game.

Protection of Animals Act 1872 (36 Victoriae 1872 No. 14; Supplement to *NZG* 50, 3 October 1872: 35–36).

Made it an offence to sell a dead tūi. Section 9 of the Protection of Animals Amendment Act 1868 repealed (i.e. New Zealand pigeon returned to the game list).

Protection of Animals Act 1873 (37 Victoriae 1873 No. 42; Supplement to *NZG* 57, 2 October 1873: 157–163).

This repealed the Protection of Animals Act 1867, the Protection of Animals Act Amendment Act 1868 and the Protection of Animals Act 1872.

Native game included: wild duck of any species, bittern, pied stilt, wild geese, dotterel, tūi, New Zealand pigeon, teal, black stilt, curlew (godwit), quail. ‘Swans’ included as (imported) game.

The Protection of Animals Act Amendment Act 1875 (39 Victoriae 1875 No. 18; Supplement to *NZG* 52, 23 September 1875: 49).

Covered hunting of seals only.

‘**The Protection of Animals Act, 1873**’ Three notices published in *NZG* 28, 29 March 1877: 346–348.

The full list of native game species from the 1873 Act were able to be taken.

Sea-gulls declared to be native game Notice published in *NZG* 35, 19 April 1877: 435.

Gulls declared to be game, and henceforth protected within Wellington Provincial District.

Season in which native game shall be killed, &c. Notice published in *NZG* 33, 11 April 1878: 439.

Tūi omitted from the list of native game species able to be hunted, shot, taken or killed.

Black swans throughout the Colony, and hares within the Provincial District of Auckland, not to be deemed game Notice published in *NZG* 68, 11 July 187: 988. Black swan removed from the game list.

Season in which native game shall be killed, &c. Notice published in *NZG* 35, 27 March 1879: 424.

Tūi and curlew (godwit) omitted from the list of native game species able to be hunted, shot, taken or killed.

Season in which native game shall be killed, &c. Notices published in *NZG* 26, 18 March: 341 and *NZG* 34, 8 April 1880: 461.

Tūi omitted from the lists of native game species able to be hunted, shot, taken or killed.

Animals Protection Act 1880 (44 VICT 1880 No. 18; *SNZ* 1880, 17 August: 82–87).

This repealed the Protection of Animals Act 1873, and the Protection of Animals Act Amendment Act 1875.

Fourth Schedule (native game) included: wild duck of any species, bittern, pied stilt, wild geese, dotterel, tūi, New Zealand pigeon, teal, black stilt, curlew (godwit), quail. ‘Swans’ included as (imported) game.

Season for shooting native game [etc] Ten notices published in *NZG* between 3 March and 14 April 1881: 16: 267, 20: 343, 21: 365, 26: 408.

Tūi omitted from the lists of native game species able to be hunted, shot, taken or killed.

Animals Protection Act Amendment Act 1881 (45 VICT 1881 No. 34; *SNZ* 1881, 23 September: 220–221).

Covered regulation of game seasons.

Fixing shooting season for native and imported game [etc] Thirteen notices published in *NZG* between 30 March and 20 April 1882: 30: 507–509, 33: 551, 38: 605.

All contained the phrase ‘except tuis’ or ‘excepting tuis’, or excluded tūi from the schedule of native game.

Fixing shooting season for native and imported game [etc] Fifteen notices published in *NZG* on 22 and 29 March 1883: 24: 345–346, 26: 374–375.

All contained the phrase ‘excepting tuis’ or ‘except tuis’, or excluded tūi from the schedule of native game.

Fixing shooting season for native and imported game [etc] Eighteen notices published in *NZG* between 20

March and 22 May 1884: 36: 558, 37: 571–572, 42: 615, 46: 650, 48: 674, 51: 707, 60: 796, 62: 843.

All contained the phrase 'except tuis' or 'excepting tuis', or excluded tūi from the schedule of native game; North Canterbury also excluded native pigeons.

Animals Protection Act 1880 Amendment Act 1884 (48 VICT 1884 No. 45; *SNZ* 1884, 8 November: 212–213).

No relevant content.

Fixing shooting season for native and imported game [etc] Seventeen notices published in *NZG* between 12 February and 16 April 1885: 10: 222, 15: 279, 329–330, 18: 364–366, 19: 375–376, 22: 427.

All contained the phrase 'excepting tuis', or excluded tūi from the schedule of native game; Otago also excluded bittern.

White heron and crested grebe protected Notice published in *NZG* 19, 31 March 1885: 376.

White heron and crested grebe included in Fourth Schedule (native game) of the Animals Protection Act 1880.

Fixing shooting season for ... game [etc] Twenty notices published in *NZG* between 18 March and 29 April 1886: 15: 361–362, 16: 401–402, 20: 427, 25: 529–530.

All contained the phrase 'excepting tuis' or 'except tuis', or excluded tūi from the schedule of native game; Otago also excluded bittern, white heron and crested grebe.

Animals Protection Act 1880 Amendment Act 1886 (50 VICT 1886 No. 11; *SNZ* 1886, 30 July: 20).

Section 3 granted powers to the Governor to 'prohibit absolutely or for such time as he may think fit the destruction of any bird indigenous to the colony'.

Pukeko (swamp hen) to be native game Notice published in *NZG* 42, 12 August 1886: 946.

Pukeko included in Fourth Schedule (native game).

Curlew [= godwit] to cease to be deemed native game Notice published in *NZG* 65, 16 December 1886: 1616.

Fixing shooting season for ... game [etc] Twenty-one notices published in *NZG* between 24 March and 7 July 1887: 19: 386, 20: 410–411, 23: 445–447, 44: 910.

All contained the phrase 'excepting tuis'; Otago also excluded bittern, white heron and crested grebe.

Kaka protected under the Animals Protection Act Notice published in *NZG* 23, 7 April 1887: 447.

Kākā included in Fourth Schedule (native game) within Southland District, and 'shall not be taken or killed'.

Shooting season for native game Notice published in *NZG* 17, 15 March 1888: 343.

Contained the phrase 'excepting tuis, white heron, and crested grebe'.

Kaka protected under the Animals Protection [sic] Acts Notice published in *NZG* 46, 23 August 1888: 903.

Kākā included in Fourth Schedule (native game).

Owl protected under the Animals Protection Acts Notice published in *NZG* 65, 29 November 1888: 1326.

Morepork included in Fourth Schedule (native game).

Shooting season for native game Notice published in *NZG* 16, 21 March 1889: 313.

Contained the phrase 'excepting tuis, white heron, and crested grebe'.

Animals Protection Act Amendment Act 1889 (53 VICT 1889 No. 23; *SNZ* 1889, 16 September: 112–114).

Fixed a February–April season for godwit hunting.

Seagulls protected under 'Animals Protection Act, 1880,' Auckland District Notice published in *NZG* 5, 30 January 1890: 114.

Gulls declared to be game, and henceforth protected within the Provincial District of Auckland.

Shooting season for native game to commence 1st May Notice published in *NZG* 14, 20 March 1890: 318.

Contained the phrase 'excepting tuis, white heron, and crested grebe'.

Black swans to cease to be game Notice published in *NZG* 72, 11 December 1890: 1446.

Black swan removed from the game list. (They were returned to the game list in Westland in 1891; Wairarapa, Wellington, Canterbury and Otago in 1892; and Marlborough in 1895.)

Shooting season for native game to commence 1st April Notice published in *NZG* 13, 12 February 1891: 232.

Contained the phrase 'excepting tuis, white heron, and crested grebe'.

Huia protected under the Animals Protection Acts Notice published in *NZG* 18, 25 February 1892: 402.

Huia included in Fourth Schedule (native game).

Shooting season for ... game [etc] Nineteen notices published in *NZG* between 3 March and 21 April 1892: 20: 432, 22: 459–461, 23: 481–482, 25: 520, 28: 542, 30: 570, 33: 624–625.

All contained the phrase ‘excepting tui, huia, white heron, and crested grebe’; Otago also excluded bittern.

Shooting season for ... native game [etc] Twenty-three notices published in *NZG* between 9 March and 27 April 1893: 18: 337–338, 19: 343–344, 21: 386, 22: 409–410, 27: 462–463, 30: 530.

Twenty-two contained the phrase ‘excepting tui, huia, white heron, and crested grebe’; Kaikoura did not exclude huia; Otago also excluded wild geese and bittern.

Swallows, swifts, and martins protected under the Animals Protection Acts Notice published in *NZG* 42, 25 May 1893: 785.

Protected ‘swallows, swifts, and martins (*Hirundo*) of every kind’, as if included in Third Schedule of the Animals Protection Act 1880.

Shooting season for ... native game [etc] Twenty-four notices published in *NZG* between 1 March and 5 April 1894: 16: 331–332, 19: 372–373, 20: 410–411, 23: 454–455, 27: 516.

Twenty-three contained the phrase ‘excepting tui, huia, white heron, and crested grebe’; Kaikoura did not exclude huia; Otago also excluded wild geese and bittern.

Shooting season for ... native game [etc] Twenty-four notices published in *NZG* between 14 February and 4 April 1895: 12: 289, 13: 328, 17: 410–411, 18: 441, 21: 525–526, 23: 554, 25: 615, 620.

Twenty-three contained the phrase ‘excepting tui, huia, white heron, and crested grebe’; Kaikoura did not exclude huia; Otago also excluded wild geese and bittern.

Tuatara lizards protected under the Animals Protection Acts Notice published in *NZG* 25, 4 April 1895: 620. Tuatara included in Fourth Schedule (native game).

Land temporarily reserved in the Land District of Auckland Notice published in *NZG* 47, 27 June 1895: 999.

Hauturu/Little Barrier Island reserved from sale for the preservation of the native fauna.

Animals Protection Act Amendment Act 1895 (59 VICT 1895 No. 13; *SNZ* 1895, 30 August: 34–35).

‘Native pigeons’ to be protected throughout the country in 1896 and every sixth year thereafter.

Lands permanently reserved Notice published in *NZG* 72, 26 September 1895: 1534–1535.

Hauturu/Little Barrier Island reserved for the preservation of native fauna.

Shooting season for ... native game [etc] Twenty-three notices published in *NZG* between 20 February and 14 May 1896: 11: 329, 19: 473–475, 21: 512–514, 23: 564, 25: 611, 27: 634, 33: 755.

Twenty-two contained the phrase ‘excepting native pigeon, tui, huia, white heron, and crested grebe’; Kaikoura did not exclude huia; Otago also excluded wild geese and bittern; Southland also excluded ‘morepork-owl (*ruru*)’ and bittern.

Certain native birds protected under the Animals Protection Acts Notice published in *NZG* 19, 19 March 1896: 475.

Bellbird, North Island kōkako, South Island kōkako, kākāpō, kiwi, saddleback and stitchbird included in Fourth Schedule (native game).

Shooting season for ... native game [etc] Twenty-three notices published in *NZG* between 18 February and 15 April 1897: 18: 507, 30: 776–778, 33: 821–823, 37: 886.

All contained the phrase ‘excepting tui, huia, white heron, and crested grebe’; Otago also excluded wild geese and bittern; Southland also excluded ‘morepork-owl (*ruru*)’ and bittern; Cook County and Auckland also excluded native pigeon; Marlborough also excluded bittern.

Extending time for shooting season for imported and native game, Cook County District Notice published in *NZG* 56, 24 June 1897: 1217–1218.

Contained the phrase ‘excepting tui, huia, white heron, and crested grebe’.

Shooting season for ... native game [etc] Twenty-four notices published in *NZG* between 24 March and 7 April 1898: 20: 501–502, 21: 534, 24: 574–577.

All contained the phrase ‘excepting tui, huia, white heron, and crested grebe’; Otago also excluded wild geese and bittern; Southland also excluded ‘great kiwi (*roa-roa*), morepork-owl (*ruru*)’ and bittern; Wellington also excluded ‘paradise ducks and blue mountain ducks’.

Tuatara lizards and their eggs protected under the Animals Protection Acts Notice published in *NZG* 67, 8 September 1898: 1435.

Tuatara and their eggs absolutely protected (*ultra vires*).

Shooting season for ... native game [etc] Twenty-four notices published in *NZG* 26, 23 March 1899: 657–661.

All contained the phrase ‘excepting tui, huia, white heron, and crested grebe’; Wellington also excluded

paradise shelduck and blue duck; Marlborough also excluded native pigeon, pūkeko and paradise shelduck; Otago also excluded wild geese and bittern; Southland also excluded 'great kiwi (roa-roa), morepork-owl (ruru)' and bittern.

Shooting season for native game extended Notice published in *NZG* 60, 13 July 1899: 1310.

Listed species not to be taken or killed: in all districts, tūi, huia, white heron and crested grebe; in Wellington District, paradise shelduck and blue duck; in Marlborough District, native pigeon, pūkeko and paradise shelduck; in Otago District, wild geese and bittern; in Southland District, 'great kiwi (roa-roa), morepork-owl (ruru)', and bittern.

Sea-gulls of any species protected under the Animals Protection Acts. Notice published in *NZG* 65, 3 August 1899: 1409.

Protected 'sea-gulls of any species', as if included in Fourth Schedule of the Animals Protection Act 1880.

Shooting season for ... native game [etc] Twenty-six notices published in *NZG* 22, 16 March 1900: 580–584, and *NZG* 23, 22 March 1900: 607.

All contained the phrase 'excepting tui, huia, white heron, and crested grebe'; Marlborough also excluded native pigeon, pūkeko and paradise shelduck; Otago also excluded wild geese and bittern; Southland also excluded 'great kiwi (roa-roa), morepork-owl (ruru)' and bittern; Wellington also excluded paradise shelduck and blue duck.

Shooting season for native game extended Notice published in *NZG* 62, 12 July 1900: 1343.

Listed species not to be taken or killed: in all districts, tūi, huia, white heron and crested grebe; in Wellington District, paradise shelduck and blue duck; in Marlborough District, pūkeko; in Otago District, wild geese and bittern; in Southland District, 'great kiwi (roa-roa), morepork-owl (ruru)' and bittern.

Animals Protection Acts Amendment Act 1900 (64 VICT 1900 No. 45; *SNZ* 1900, 20 October: 236–237). Set the year 1901 and every third year thereafter to be a closed season for native pigeon, pūkeko and kākā.

Shooting season for ... native game [etc] Twenty-seven notices published in *NZG* 31, 28 March 1901: 773–778.

All contained the phrase 'excepting kaka, native pigeon, pukeko, tui, huia, white heron, and crested grebe';

Marlborough also excluded paradise shelduck; Otago also excluded wild geese and bittern; Southland also excluded 'great kiwi (roa-roa), morepork-owl (ruru)' and bittern; Wellington also excluded paradise shelduck and blue duck.

Native pigeons may be taken or killed in certain Native Districts Notice published in *NZG* 48, 16 May 1901: 1068.

Exemption during 1901 closed season allowed Māori to kill pigeons in parts of seven counties, mostly in the Bay of Plenty and Taupo regions.

Shooting season for ... native game [etc] Twenty-five notices published in *NZG* between 6 March and 24 April 1902: 18: 534, 25: 737–742, 31: 914.

All contained the phrase 'excepting tui, huia, white heron, and crested grebe'; Otago also excluded wild geese and bittern; Southland also excluded 'great kiwi (roa-roa), morepork-owl (ruru)' and bittern; Wellington also excluded paradise shelduck and blue duck.

Blue or mountain duck protected Notice published in *NZG* 12, 19 February 1903: 520.

Shooting season for ... native game [etc] Twenty-seven notices published in *NZG* between 5 and 26 March 1903: 17: 669–670, 20: 794–798, 22: 850.

All contained the phrase 'excepting tui, huia, white heron, crested grebe, and blue-or mountain-duck'; Southland also excluded 'great kiwi (roa-roa), morepork-owl (ruru)' and bittern; Otago also excluded wild geese and bittern; Wellington also excluded paradise shelduck.

Huia protected Notice published in *NZG* 19, 12 March 1903: 739.

Paradise ducks not to be taken or killed within the County of Rotorua Notice published in *NZG* 58, 16 July 1903: 1604.

Certain native birds protected Notice published in *NZG* 67, 27 August 1903: 1869.

Provided protection for 15 bird species within the counties of Akaroa and Mt Herbert, Canterbury: Australasian bittern, kākā, New Zealand pigeon, sacred kingfisher, long-tailed cuckoo, shining cuckoo, morepork, laughing owl, red-crowned parakeet (*Cyanoramphus novaeseelandiae*), New Zealand fantail, tomtit, South Island robin (*Petroica australis*), yellowhead, spotless crane and banded rail.

Seagulls may be killed in part of the Hawke's Bay District Notice published in *NZG* 62, 6 August 1903: 1738.

Half a mile (800 m) on each side of the Tukituki River from the sea to the junction with the Mangamuku Stream (about 3 miles [5 km] above Waipawa).

Bittern protected Notice published in *NZG* 73, 17 September 1903: 2050.

Australasian bittern protected throughout Canterbury.

Animals Protection Amendment Act 1903 (3 EDW VII 1903 No. 46; *SNZ* 1903, 12 November: 105–106). No relevant content.

Fixing season for godwits (curlew) Notice published in *NZG* 1, 7 January 1904: 12.

Godwit season set at 1 January–31 March.

Paradise ducks not to be taken or killed in Marlborough and North Canterbury Notice published in *NZG* 39, 5 May 1904: 1238.

Notice respecting native and imported game Notice published in *NZG* 39, 5 May 1904: 1238.

Native pigeon, pūkeko and kākā not to be taken or killed this year.

Bats of any species protected under the Animals Protections Acts Notice published in *NZG* 63, 28 July 1904: 1844.

Protection of 'the native bat (*Mystacops tuberculatus* and *Chalinobus morio*) ... as if ... included in the Fourth Schedule to the ... Animals Protection Act, 1880'.

Mangare rail (Chatham Islands) protected Notice published in *NZG* 73, 1 September 1904: 2123.

Seagulls may be killed in the County of Maniototo Notice published in *NZG* 78, 22 September 1904: 2264.

Bittern and little bittern protected Notice published in *NZG* 81, 6 October 1904: 2349.

Paradise duck protected Notice published in *NZG* 37, 20 April 1905: 980.

Protected for one year from 20 April 1905.

Paradise duck protected Notice published in *NZG* 26, 26 April 1906: 1111.

Protected for one year from 26 April 1906.

Certain native birds absolutely protected Notice published in *NZG* 36, 10 May 1906: 1191.

About 140 species listed (listed here in Appendix 2).

Paradise duck protected Notice published in *NZG* 109, 20 December 1906: 3266.

Protected for one year from 25 April 1907.

Albatross and eggs protected Notice published in *NZG* 22, 7 March 1907: 844.

Prohibited the 'taking or killing of the albatross (*Diomedea [sic]*) of any species, being birds indigenous to the said Colony of New Zealand, and ... also ... the taking or destroying of the eggs of such birds'.

Notice respecting native and imported game Notice published in *NZG* 28, 21 March 1907: 1045.

Native pigeon, pūkeko and kākā not to be taken or killed this year.

Animals Protection Act 1907 (7 EDW VII 1907 No. 66; *SDNZ* 1907, 25 November: 328–341).

This repealed the Animals Protection Act 1880, the Animals Protection Act Amendment Act 1881, the Animals Protection Act 1880 Amendment Act 1884, the Animals Protection Act 1880 Amendment Act 1886, the Animals Protection Act 1880 Amendment Act 1889, the Animals Protection Act 1880 Amendment Act 1895, the Animals Protection Acts Amendment Act 1900 and the Animals Protection Amendment Act 1903.

Set the year 1910 and every third year thereafter to be a closed season for native game.

Fixed February–April season for godwit hunting.

Native game included: black stilt, black swan, curlew, dotterel, godwit, New Zealand pigeon, pied stilt, pūkeko, teal, wild duck, wild geese.

Listed birds and reptiles to be protected: bellbird, bittern, reef heron, blue duck, crested grebe, kōkako, cuckoo (family Cuculidae), fantail, fernbird, kākāpō, huia, kākā, kingfisher, kiwi, banded rail, morepork, piopio, oystercatcher, paradise shelduck, tūī, variable oystercatcher, robin, saddleback, stitchbird, spotless crane, tomtit, white heron, bush wren, tuatara.

Paradise duck protected Notice published in *NZG* 30, 16 April 1908: 1180.

Protected for one year from 25 April 1908.

Animals Protection Act 1908 (1908 No. 6; *SDNZ* 1908: 45–49).

No additional changes (this is a consolidation of the Animals Protection Act 1907).

Fixing season for godwits (curlew) Notice published in *NZG* 84, 7 October 1909: 2535.

Godwit season set at 1 January–31 March.

Native pigeons may be taken or killed in the Native District of Urewera Notice published in *NZG* 35, 15 April 1910: 1222.

Exemption during 1910 closed season allowed Māori to kill pigeons in Urewera district.

Native pigeons may be taken or killed in the Native District of Taupo Notice published in *NZG* 46, 12 May 1910: 1418.

Exemption during 1910 closed season allowed Māori to kill pigeons in Taupo district.

Fixing open season for godwits (curlew) Notice published in *NZG* 78, 18 August 1910: 3189–3190. Godwit season set at 1 February–30 April.

Animals Protection Amendment Act 1910 (1 GEO V 1910 No. 22; *SDNZ* 1910, 2 November: 63–64).

‘Every person who destroys, or injures, or captures any bird which is indigenous to New Zealand, or who robs or destroys the nest of any such bird, is liable to a fine not exceeding twenty pounds.’

Certain species of birds indigenous to New Zealand not to be deemed protected Notice published in *NZG* 13, 16 February 1911: 642.

Protection removed for kea, hawks of all species, and ‘Shags of the following species: Black shag (*Phalacrocorax sulcirostris*), White-throated shag (*Phalacrocorax brevirostris*), Sea shag (*Phalacrocorax novae-hollandiae*, *Phalacrocorax carbo*)’ (i.e. little black shag [*Phalacrocorax sulcirostris*], little shag [*P. melanoleucos brevirostris*] and black shag [*P. carbo novae-hollandiae*]) through to 31 December 1911. Similar notices were published in *NZG* 13, 15 February 1912: 706, *NZG* 19, 6 March 1913: 758, *NZG* 24, 19 March 1914: 1008, and *NZG* 1, 7 January 1915: 13.

Certain species of birds indigenous to New Zealand not to be deemed protected Notice published in *NZG* 30, 13 April 1911: 1276.

Protection suspended for New Zealand pigeon, pūkeko, teal (probably New Zealand scaup) and grey duck, from 1 May to 31 July 1911.

Fixing open season for godwits (curlew) Notice published in *NZG* 2, 11 January 1912: 23.

Godwit season set at 1 January–31 March.

Certain species of birds indigenous to New Zealand not to be deemed protected Notice published in *NZG* 37, 24 April 1912: 1387.

Protection suspended for pūkeko, teal (probably New

Zealand scaup), grey duck, Australasian shoveler, black swan, and wild geese, from 1 May to 31 July 1912; protection suspended for paradise shelduck from 1 May to 14 May 1912. (This removed the penalty for killing these indigenous species during the game season, and allowed their harvest to be controlled by warrants covering each acclimatisation district. Similar notices were published in *NZG* 35, 24 April 1913: 1440, *NZG* 35, 8 April 1914: 1395, *NZG* 47, 8 April 1915: 1100 (or *RRB* 2: 964), *NZG* 42, 12 April 1916: 1033–1034 (or *RRB* 2: 1418), *NZG* 59, 4 April 1917: 1184, *NZG* 50, 8 April 1918: 1000 (or *RRB* 3: 200), *NZG* 39, 1 April 1919: 892–893 (or *RRB* 4: 69), *NZG* 37, 9 April 1920: 1124 (or *RRB* 5: 93), and *NZG* 33, 31 March 1921: 852.)

Godwit season set at 1 January to 31 March Order in Council dated 22 December 1912. (Referred to in *NZG* 133, 10 December 1914: 4265, but apparently not published in 1912.)

Kaka to cease to be native game Notice published in *NZG* 60, 25 June 1914: 2535.

Clarified that the kākā was fully protected under the Animals Protection Amendment Act 1910.

Animals Protection Act 1914 (5 GEO V 1914 No. 26; *SDNZ* 1914, 19 October: 65).

No relevant content.

Fixing open season for godwits (curlew) Notice published in *NZG* 133, 10 December 1914: 4265–4266.

Godwit season set at 1 January–31 March (except in Southland).

Certain species of birds indigenous to New Zealand not to be deemed protected Notice published in *NZG* 145, 23 December 1915: 4105–4106 (or *RRB* 2: 1340).

Absence of protection continued for kea, and the same three species of shags, through to 31 December 1916. (‘Hawks of all species’ omitted.)

Notice. – Animals Protection Acts. – Protection of native birds Notice published in *NZG* 42, 12 April 1916: 1034 (or *RRB* 2: 1419).

Set a closed season in 1916 and every third year thereafter. Birds not protected: kea, (little) black shag, white-throated shag, sea shag (= black shag). Native game protected in closed seasons: black stilt, black swan, curlew, dotterel, godwit, native pigeon, pied stilt, pūkeko, teal, wild duck, wild goose. Indigenous birds absolutely protected: ‘Kiwis of all species, New Zealand quail and

Chatham Island pigeon, rails and woodhens of all species, dabchick and grebe. Sea birds of all species, including penguins, petrels, storm petrels, shearwaters, fulmars, diving-petrels, albatross, terns, gulls, skuas, noddies, and shags (with exceptions noted above); also gannets, frigate-birds and tropic birds. Wading birds of all species, including turnstones, oyster-catchers, plovers, wry-bill plovers, avocets, sandpipers, knots, snipe, herons, night-herons, reef-herons, and bitterns. Hawks, owls, and harriers of all species. Parakeets of all species, and the kaka and kakapo, kingfisher, shining cuckoo, and long-tailed cuckoo. Riflemen and wrens of all species, tomtits, warblers, robins, fantails, whiteheads, yellowheads and fern-birds of all species. North and South Island thrushes and crows, creepers, stitch-birds, makomako, tui, silver-eye, pipit or native lark, huia, and saddleback. Blue mountain duck and Auckland Island duck. Southern merganser, moho (or takahe).

Hawks not to be deemed protected Notice published in *NZG* 99, 7 September 1916: 2955.

Hawks of all species not protected through to 31 December 1916.

Fixing open season for godwits (curlew) Notice published in *NZG* 103, 14 September 1916: 2997.

Godwit season set at 1 January–31 March (except in Opotiki, Southland and Auckland).

Certain species of birds indigenous to New Zealand not to be deemed protected Notice published in *NZG* 11, 25 January 1917: 314.

Absence of protection continued for kea, and the same three species of shags, through to 31 December 1917. 'Hawks of all species' reinserted.

Certain species of birds indigenous to New Zealand not to be deemed protected Notice published in *NZG* 180, 20 December 1917: 4538.

Absence of protection continued for hawks of all species, kea, and the same three species of shags, through to 31 December 1918. Similar notices were published in *NZG* 168, 19 December 1918: 4021, *NZG* 150, 19 December 1919: 3792 (or *RRB* 4: 231), and *NZG* 99, 9 December 1920: 3240 (or *RRB* 5: 377–378).

Fixing open season for godwits (curlew) Notice published in *NZG* 180, 20 December 1917: 4544.

Godwit season set at 1 January–31 March (except in Opotiki, Southland and Auckland). Auckland season set at 15 January–14 April.

Restricting shooting season for paradise duck Notice published in *NZG* 5, 17 January 1918: 154.

May be taken 'in the Otago Acclimatization District and in the Southland Acclimatization District' during the month of May.

Fixing open season for godwits (curlew) Notice published in *NZG* 1, 9 January 1919: 13.

Godwit season set at 1 January–31 March (except in Opotiki and Southland).

Special shooting season for native game, Ashburton Acclimatization District Notice published in *NZG* 39, 1 April 1919: 886.

Notice. – Animals Protection Acts. – Protection of native birds Notice published in *NZG* 39, 1 April 1919: 893 (or *RRB* 4: 69–70).

Set a closed season for 1919 and every third year thereafter. Same schedules as for 1916 (see above) apart from 'hawks of all species' added to 'Birds not protected', and hawks and harriers removed from 'Indigenous birds absolutely protected'.

Special shooting season for native game, Waitaki Acclimatization District Notice published in *NZG* 45, 14 April 1919: 1919.

Special shooting season for native game, license fee, &c, Lakes District Acclimatization District Notice published in *NZG* 53, 1 May 1919: 1251.

Fixing open season for godwits (curlew) Notice published in *NZG* 1, 8 January 1920 [printed as 1919 in error]: 34 (or *RRB* 5: 6).

Godwit season set at 1 January–31 March (except in Opotiki and Southland).

Short- and long-tailed bats protected absolutely in the Rotorua Acclimatization District Notice published in *NZG* 64, 1 July 1920: 2065–2066.

'Long-tailed bat (*Chalinobus morio*); Short-tailed bat (*Mystacops tuberculatus*)'.

Animals Protection Amendment Act 1920 (11 GEO V 1920 No. 54; *SDNZ* 1920, 5 November: 411–412).

No relevant content.

Certain species of frogs absolutely protected Notice published in *NZG* 51, 26 May 1921: 1357.

'*Liopelma Hamiltoni* and *Liopelma Hochstetteri*'.

Animals Protection and Game Act 1921–1922 (12 GEO V 1921 No. 57; *SDNZ* 1921–1922, 11 February 1922: 465–483).

This repealed the Animals Protection Act 1908, the Animals Protection Amendment Act 1910, the Animals Protection Act 1914, and the Animals Protection Amendment Act 1920.

The APGA 1921–22 provided a long list of birds to be fully protected, along with the long-tailed bat, short-tailed bat, tuatara and two species of native frogs (the full list of absolutely protected species is here given in Appendix 3). Native game included: black swan, New Zealand scaup, grey duck, shoveler, Pacific golden plover, bar-tailed godwit, lesser knot, turnstone.

Fourteen notices published in *NZG* 84, 16 November 1922: 2986–2991.

Set godwit game seasons for 14 acclimatisation districts.

Paradise duck and pukeko declared to be native game Notice published in *NZG* 32, 9 April 1923: 1003 (or *RRB* 7: 135).

Notice respecting native and imported game Notice published in *NZG* 32, 9 April 1923: 1003–1019 (or *RRB* 7: 139–142).

Pages 1004–1005 reproduced lists of native game and absolutely protected birds as per the APGA 1921–22 (see Appendix 3), with paradise shelduck and pukeko added to the game list (and removed from the list of absolutely protected birds). Pages 1005–1019 set game seasons.

Notice respecting native and imported game Notice published in *NZG* 21, 9 April 1924: 841–843 (or *RRB* 7: 634–637).

Paradise shelduck omitted from both lists (native game and absolutely protected birds), and not included in the game list for any district. Pages 843–856 set game seasons, with the season for Otago published in *NZG* 26, 17 April: 926, and the season for Coromandel published in *NZG* 33, 15 May: 1180.

Amending notifications under Animals Protection and Game Act, 1921–1922, in respect of Otago, Southland, Waitaki, and Lakes Acclimatization Districts Notice published in *NZG* 28, 24 April 1924: 1045.

Paradise shelduck season set at 1–7 May 1924.

Protection of native birds Notice published in *NZG* 22, 1 April 1925: 947 (or *RRB* 8: 113–115).

Paradise shelduck returned to the list of native game. Native game included: black swan, paradise shelduck, grey duck, shoveler, New Zealand scaup, pukeko, bar-tailed godwit, knot, eastern golden plover and turnstone. (The same lists were published in *NZG* 14, 12 March

1926: 633, *NZG* 15, 14 March 1927: 617, *NZG* 21, 14 March 1928: 675, *NZG* 17, 13 March 1929: 603, *NZG* 21, 21 March 1930: 825, *NZG* 20, 13 March 1931: 597, *NZG* 16, 4 March 1932: 457–458, and *NZG* 16, 20 March 1933: 461, apart from 1928 being a closed season for paradise shelduck, and 1929, 1930 and 1931 being closed seasons for pukeko.)

Carunculated shag absolutely protected Notice published in *NZG* 27, 5 May 1927: 1384.

‘Carunculated shag (*phalacrocorax carunculatus*)’ (= New Zealand king shag [*Leucocarbo carunculatus*]).

Stewart Island shag and bronze shag absolutely protected Notice published in *NZG* 31, 24 April 1930: 1469.

‘Stewart Island shag (*Phalacrocorax Stewarti*, *Phalacrocorax Huttoni*) and the bronze shag (*Phalacrocorax Chalconotus*)’ (= the two colour morphs of Stewart Island shag *Leucocarbo chalconotus*).

Certain birds absolutely protected Notice published in *NZG* 1, 9 January 1931: 13 (or *RRB* 10: 353–354).

‘Chatham Island Mollymawk (*Thalassarche Eremita*), brown kaka (*Nestor occidentalis*), Chatham Island shag (*phalacrocorax onslowi*), Bounty Island shag (*phalacrocorax ranfurlyi*), Auckland Island shag (*phalacrocorax Colensoi*), Campbell Island shag (*phalacrocorax Campbelli*), spotted shag (*Stictocarbo punctatus*), blue shag (*Stictocarbo stedi*)’.

Certain birds declared to be absolutely protected Notice published in *NZG* 62, 31 August 1933: 2134.

Pacific golden plover, lesser knot and turnstone.

Notice respecting native and imported game Supplement to *NZG* 14, 12 March 1934: 517–519.

Lesser knot, Pacific golden plover and turnstone added to the schedule of absolutely protected birds. Closed season set for pukeko.

Black teal declared to be absolutely protected Notice published in *NZG* 68, 6 September 1934: 2824.

New Zealand scaup.

Notice respecting native and imported game *NZG* 19, 25 March 1935: 761–762.

Closed season set for pukeko.

Animals Protection and Game Act, 1921–1922. – Protection of native birds Notice published in *NZG* 19, 25 March 1935: 763–764.

New Zealand scaup added to the schedule of absolutely protected birds. Pp. 764–771 set game seasons.

Animals Protection and Game Act, 1921–1922. – Protection of native birds Notice published in *NZG* 22, 16 March 1936: 483–484.

Native game included: black swan, paradise shelduck, grey duck, shoveler, pūkeko and bar-tailed godwit. (The same lists were published in *NZG* 17, 23 March 1937: 629–630, *NZG* 17, 16 March 1938: 453–454, *NZG* 16, 16 March 1939: 423–424, and *NZG* 29, 4 April 1940: 607–608.)

Little black shag (*Phalacrocorax sulcirostris*) absolutely protected (*SR* 1940/296, 14 November 1940).

‘Little black shag shall be deemed to be included in the First Schedule of the Animals Protection and Game Act 1921–22’.

The Animals Protection Warrant 1941 (*SR* 1941/17; *SR* 1941, 20 February: 28).

‘The godwit (*Limosa novae-zealandiae*) shall be deemed to cease to be included in the Third Schedule to the Animals Protection and Game Act, 1921–22, and shall be deemed to be included in the First Schedule to that Act [absolutely protected]’.

Animals Protection and Game Act, 1921–1922. – Protection of native birds Notice published in *NZG* 27, 28 March 1941: 786–788.

Native game included: black swan, paradise shelduck, grey duck, shoveler and pūkeko. These same five species (without further additions or deletions) have remained on the game list from 1941 to the present. (The same lists were published in *NZG* 34, 27 March 1942: 930–932, *NZG* 23, 5 April 1943: 412–413, *NZG* 28, 3 April 1944: 328–329, *NZG* 21, 27 March 1945: 328–329, *NZG* 22, 9 April 1946: 438–439, *NZG* 17, 31 March 1947: 399–400, *NZG* 20, 15 April 1948: 423–424, *NZG* 19, 30 March 1949: 840–841, *NZG* 20, 12 April 1950: 397–398, *NZG* 31, 12 April 1951: 530–531, and *NZG* 17, 27 February 1952: 300–301.)

The Animals Protection (Australian Spur-winged Plover) Warrant 1946 (*SR* 1946/157, 12 September 1946).

‘Spur-winged plover shall be deemed to be included in the First Schedule of the Animals Protection and Game Act, 1921–22’ (absolutely protected).

The Animals Protection (Mutton Bird) Warrant, 1947 (*SR* 1947/41, 27 March 1947).

Sooty shearwater to be protected on the main island of Stewart Island/Rakiura, apart from Block X, Lords River District.

The Animals Protection (Mallard Duck and Grey Duck) Warrant 1947 Notice published in *NZG* 68, 20 November 1947: 1814.

Clarified that crosses between mallards and grey ducks and any other variety of duck were to be included in the Third Schedule of the Animals Protection and Game Act, 1921–22 (native game).

Animals Protection (Native Frogs) Warrant 1948 (*SR* 1948/221, 13 January 1949: 924).

‘Native frogs ... (all species of the genus *Liopelma*) shall be deemed to be ... absolutely protected throughout New Zealand’.

Land Act Regulations 1949 (*SR* 1949/37, 30 March 1949).

Regulation 18 covered taking of muttonbirds (chicks of the sooty shearwater) on the Titi/Muttonbird Islands and other islands adjacent to Stewart Island/Rakiura.

Wildlife Act 1953 (*SR* 1953/16) (1953 No. 31; *SNZ* 1953, 31 October: 176–245) *SNZ* 16: 669–736.

This repealed the Animals Protection and Game Act 1921–22.

All terrestrial vertebrate species fully protected unless listed in one of five schedules.

First Schedule – Wildlife declared to be game included black swan (*Cygnus atratus*), grey duck (*Anas superciliosa*), paradise duck (*Casarca variegata* [= *Tadorna variegata*]), spoonbill duck (New Zealand shoveler) (*Anas rhynchosotis*) and pūkeko (*Porphyrio melanotus*).

Second Schedule – Partially protected: black-backed gull (*Larus dominicanus*), sea hawk (*Catharacta lonnbergi*), bush hawk (*Falco novae-seelandiae*), white eye (*Zosterops*). (‘when any injury or damage to any land or property on any land has arisen owing to the presence on the land of any wildlife ... specified in Schedule 2, the occupier of the land or any other person with the authority of the occupier may hunt or kill on the land any such wildlife’).

Third Schedule – Wildlife that may be hunted or killed subject to Minister’s notification: mutton bird (*Puffinus griseus*), grey-faced petrel (*Pterodroma macroptera*), little shag (*Phalacrocorax brevirostris*), pied shag (*Phalacrocorax varius*), weka (*Gallirallus*) on Chatham Islands and on islets off Stewart Island/Rakiura.

Fourth Schedule – Wildlife not protected, except in areas and during periods specified in Minister’s notification: introduced species only.

Fifth Schedule – Wildlife not protected: harrier hawk (*Circus*

approximans), kea (*Nestor notabilis*), black shag (*Phalacrocorax carbo*), all lizards.

Declaring red-vented bulbul to be wildlife not protected Notice published in *NZG* 22, 24 March 1955: 431).

Red-vented bulbul (*Pycnonotus cafer*) (an introduced species) added to the Fifth Schedule.

The Chatham Islands (Wildlife) Notice 1955 (*SR* 1955/57; *SR* 1955, 28 April: 182–184).

Regulated hunting of grey duck, black swan, pūkeko and weka (also mallard) on the Chatham Islands.

Little Shag Notice 1955 (*SR* 1955/181; *SR* 1955, 13 October: 666–667).

Outlined circumstances under which Minister of Internal Affairs authorised little shags to be killed.

The Chatham Islands (Wildlife) Notice 1956 (*SR* 1956/50; *SR* 1956, 12 April: 294–296).

Regulated hunting of grey duck, black swan, pūkeko and weka (also mallard) on the Chatham Islands.

Little Shag (Waimarino) Notice 1956 (*SR* 1956/190; *SR* 1956, 22 November: 879–880).

Minister of Internal Affairs authorised Waimarino Acclimatisation Society to issue permits allowing little shags to be killed in Waimarino Acclimatisation District.

Wildlife Amendment Act 1956 (1956 No. 5; *SNZ* 1956, 10 May: 23–27), **1959** (1959 No. 49; *SNZ* 1959, 21 October: 480–485), **1964** (1964 No. 63; *SNZ* 1964, 17 November: 399–403), **1966** (1966 No. 94; *SNZ* 1966, 20 October: 1517), **1968** (1968 No. 120; *SNZ* 1968, 13 December: 871–872).

No relevant content.

The Grey-faced Petrel (Northern Muttonbird) Notice 1957 (*SR* 1957/233; *SR* 1957, 24 October: 1006–1009).

Regulated harvest of chicks of the grey-faced petrel on islands lying off the east coast of the North Island between North Cape and East Cape.

The Grey-faced Petrel (Northern Muttonbird) Notice 1958 (*SR* 1958/112; *SR* 1958, 14 August: 604–607).

Regulated harvest of chicks of the grey-faced petrel on islands lying off the east coast of the North Island between North Cape and East Cape. Revoked The Grey-faced Petrel (Northern Muttonbird) Notice 1957 (*SR* 1957/233).

The Grey-faced Petrel (Northern Muttonbird) Notice 1959 (*SR* 1959/149; *SR* 1959, 24 September: 877–880).

Regulated harvest of chicks of the grey-faced petrel on islands lying off the east coast of the North Island between North Cape and East Cape. Revoked The Grey-faced Petrel (Northern Muttonbird) Notice 1958 (*SR* 1958/112).

The Land Act Regulations 1949, Amendment No. 3 (*SR* 1962/10; *SR* 1962, 15 February: 38–42).

Covered taking of muttonbirds (chicks of the sooty shearwater) on the Titi/Muttonbird Islands and other islands adjacent to Stewart Island/Rakiura.

The Grey-faced Petrel (Northern Muttonbird) Notice 1964 (*SR* 1964/176; *SR* 1964, 5 November: 1038–1041).

Regulated harvest of chicks of the grey-faced petrel on islands lying off the east coast of the North Island between North Cape and East Cape. Revoked The Grey-faced Petrel (Northern Muttonbird) Notice 1959 (*SR* 1959/149).

The Grey-faced Petrel (Northern Muttonbird) Notice 1969 (*SR* 1969/213; *SR* 1969, 16 October: 1192–1195).

Regulated harvest of chicks of the grey-faced petrel on islands lying off the east coast of the North Island between North Cape and East Cape. Revoked The Grey-faced Petrel (Northern Muttonbird) Notice 1964 (*SR* 1964/176).

Wildlife Order 1970 (*SR* 1970/124; *SR* 1970, 18 June: 803–804).

New Zealand falcon or 'bush hawk' (*Falco novaeseelandiae*) removed from the Second Schedule of the Wildlife Act 1953, thereby granted full protection. Kea (*Nestor notabilis*) moved from the Fifth Schedule (unprotected) to the Second Schedule (partially protected). Black-backed gull (*Larus dominicanus*) moved from the Second Schedule (partially protected) to the Fifth Schedule (unprotected).

Wildlife Order (No. 2) 1970 (*SR* 1970/208; *SR* 1970, 29 October: 1341–1342)

No relevant content.

Wildlife Amendment Act 1971 (1971 No. 140; *SNZ* 1971, 8 December: 2077–2078), **1972** (1972 No. 116; *SNZ* 1972, 20 October: 831–834), **1973** (1973 No. 99; *SNZ* 1973, 21 November: 760–761).

No relevant content.

The Chatham Islands (Wildlife) Notice 1975 (*SR* 1975/94; *SR* 1975, 15 May: 390–392).

Regulated hunting of grey duck, black swan, pūkeko and

weka (also mallard) on the Chatham Islands. Revoked the Chatham Islands (Wildlife) Notice 1955 (SR 1955/57), and the Chatham Islands (Wildlife) Notice 1956 (SR 1956/50).

The Chatham Islands (Wildlife) Notice 1977 (SR 1977/106; SR 1977, 6 May: 524–525).

Regulated hunting of grey duck, black swan, pūkeko and weka (also mallard) on the Chatham Islands. Revoked the Chatham Islands (Wildlife) Notice 1975 (SR 1975/94).

The Titi (Muttonbird) Islands Regulations 1978 (SR 1978/59; SR 1978, 16 March: 280–287).

Regulated harvest of chicks of sooty shearwaters (muttonbirds) on islands adjacent to Stewart Island/Rakiura. Revoked Regulation 18 of the Land Act Regulations 1949 (SR 1949/37), and the Land Act Regulations 1949, Amendment No. 3 (SR 1962/10).

The Titi (Muttonbird) Notice 1978 (SR 1978/124; SR 1978, 27 April: 528–529).

Provides that chicks of sooty shearwaters (muttonbirds) may be hunted or killed in accordance with the Titi (Muttonbird) Islands Regulations 1978.

The Grey-faced Petrel (Northern Muttonbird) Notice 1979 (SR 1979/237; SR 1979, 8 November: 1187–1190).

Regulated harvest of chicks of the grey-faced petrel on islands lying off the east coast of the North Island between North Cape and East Cape. Revoked The Grey-faced Petrel (Northern Muttonbird) Notice 1969 (SR 1969/213).

Wildlife Amendment Act 1980 (1980 No. 17; SNZ 1980, 19 September: 113–123).

Absolute protection provided to 29 species and two genera of terrestrial invertebrates declared to be animals with regard to the Wildlife Act 1953 (presented here in Appendix 5).

Wildlife Amendment Act 1981 (1981 No. 107; SNZ 1981, 22 October: 903).

No relevant content.

The Wildlife Order 1981 (SR 1981/48). SR 1981 1: 206–207.

Amended the Wildlife Act 1953 to provide absolute protection for all lizards except *Leiopisma nigriplantare maccani* (*sic*) (= *Oligosoma polychroma*), *Cyclodina aenea* (= *O. aeneum*), *Hoplodactylus maculatus* (= *Woodworthia maculata*) and *H. granulatus* (= *Mokopirirakau granulatus*).

Wildlife Amendment Act 1983 (1983 No. 48; SNZ 1983, 6 December: 619–624).

No relevant content.

Wildlife Order 1986 (SR 1986/7; SR 1986, 30 January: 18–19).

Harrier hawk (*Circus approximans*) and black shag (*Phalacrocorax carbo*) moved from the Fifth Schedule (not protected) of the Wildlife Act 1953 to the Second Schedule (partially protected). Kauri snail (*Paryphanta busbyi busbyi*) added to the Seventh Schedule (i.e. declared to be an animal, and thereby fully protected).

Wildlife Order (No. 2) 1986 (SR 1986/330; SR 1986, 13 November: 1782–1783).

Kea (*Nestor notabilis*) removed from the Second Schedule of the Wildlife Act 1953, and thereby granted full protection.

Wildlife Amendment Act 1993 (1993 No. 39; SNZ 1993, 17 May: 931–939), **1994** (1994 No. 109; SNZ 1994, 25 November: 1170–1171), **1996** (1996 No. 2; SNZ 1996, 13 March: 45–51), **(No. 2) 1996** (1996 No. 151; SNZ 1996, 2 September: 2959–2960).

No relevant content.

Wildlife Order 1996 (SR 1996/95; SR 1996, 9 May: 400–401).

No relevant content.

Fisheries Act 1996 (1996 No. 88; SNZ 1996, 13 August: 2181–2566).

Extended area of those species protected by the Wildlife Act 1953 from territorial waters (12 nautical miles [22.2 km] from the coast) to New Zealand fisheries waters (200 nautical miles [370 km] from the coast).

Wildlife Order (No. 2) 1996 (SR 1996/258; SR 1996, 19 September: 1465–1466).

The Fifth Schedule of the Wildlife Act 1953 amended by removal of four lizard species (see SR 1981/48 above), thereby granting protection to all native New Zealand lizard species.

Wildlife Amendment Act 2003 (2003 No. 103; SNZ 2003, 21 October: 2092–2093).

No relevant content.

Titi (Muttonbird) Notice 2005 (SR 2005/21; 17 February 2005).

Defines the Beneficial Titi Islands, the Rakiura Titi Islands, and titi. Revokes The Titi (Muttonbird) Notice 1978 (SR 1978/124).

The Titi (Muttonbird) Islands Amendment Regulations 2007 (SR 2007/375; 3 December 2007).

Amended the Titi (Muttonbird) Islands Regulations 1978 (SR 1978/59). No relevant content.

The Grey-Faced Petrel (Northern Muttonbird) Amendment Notice 2009 (SR 2009/305; 15 October 2009).

Amended the Grey-faced Petrel (Northern Muttonbird) Notice 1979.

Wildlife Order 2010 (SR 2010/159; SR 2010, 8 July).

Multiple changes to the schedules of the Wildlife Act, many of which were correcting nomenclature of both common and scientific names, and moving a few bird species between categories of partial protection. Substantive changes included full protection being provided to nine additional invertebrate species and three additional invertebrate genera (see Appendix 5), and spur-winged plover being added to the Fifth Schedule (not protected). Australasian harrier and black shag were moved from the Second Schedule (partially protected) to the Third Schedule (wildlife that may be hunted or killed subject to Minister's notification), and grey teal placed in the Third Schedule.

First Schedule – Wildlife declared to be game included black swan (*Cygnus atratus*), Australasian shoveler (*Anas rhynchos*), grey duck (*Anas superciliosa*), paradise shelduck (*Tadorna variegata*) and pūkeko (*Porphyrio melanotus*).

Second Schedule – Partially protected included: brown skua (*Catharacta antarctica lonnbergi*), silvereye (*Zosterops lateralis*).

Third Schedule – Wildlife that may be hunted or killed subject to Minister's notification included: Australasian harrier (harrier hawk) (*Circus approximans*), grey teal (*Anas gracilis*), grey-faced petrel (*Pterodroma macroptera*), black shag (*Phalacrocorax carbo*), little shag (*Phalacrocorax brevirostris*), pied shag (*Phalacrocorax varius*), sooty shearwater (mutton bird) (*Puffinus griseus*), weka (*Gallirallus*) on Chatham Islands and on islets off Stewart Island/Rakiura and in Foveaux Strait.

Fourth Schedule – Wildlife not protected, except in areas and during periods specified in Minister's notification: nil.

Fifth Schedule – Wildlife not protected included: black-backed gull (*Larus dominicanus*), spur-winged plover (*Vanellus miles*).

Wildlife (Black Shag and Little Shag) Notice 2012 (SR 2012/185; SR 2012, 10 July).

Described circumstances under which Minister of Conservation authorised black shags and little shags to be killed.

Wildlife (Australasian Harrier) Notice 2012 (SR 2012/194; SR 2012, 17 July).

Described circumstances under which Minister of Conservation authorised Australasian harriers to be killed.

Wildlife Amendment Act 2013 (2013 No. 18; SR 2013, 19 April).

No relevant content.

Appendix 2: Schedule published in the notice in *New Zealand Gazette* 36, 10 May 1906: 1191

Certain native birds absolutely protected by Governor William Lee, Baron Plunket, under the Animals Protection Act and 'the Acts amending the same'.

(Common and scientific names are reproduced as in the original – see Appendix 4 for current scientific names.)

Avocet (*Recurvirostra novae-hollandiae*).

Bell-bird, or Mocker (Makomako), (*Anthornis melanura*), and Chatham Island Bell-bird (*Anthornis melanocephala*).

Bittern (Matuku-Hurepo), (*Botaurus paeziloptilus*), and Little Bittern (Kioriki) (*Ardetta pusilla*).

Blue or Mountain Duck (Whio), (*Hymenolæmus malacorrhynchus*).

Brown Creeper (Toitoi) (*Finschia nove-zealandiae*).

Bush Canary (Mohua), (*Mohua ochrocephala*), and Whitehead Canary (Popokotea) (*Certhiparus albicillus*).

North Island Crow (Kokako), (*Glaucoptes wilsoni*), and South Island Crow (Kokako), (*Glaucoptes cinerea*).

Shining Cuckoo (Pipiwarauoa), (*Chalcococcyx lucidus*), and Long-tailed Cuckoo (Koekoea), (*Urodynamis taitensis*).

Dotterel (Tuturiwatu) (*Ochthodromus obscurus*), and Banded Dotterel (Pohowera) (*Ochthodromus bicinctus*).
 Pied Fantail (Tiwakawaka), (*Rhipidura flabellifera*), and Black Fantail (Tiwakawaka), (*Rhipidura fuliginosa*).
 Fern-bird (Matata) (*Sphenæacus punctatus*), Tawny Fern-bird (*Sphenæacus fulvus*), and Chatham Island Fern-bird (*Sphenæacus rufescens*).
 Gannet (Takapu) (*Sula serrator*).
 Crested Grebe (*Podiceps cristatus*), and Little Grebe (Totokipio) (*Podiceps rufipectus*).
 Grey Warbler (Riro-riro), (*Pseudogerygone igata*), and Chatham Island Warbler (*Pseudogerygone albifrontata*).
 Red-billed Gull (Tarapunga) (*Larus scopulinus*), Black-billed Gull (*Larus bulleri*), Skua Gull (*Stercorarius crepidatus*), and Sea Hawk (Hakoakoa), (*Megalestris antarctica*).
 White Heron (Kotuku), (*Herodias timoriensis*), White-fronted Heron (Matuku-Moana), (*Notophoyx nove-hollandie*), Blue Heron (Matuku), (*Demigretta sacra*), and Nankeen Night Heron (*Nycticorax caledonicus*).
 Huia (*Heteralocha acutirostris*).
 Kingfisher (Kotare) (*Halcyon vagans*).
 Brown Kiwi (*Apteryx mantelli*), Southern Kiwi (Rowi) (*Apteryx australis*), Grey Kiwi (*Apteryx oweni*), Spotted Kiwi (*Apteryx occidentalis*), and Great Spotted Kiwi (Roaroa) (*Apteryx haastii*).
 Knot (*Tringa canutus*).
 Antipodes Lark (*Anthus steindachneri*).
 Southern Merganser (*Merganser australis*).
 Moho or Takahe (*Notornis hochstetteri*).
 Laughing Owl (Whekau) (*Sceloglaux albifacies*), and Morepork (Ruru) (*Ninox nove-zealandie*).
 Pied Oyster-catcher or Red-bill (Torea), (*Haematopus longirostris*), and Black Oyster-catcher, or Red-bill (Torea), (*Haematopus unicolor*).
 Antipodes Island Parrakeet (*Cyanorhamphus unicolor*), Kermadec Island Parrakeet (*Cyanorhamphus cyanurus*), Red-fronted Parrakeet (Kakariki) (*Cyanorhamphus nove-zealandie*), Yellowish Parrakeet (*Cyanorhamphus erythrotis*), Yellow-fronted Parrakeet (*Cyanorhamphus auriceps*), Chatham Island Parrakeet (*Cyanorhamphus forbesi*), and Orange-fronted Parrakeet (*Cyanorhamphus malherbei*).
 Parson Bird (Tui) (*Prothemadera nove-zealandie*).
 Ground-parrot (Kakapo) (*Stringops nabroptilus*).
 King Penguin (*Aptenodytes patagonica*), Rock Hopper Penguin (*Pygoscelis papua*), Tufted Penguin (*Catarrhactes chrysocome*), Crested Penguin (Tawaki), (*Catarrhactes pachyrhynchus*), Big Crested Penguin (*Catarrhactes*

sclateri), Royal Penguin (*Catarrhactes schlegeli*), Yellow-eyed Penguin (Hoiho), (*Megadyptes antipodum*), Blue Penguin (Korora), (*Eudyptula minor*), and White-flipped Penguin (*Eudyptula albosignata*).
 Wilson's Storm Petrel (*Oceanites oceanicus*), Grey-backed Storm Petrel (*Garrodia nereis*), White-faced Storm Petrel (*Pelagodroma marina*), Black-bellied Storm Petrel (*Cymodroma melanogaster*), Brown Petrel (*Priofinus cinereus*), Silver-grey Petrel (*Priocella glacialisoides*), White-chinned Petrel (*Majaqueus æquinoctialis*), Black Petrel (Toanui), (*Majaqueus parkinsoni*), Grey-faced Petrel (*Cestrelata macroptera*), White-headed Petrel (*Cestrelata lessoni*), Black-winged Petrel (*Cestrelata nigripennis*), Black-capped Petrel (*Cestrelata cervicalis*), Kermadec Island Mutton-bird (*Cestrelata neglecta*), Cook's Petrel (Titi), (*Cestrelata cooki*), Rain-bird (*Cestrelata inexpectata*), Chatham Island Petrel (*Cestrelata axillaris*), Giant Petrel or Nelly (*Ossifraga gigantea*), Cape Pigeon (*Daption capensis*), Blue Petrel (*Halobaena caerulea*), Whale-bird (*Prion vittatus*), Whale-bird (Whiroia), (*Prion banksi*, *Prion desolatus*, and *Prion ariel*), Diving Petrel (*Pelecanoides urinatrix*), Diving Petrel (*Pelecanoides exsul*).
 Spotted Plover (*Charadrius dominicus*), Sand Plover (Kukuruatu), (*Thinornis nove-zealandie*), Auckland Island Sand Plover (*Thinornis rossi*), and Wrybill (*Anarhynchus frontalis*).
 Pectoral Rail (Mohopereru), (*Hypotaenidia philippensis*), Macquarie Island Rail (*Hypotaenidia macquariensis*), Auckland Island Rail (*Hypotaenidia muelleri*), Mangare Rail (*Cabalus modestus*), Dieffenbach's Rail (*Nesolimnas dieffenbachii*), Marsh Rail (Koitareki) (*Porzana affinis*), and Swamp Rail (Putoto) (*Porzana tabuensis*).
 South Island Wood Robin (Toutouwai) (*Miro albifrons*), North Island Wood Robin (Toutouwai), (*Miro australis*), Black Wood Robin (*Miro traversi*), Little Wood Robin (*Miro dannefordi*), White-breasted or Pied Tit (Miro-miro) (*Petræca toitoi*), and Yellow-breasted Tit (Ngirungiru) (*Petræca macrocephala*).
 Saddle-back (Tieke), (*Creedion carunculatus*).
 Sandpiper (*Heteropygia acuminata*), and Red-necked Sandpiper (*Limonites ruficollis*).
 Shearwater (Hakoakoa) (*Puffinus gavia*), Dusky Shearwater (*Puffinus obscurus*), Allied Shearwater (*Puffinus assimilis*), Pink-footed Shearwater (*Puffinus carneipes*), Long-tailed Shearwater (*Puffinus bulleri*), and Wedge-tailed Shearwater (*Puffinus chlororhynchus*).
 Snares Snipe (*Gallinago huegeli*), Auckland Island Snipe

(*Gallinago aucklandica*), and Chatham Island Snipe (*Gallinago pusilla*).
 White-headed Stilt Plover (Poaka) (*Himantopus leucocephalus*), Pied Stilt Plover (Poaka) (*Himantopus picatus*), and Black Stilt Plover (Kaki) (*Himantopus melas*).
 Stitch-bird (Ihi) (*Pogonornis cincta*).
 Swallow (*Hirundo nigricans*).
 Caspian Tern (Tara-nui) (*Hydroprogne caspia*), Black-fronted Tern (Tara), (*Sterna albistriata*), and Swallow-tailed Tern (*Sterna vittata*).

White-fronted Tern (Tara), (*Sterna frontalis*), Sooty Tern (*Sterna fuliginosa*), Little Tern (*Sterna nereis*), and White Tern (*Gygis candida*).
 South Island Thrush (Piopio) (*Turnagra crassirostris*), and North Island Thrush (Piopio) (*Turnagra tanagra*).
 Turnstone (*Arenaria interpres*).
 Green Wren (*Xenicus longipes*), Rock Wren (*Xenicus gilviventris*), and Bush Wren (Titipounamu), (*Acanthidossitta chloris*).

Appendix 3: First Schedule of the Animals Protection and Game Act 1921–22

(12 GEO V 1921 No. 57; *Statutes of the Dominion of New Zealand* 1921–1922, 11 February 1922: 478). Animals absolutely protected.

(Common and scientific names are reproduced as in the original – see Appendix 4 for current scientific names.)

Birds.

Albatross–

Black-browed mollymawk (*Thalassarche melanophrys*).
 Bounty Island mollymawk (*Thalassogeron cautus*).
 Campbell Island mollymawk (*Thalassogeron chrysostomus*).
 Royal albatross (*Diomedea epomophora*).
 Snares Island mollymawk (*Thalassarche bulleri*).
 Sooty albatross (*Phoebastria palpebrata: fusca*).
 Wandering albatross (toroa), (*Diomedea exulans*).
 Yellow-nosed mollymawk (*Thalassogeron chlororhynchus*).

Australian tree-swallow (*Petrochelidon nigricans*).

Avocet (*Recurvirostra novae-hollandiae*).

Bell-bird, or mocky (korimako), (*Anthornis melanura*).

Auckland Island bell-bird (*Anthornis melanura incoronata*).

Chatham Island bell-bird (*Anthornis melanocephala*).

Bittern (matuku-hurepo), (*Botaurus poeciloptilus*).

Little bittern (kioriki), (*Ixobrychus minutus*).

Canary–

Bush canary (mohua), (*Mohua ochrocephala*).

White-head canary (popokotea), (*Certhiparus albicillus*).

Creeper (South Island), (pipipi, toitoi), (*Finschia novae-zealandiae*).

Crow–

North Island crow (kokako), (*Callaeas wilsoni*).

South Island crow (kokako), (*Callaeas cinerea*).

Cuckoo– (Family Cuculidae)

Long-tailed cuckoo (koekoea), (*Urodynamis taitensis*).

Shining cuckoo (pipiwharaua), (*Chalcococcyx lucidus*).

Dottrel–

Banded dottrel (*Cirripedesmus bicinctus*).

New Zealand dottrel (*Orthodromus obscurus*).

Duck–

Auckland Island duck (*Nesonetta aucklandica*).

Blue or mountain duck (whio), (*Hymenoloeus malacorrhynchus*).

Brown duck (*Elasmonetta chlorotis*).

Grey teal (*Nettion castaneum*).

Paradise duck (*Casarca variegata*).

Fantail–

Black fantail (tiwakawaka), (*Rhipidura fuliginosa*).

Chatham Island pied fantail (*Rhipidura flabellifera penita*).

Pied fantail (tiwakawaka), (*Rhipidura flabellifera*).

Fern-bird (matata) –

Chatham Island fern-bird (*Bowdleria rufescens*).

Mainland species (*Bowdleria punctata* and *Bowdleria fulva*).

Snares Island fern-bird (*Bowdleria punctata caudata*).

Gannet–

Gannet (takapu), (*Sula serrator*).

Masked gannet (*Sula dactylatra*).

Grebe–

- Crested grebe (*Podiceps cristatus*).
- Little grebe, or dabchick (totokipio), (*Poliiocephalus rufopectus*).

Gull–

- Black-billed gull (*Larus bulleri*).
- Red-billed gull (tarapunga), (*Larus scopulinus*).
- Sea-hawk (hakoakoa), (*Megalestris lonnbergi*).

Heron–

- Blue heron (matuku), (*Demigretta sacra*).
- Nankeen night-heron (*Nycticorax caledonicus*).
- White-fronted heron (matuku-moana), (*Notophox novae-hollandiae*).
- White heron (kotuku), (*Herodias alba*).

Huia (*Heteralocha acutirostris*).Kaka (*Nestor meridionalis*).Kakapo (ground-parrot), (*Strigops habroptilus*).Kingfisher (kotare), (*Halcyon vagans*).

Kiwi–

- Brown kiwi (*Apteryx mantelli*).
- Great spotted kiwi (roaroa), (*Apteryx haasti*).
- Grey kiwi (*Apteryx oweni*).
- Spotted kiwi (*Apteryx occidentalis*).
- Southern kiwi (roa), (*Apteryx australis*).
- Stewart Island kiwi (*Apteryx australis lawryi*).

Magpie (Australian), (*Gymnorhina tibicen*).Martin (*Chelidon urbica*).

Owl–

- Laughing-owl (whekau), (*Sceloglaux albifacies*).
- Little owl (*Athene noctua*).
- Morepork (ruru, koukou), (*Ninox novae-zealandiae*).
- Rufous-faced owl (North Island), (*Sceloglaux albifacies rufifacies*).

Oyster-catcher, or redbill–

- Black oyster-catcher, or redbill (torea), (*Haematopus niger*).
- Pied oyster-catcher, or redbill (torea), (*Haematopus ostralegus*).

Parakeet–

- Antipodes Island parakeet (*Cyanorhamphus unicolor*).
- Auckland Island parakeet (*Cyanorhamphus novae-zealandiae aucklandicus*).
- Chatham Island parakeet (*Cyanorhamphus auriceps forbesi*).
- Kermadec Island parakeet (*Cyanorhamphus novae-zealandiae cyanurus*).
- Orange-fronted parakeet (*Cyanorhamphus malherbei*).

Red-fronted parakeet (kakariki), (*Cyanorhamphus novae-zealandiae*).

Yellow-fronted parakeet (*Cyanorhamphus auriceps*).

Parson-bird (tui), (*Prothemadera novae-zealandiae*).

Penguin–

- Big crested penguin (*Eudyptes chrysochomus sclateri*).
- Blue penguin (korora), (*Eudyptula minor*).
- Campbell Island crested penguin (*Eudyptes chrysochomus filholi*).
- Crested penguin (tawaki), (*Eudyptes chrysochomus pachyrhynchus*).
- King penguin (*Aptenodytes patagonica*).
- Rock-hopper penguin (*Pygoscelis papua*).
- Royal penguin (*Eudyptes schegeli*).
- Tufted penguin (*Eudyptes chrysochomus*).
- White-flipped penguin (*Eudyptula albisignata*).
- Yellow-eyed penguin (hoiho or hoihoi), (*Megadyptes antipodum*).

Petrel–

- Black petrel (toanui), (*Procellaria parkinsoni*).
- Black-bellied storm-petrel (*Fregatta melanogaster*).
- Black-capped petrel (*Pterodroma externa*).
- Black-winged petrel (*Cookilaria nigripennis*).
- Blue petrel (*Halobaena caerulea*).
- Brown petrel (*Priofinus cinereus*).
- Cape pigeon (*Daption capensis*).
- Chatham Island petrel (*Cookilaria axillaris*).
- Cook's petrel (titi), (*Cookilaria cooki*).
- Diving-petrel (*Pelecanoides urinatrix*).
- Grey-backed storm-petrel (*Garrodia nereis*).
- Grey-faced petrel (*Pterodroma macroptera*).
- Giant petrel, or nelly (*Macronectes gigantea*).
- Kermadec Island mutton-bird (*Pterodroma neglecta*).
- Rainbird (*Pterodroma inexpectata*).
- Silver-grey petrel (*Priocella antarctica*).
- Whale-bird (*Prion vittatus*).
- Whale-bird (whiroia), (*Prion desolatus* and *Prion turtur*).
- White-chinned petrel (*Procellaria aequinoctialis*).
- White-faced storm-petrel (*Pelagodroma marina*).
- White-headed petrel (*Pterodroma lessoni*).
- Wilson's storm-petrel (*Oceanites oceanicus*).

Pigeon (kereru), (*Hemiphaga novae-zealandiae*).

Chatham Island pigeon (*Hemiphaga chathamensis*).

Pipit (pihoihoi, ground-lark), (*Anthus novae-zealandiae*).

Antipodes Island pipit (*Anthus novae-zealandiae steindachneri*).

- Auckland Island pipit (*Anthus novae-zealandiae aucklandicus*).
- Chatham Island pipit (*Anthus novae-zealandiae chathamensis*).
- Plover–
- Lapwing (*Vanellus cristatus*).
- Sand-plover (kukuruatu), (*Thinornis novae-zealandiae*).
- Wrybill (*Anarhynchus frontalis*).
- Pukeko (*Porphyrio melanotus*).
- Rail–
- Auckland Island rail (*Rallus muelleri*).
- Dieffenbach's rail (Chatham Island), (moeraki), (*Nesolimnas dieffenbachii*).
- Mangare rail (*Cabalus modestus*).
- Marsh-rail (koitareke), (*Porzana affinis*).
- Pectoral rail (mohopereru patata), (*Hypotaenidia philippensis*).
- Swamp-rail (putoto), (*Porzana plumbea*).
- Rifleman (tititipounamu), (*Acanthisitta chloris*).
- Robin–
- Chatham Island robin (*Nesomiro traversi*).
- North Island wood-robin (toutouwai), (*Miro longipes*).
- Snares robin (*Nesomiro traversi dannefordi*).
- South Island alpine robin (*Miro australis bulleri*).
- South Island wood-robin (toutouwai), (*Miro australis*).
- Saddleback (tieke), (*Creadion carunculatus*).
- Sandpiper (*Heteropygia maculata*).
- Shag–
- Chatham Island shag (*Phalacrocorax featherstoni*).
- Shearwater (hakoakoa), (*Puffinus reinholdi*).
- Allied shearwater (*Puffinus assimilis*).
- Long-tailed shearwater (*Puffinus bulleri*).
- Pink-footed shearwater (*Puffinus carneipes*).
- Wedge-tailed shearwater (*Puffinus pacificus*).
- Snipe–
- Antipodes Island snipe (*Gallinago aucklandica tristrami*).
- Auckland Island snipe (*Gallinago aucklandica*).
- Chatham Island snipe (*Gallinago aucklandica pusilla*).
- Common snipe (*Gallinago coelestis*).
- Snares Island snipe (*Gallinago aucklandica huegeli*).
- Southern merganser (*Merganser australis*).
- Starling (*Sturnus vulgaris*).
- Stilt-plover–
- Black stilt-plover (*Hypsibates novae-zealandiae*).
- Pied stilt-plover (*Hypsibates leucocephalus*).
- Stitch-bird (hihi), (*Notiomystis cincta*).
- Takahe (*Notornis hochstetteri*).
- Tern–
- Black-fronted tern (tara), (*Sterna albistriata*).
- Caspian tern (tara nui), (*Hydroprogne caspia*).
- Grey noddy (*Procelsterna caerulea*).
- Little tern (*Sterna nereis*).
- Sooty tern (*Sterna fuscata*).
- Swallow-tailed tern (*Sterna vittata*).
- White-capped noddy (*Megalopterus minutus*).
- White-fronted tern (tara), (*Sterna striata*).
- White tern (*Gygis alba*).
- White-winged black tern (*Hydrochelidon leucoptera*).
- Thrush–
- North Island thrush (piopio), (*Turnagra tanagra*).
- South Island thrush (piopio), (*Turnagra crassirostris*).
- Tomtit (miromiro)–
- Auckland Island tomtit (*Myiomoira macrocephala marrineri*).
- Chatham Island tomtit (*Myiomoira macrocephala dieffenbachii*).
- North Island tomtit (*Myiomoira toitoi*).
- South Island tomtit (*Myiomoira macrocephala*).
- Tropic bird (raukura), (*Phaethon rubricauda*).
- Warbler–
- Chatham Island warbler (*Pseudogerygone albifrontata*).
- Grey warbler (riroriro), (*Pseudogerygone igata*).
- Woodhen–
- Black woodhen (weka), (*Gallirallus brachypterus*).
- Brown woodhen (weka), (*Gallirallus australis*).
- North Island woodhen (weka), (*Gallirallus australis greyi*).
- South Island woodhen (weka), (*Gallirallus hectori*).
- Stewart Island woodhen (weka), (*Gallirallus australis scotti*).
- Wren–
- Green wren (*Xenicus longipes*).
- Rock-wren (*Xenicus gilviventris*).
- Stephen Island wren (*Traversia lyalli*).
- Mammalia.**
- Long-tailed bat (pekapeka), (*Chalinolobus morio*).
- Short-tailed bat (*Mystacops tuberculatus*).
- Reptiles.**
- Tuatara (*Sphenodon punctatus*).
- Amphibia.**
- Native frogs (*Liopelma hamiltoni* and *Liopelma hochstetteri*).

Appendix 4: Current accepted names for species listed in the notice published in *New Zealand Gazette* 36, 10 May 1906: 1191 (see Appendix 2) and the First Schedule of the Animals Protection and Game Act 1921–22 (see Appendix 3)

Names are listed only if they have changed since 1906 or 1922. The current names given (based on Gill *et al.* 2010) are an interpretation of what the legislation was likely to be referring to, rather than a strict modern synonymy.

Name used in 1906 and/or 1922	Current name
<i>Acanthidositta chloris</i>	<i>Acanthisitta chloris</i>
<i>Anthornis melanura incoronata</i>	<i>Anthornis melanura melanura</i>
<i>Anthus novae-zealandiae</i>	<i>Anthus novaeseelandiae</i>
<i>Anthus novae-zealandiae aucklandicus</i>	<i>Anthus novaeseelandiae aucklandicus</i>
<i>Anthus novae-zealandiae chathamensis</i>	<i>Anthus novaeseelandiae chathamensis</i>
<i>Anthus novae-zealandiae steindachneri</i>	<i>Anthus novaeseelandiae steindachneri</i>
<i>Anthus steindachneri</i>	<i>Anthus novaeseelandiae steindachneri</i>
<i>Apteryx haasti</i>	<i>Apteryx haastii</i>
<i>Apteryx occidentalis</i>	<i>Apteryx owenii</i>
<i>Apteryx oweni</i>	<i>Apteryx owenii</i>
<i>Ardetta pusilla</i>	<i>Ixobrychus novaeseelandiae</i>
<i>Bowdleria fulva</i>	<i>Bowdleria punctata</i>
<i>Casarca variegata</i>	<i>Tadorna variegata</i>
<i>Catarrhactes chrysocome</i>	<i>Eudypetes filholi</i>
<i>Catarrhactes pachyrhynchus</i>	<i>Eudypetes pachyrhynchus</i> and <i>E. robustus</i>
<i>Catarrhactes schlegeli</i>	<i>Eudypetes schlegeli</i>
<i>Catarrhactes sclateri</i>	<i>Eudypetes sclateri</i>
<i>Certhiparus albicillus</i>	<i>Mohoua albicilla</i>
<i>Chalcococcyx lucidus</i>	<i>Chrysococcyx lucidus</i>
<i>Chalinolobus morio</i>	<i>Chalinolobus tuberculatus</i>
<i>Charadrius dominicus</i>	<i>Pluvialis fulva</i>
<i>Chelidon urbica</i>	<i>Delichon urbicum</i>
<i>Cirripedesmus bicinctus</i>	<i>Charadrius bicinctus</i>
<i>Cookilaria axillaris</i>	<i>Pterodroma axillaris</i>
<i>Cookilaria cooki</i>	<i>Pterodroma cookii</i>
<i>Cookilaria nigripennis</i>	<i>Pterodroma nigripennis</i>
<i>Creadion carunculatus</i>	<i>Philesturnus carunculatus</i> and <i>P. rufusater</i>
<i>Cyanoramphus auriceps</i>	<i>Cyanoramphus auriceps</i>
<i>Cyanoramphus auriceps forbesi</i>	<i>Cyanoramphus forbesi</i>
<i>Cyanoramphus cyanurus</i>	<i>Cyanoramphus novaeseelandiae cyanurus</i>
<i>Cyanoramphus erythrotis</i>	<i>Cyanoramphus novaeseelandiae erythrotis</i>
<i>Cyanoramphus forbesi</i>	<i>Cyanoramphus forbesi</i>
<i>Cyanoramphus malherbei</i>	<i>Cyanoramphus malherbi</i>
<i>Cyanoramphus novae-zealandiae</i>	<i>Cyanoramphus novaeseelandiae</i>
<i>Cyanoramphus novae-zealandiae aucklandicus</i>	<i>Cyanoramphus novaeseelandiae novaeseelandiae</i>

Name used in 1906 and/or 1922	Current name
<i>Cyanoramphus novae-zealandiae cyanurus</i>	<i>Cyanoramphus novaezealandiae cyanurus</i>
<i>Cyanoramphus unicolor</i>	<i>Cyanoramphus unicolor</i>
<i>Cymodroma melanogaster</i>	<i>Fregatta tropica</i>
<i>Daption capensis</i>	<i>Daption capense</i>
<i>Demiegretta sacra</i>	<i>Egretta sacra</i>
<i>Diomedea exulans</i>	<i>Diomedea antipodensis</i>
<i>Elasmonetta chlorotis</i>	<i>Anas chlorotis</i>
<i>Eudyptes chrysocomus</i>	<i>Eudyptes filholi</i>
<i>Eudyptes chrysocomus filholi</i>	<i>Eudyptes filholi</i>
<i>Eudyptes chrysocomus pachyrhynchus</i>	<i>Eudyptes pachyrhynchus</i> and <i>E. robustus</i>
<i>Eudyptes chrysocomus sclateri</i>	<i>Eudyptes sclateri</i>
<i>Eudyptes schegeli</i>	<i>Eudyptes schlegeli</i>
<i>Eudyptula albisignata</i>	<i>Eudyptula minor</i> (colour morph)
<i>Eudyptula albosignata</i>	<i>Eudyptula minor</i> (colour morph)
<i>Finschia novae-zealandiae</i>	<i>Mohoua novaeseelandiae</i>
<i>Fregatta melanogaster</i>	<i>Fregatta tropica</i>
<i>Gallinago aucklandica</i>	<i>Coenocorypha aucklandica</i>
<i>Gallinago aucklandica huegeli</i>	<i>Coenocorypha huegeli</i>
<i>Gallinago aucklandica pusilla</i>	<i>Coenocorypha pusilla</i>
<i>Gallinago aucklandica tristrami</i>	<i>Coenocorypha aucklandica meinertzhagenae</i>
<i>Gallinago coelestis</i>	<i>Gallinago gallinago</i>
<i>Gallinago huegeli</i>	<i>Coenocorypha huegeli</i>
<i>Gallinago pusilla</i>	<i>Coenocorypha pusilla</i>
<i>Gallirallus brachypterus</i>	<i>Gallirallus australis</i>
<i>Gallirallus hectori</i>	<i>Gallirallus australis hectori</i>
<i>Glaucopis cinerea</i>	<i>Callaeas cinerea</i>
<i>Glaucopis wilsoni</i>	<i>Callaeas wilsoni</i>
<i>Gygis candida</i>	<i>Gygis alba</i>
<i>Haematopus longirostris</i>	<i>Haematopus finschi</i>
<i>Haematopus niger</i>	<i>Haematopus unicolor</i>
<i>Haematopus ostralegus</i>	<i>Haematopus finschi</i>
<i>Halcyon vagans</i>	<i>Todiramphus sanctus vagans</i>
<i>Hemiphaga novae-zealandiae</i>	<i>Hemiphaga novaeseelandiae</i>
<i>Herodias alba</i>	<i>Ardea modesta</i>
<i>Herodias timoriensis</i>	<i>Ardea modesta</i>
<i>Heteropygia acuminata</i>	<i>Calidris acuminata</i>
<i>Heteropygia maculata</i>	<i>Calidris acuminata</i>
<i>Himantopus leucocephalus</i>	<i>Himantopus himantopus leucocephalus</i>
<i>Himantopus melas</i>	<i>Himantopus novaezealandiae</i>
<i>Himantopus picatus</i>	<i>Himantopus himantopus leucocephalus</i>
<i>Hirundo nigricans</i>	<i>Petrochelidon nigricans</i>
<i>Hydrochelidon leucoptera</i>	<i>Chlidonias leucopterus</i>
<i>Hymenoloemus malacorhynchus</i>	<i>Hymenolaimus malacorhynchus</i>
<i>Hypotaenidia macquariensis</i>	<i>Gallirallus philippensis macquariensis</i>
<i>Hypotaenidia muelleri</i>	<i>Lewinia muelleri</i>

Name used in 1906 and/or 1922	Current name
<i>Hypotaenidia philippensis</i>	<i>Gallirallus philippensis</i>
<i>Hypsibates leucocephalus</i>	<i>Himantopus himantopus leucocephalus</i>
<i>Hypsibates novae-zealandiae</i>	<i>Himantopus novaezealandiae</i>
<i>Ixobrychus minutus</i>	<i>Ixobrychus novaezealandiae</i>
<i>Larus scopulinus</i>	<i>Larus novaehollandiae scopulinus</i>
<i>Limonites ruficollis</i>	<i>Calidris ruficollis</i>
<i>Liopelma hamiltoni</i>	<i>Leiopelma hamiltoni</i>
<i>Liopelma hochstetteri</i>	<i>Leiopelma hochstetteri</i>
<i>Macronectes gigantea</i>	<i>Macronectes halli</i>
<i>Majaqueus aequinoctialis</i>	<i>Procellaria aequinoctialis</i>
<i>Majaqueus parkinsoni</i>	<i>Procellaria parkinsoni</i>
<i>Megalestris antarctica</i>	<i>Catharacta antarctica lonnbergi</i>
<i>Megalestris lonnbergi</i>	<i>Catharacta antarctica lonnbergi</i>
<i>Megalopterus minutus</i>	<i>Anous minutus</i>
<i>Merganser australis</i>	<i>Mergus australis</i>
<i>Miro albifrons</i>	<i>Petroica australis</i>
<i>Miro australis</i> [South Island]	<i>Petroica australis</i>
<i>Miro australis</i> [North Island]	<i>Petroica longipes</i>
<i>Miro australis bulleri</i>	<i>Petroica australis australis</i>
<i>Miro dannefordi</i>	<i>Petroica macrocephala dannefaerdi</i>
<i>Miro longipes</i>	<i>Petroica longipes</i>
<i>Miro traversi</i>	<i>Petroica traversi</i>
<i>Mohua ochrocephala</i>	<i>Mohoua ochrocephala</i>
<i>Myiomoira macrocephala</i>	<i>Petroica macrocephala</i>
<i>Myiomoira macrocephala dieffenbachii</i>	<i>Petroica macrocephala chathamensis</i>
<i>Myiomoira macrocephala marrineri</i>	<i>Petroica macrocephala marrineri</i>
<i>Myiomoira toitoi</i>	<i>Petroica macrocephala toitoi</i>
<i>Mystacops tuberculatus</i>	<i>Mystacina tuberculata</i>
<i>Nesolimnas dieffenbachii</i>	<i>Gallirallus dieffenbachii</i>
<i>Nesomiro traversi</i>	<i>Petroica traversi</i>
<i>Nesomiro traversi dannefordi</i>	<i>Petroica macrocephala dannefaerdi</i>
<i>Nesonetta aucklandica</i>	<i>Anas aucklandica</i>
<i>Nettion castaneum</i>	<i>Anas gracilis</i>
<i>Ninox novae-zealandiae</i>	<i>Ninox novaeseelandiae</i>
<i>Notophox novae-hollandiae</i>	<i>Egretta novaehollandiae</i>
<i>Notornis hochstetteri</i>	<i>Porphyrio hochstetteri</i>
<i>Ochthodromus bicinctus</i>	<i>Charadrius bicinctus</i>
<i>Ochthodromus obscurus</i>	<i>Charadrius obscurus</i>
<i>Estrelata axillaris</i>	<i>Pterodroma axillaris</i>
<i>Estrelata cervicalis</i>	<i>Pterodroma cervicalis</i>
<i>Estrelata cooki</i>	<i>Pterodroma cookii</i>
<i>Estrelata inexpectata</i>	<i>Pterodroma inexpectata</i>
<i>Estrelata lessoni</i>	<i>Pterodroma lessonii</i>
<i>Estrelata macroptera</i>	<i>Pterodroma macroptera gouldi</i>
<i>Estrelata neglecta</i>	<i>Pterodroma neglecta</i>

Name used in 1906 and/or 1922	Current name
<i>Estrelata nigripennis</i>	<i>Pterodroma nigripennis</i>
<i>Orthodromus obscurus</i>	<i>Charadrius obscurus</i>
<i>Ossifraga gigantea</i>	<i>Macronectes halli</i>
<i>Pelecanoides exsul</i>	<i>Pelecanoides urinatrix exsul</i>
<i>Petræca macrocephala</i>	<i>Petroica macrocephala</i>
<i>Petræca toitoi</i>	<i>Petroica macrocephala toitoi</i>
<i>Phalacrocorax featherstoni</i>	<i>Stictocarbo featherstoni</i>
<i>Podiceps cristatus</i>	<i>Podiceps cristatus</i>
<i>Podiceps rufipectus</i>	<i>Poliocephalus rufopectus</i>
<i>Pogonornis cincta</i>	<i>Notiomystis cincta</i>
<i>Porzana affinis</i>	<i>Porzana pusilla affinis</i>
<i>Porzana plumbea</i>	<i>Porzana tabuensis</i>
<i>Priocella antarctica</i>	<i>Fulmarus glacialisoides</i>
<i>Priocella glacialisoides</i>	<i>Fulmarus glacialisoides</i>
<i>Priofinus cinereus</i>	<i>Procellaria cinerea</i>
<i>Prion ariel</i>	<i>Pachyptila turtur</i>
<i>Prion banksi</i>	<i>Pachyptila desolata</i>
<i>Prion desolatus</i>	<i>Pachyptila desolata</i>
<i>Prion turtur</i>	<i>Pachyptila turtur</i>
<i>Prion vittatus</i>	<i>Pachyptila vittata</i>
<i>Procelsterna caerulea</i>	<i>Procelsterna cerulea</i>
<i>Prothemadera novae-zealandiae</i>	<i>Prothemadera novaeseelandiae</i>
<i>Pseudogerygone albifrontata</i>	<i>Gerygone albofrontata</i>
<i>Pseudogerygone igata</i>	<i>Gerygone igata</i>
<i>Pterodroma externa</i>	<i>Pterodroma cervicalis</i>
<i>Pterodroma lessoni</i>	<i>Pterodroma lessonii</i>
<i>Puffinus chlororhynchus</i>	<i>Puffinus pacificus</i>
<i>Puffinus obscurus</i>	<i>Puffinus gavia</i>
<i>Puffinus reinholdi</i>	<i>Puffinus gavia</i>
<i>Rallus muelleri</i>	<i>Lewinia muelleri</i>
<i>Recurvirostra novae-hollandiae</i>	<i>Recurvirostra novaehollandiae</i>
<i>Rhipidura flabellifera</i>	<i>Rhipidura fuliginosa</i>
<i>Rhipidura flabellifera penita</i>	<i>Rhipidura fuliginosa penita</i>
<i>Sphenæacus fulvus</i>	<i>Bowdleria punctata</i>
<i>Sphenæacus punctatus</i>	<i>Bowdleria punctata</i>
<i>Sphenæacus rufescens</i>	<i>Bowdleria rufescens</i>
<i>Stercorarius crepidatus</i>	<i>Stercorarius parasiticus</i>
<i>Sterna albistriata</i>	<i>Chlidonias albistriatus</i>
<i>Sterna frontalis</i>	<i>Sterna striata</i>
<i>Sterna fuliginosa</i>	<i>Onychoprion fuscatus</i>
<i>Sterna fuscata</i>	<i>Onychoprion fuscatus</i>
<i>Stringops nabroptilus</i>	<i>Strigops habroptilus</i>
<i>Sula serrator</i>	<i>Morus serrator</i>
<i>Thalassarche melanophrys</i>	<i>Thalassarche melanophris</i>
<i>Thalassogeron cautus</i>	<i>Thalassarche cauta</i> and <i>T. salvini</i>

Name used in 1906 and/or 1922	Current name
<i>Thalassogeron chlororhynchus</i>	<i>Thalassarche carteri</i>
<i>Thalassogeron chrysostomus</i>	<i>Thalassarche chrysostoma</i>
<i>Thinornis novae-zealandiae</i>	<i>Thinornis novaeseelandiae</i>
<i>Thinornis rossi</i>	<i>Thinornis novaeseelandiae</i>
<i>Tringa canutus</i>	<i>Calidris canutus</i>
<i>Turnagra crassirostris</i>	<i>Turnagra capensis</i>
<i>Urodynamis taitensis</i>	<i>Eudynamis taitensis</i>
<i>Vanellus cristatus</i>	<i>Vanellus vanellus</i>

Appendix 5: Terrestrial invertebrates fully protected in a new 'Seventh Schedule' to the Wildlife Act 1953 through their inclusion in the First Schedule of the Wildlife Amendment Act 1980 (with additional taxa added through their inclusion in section 6 of the Wildlife Order 1986, and Section 3 of the Wildlife Order 2010)

ARTHROPODA

INSECTA (INSECTS)

Orthoptera:

Acrididae (grasshoppers)–

Brachaspis robustus Bigelow 1967 (robust grasshopper)

Sigaüs childi Jamieson 1999*

Anostomatidae [formerly Stenopelmatidae] (giant, ground, tree and tusked weta)–

Deinacrida carinata Salmon

Deinacrida fallai Salmon [commonly known as the Poor Knights weta]

Deinacrida heteracantha White [commonly known as wetapunga]

Deinacrida rugosa Buller [commonly known as the Stephens Island weta]

Deinacrida parva Buller

Deinacrida tibiospina Salmon

Deinacrida (giant weta)– all species*

Hemideina ricta (Hutton 1897) (Banks Peninsula tree weta)

Motuuweta isolata Johns 1997 (Mercury Islands tusked weta)*

Coleoptera:

Carabidae (ground or carab beetles)–

Mecodema laeviceps Broun 1904 (Ida Valley carabid beetle)*

Megadromus speciosus Johns 2007 (Eastern Sounds ground beetle [listed as *Megadromus* sp. in 1980])

Cerambycidae (longhorn beetles)–

Xylotoles costulatus Pascoe 1875 (Pitt Island longhorn beetle)

Curculionidae (Weevils)–

Anagotus fairburni Brookes 1932 (flax weevil)

Anagotus stephenensis Kuschel 1982 (Stephens Island weevil)*

Anagotus turbotti (Spiller 1942) (Turbott's weevil)

Hadramphus spinipennis Broun 1911 (coxella weevil)

Hadramphus stilbocarpae Kuschel 1971 (knobbed weevil)

Hadramphus tuberculatus (Pascoe 1877) (Canterbury knobbed weevil)

Heterexis seticostatus Brookes 1951 (Campbell Island ribbed weevil)

Lyperobius huttoni Pascoe 1876 (speargrass weevil)

Lyperobius nesidiotes Kuschel 1987 (Broughton Island weevil)*

Megacolabus sculpturatus Broun 1893 (Akaroa weevil)

Nothaldonis peacei Broun 1880 (Peace's weevil)

Oclandius laeviusculus Broun 1902

Elateridae (click beetles)–

Amychus candezei Pascoe 1876 (Chatham Islands click beetle)

Amychus granulatus Broun 1886 (Cook Strait click beetle)

Lucanidae (stag beetles)–

Dorcus auriculatus (Broun) [subsequently placed in *Geodorcus*]

Dorcus ithaginus (Broun) [subsequently placed in *Geodorcus*]

Geodorcus– all species*

Scarabaeidae (scarab beetles)–

Prodontria bicolorata Given 1964 (Alexandra chafer beetle)*

Prodontria lewisii Broun 1904 (Cromwell chafer beetle)

ARACHNIDA

Araneae (spiders):

Gradungulidae–

Spelungula cavernicola Forster 1987 (Nelson cave spider)

Theridiidae–

Latrodectus atritus Urquhart 1890 (black katipo spider)*,**

Latrodectus katipo Powell 1871 (red katipo spider)*,**

MOLLUSCA

GASTROPODA (SNAILS)

Cytora hirsutissima (Powell 1951)

Cytora tepakiensis Gardner 1967

Paryphanta busbyi watti Powell

*Paryphanta busbyi busbyi****

Paryphanta (kauri snails)– all species*

Placostylus (flax snails)– all native New Zealand species

Powelliphanta (large land snails)– all species

Rhytidarex buddlei (Powell 1948)*

* Species or genus added through inclusion in the Wildlife Order 2010.

** The black katipo is now considered a colour morph of the red katipo, and so both should be referred to as *Latrodectus katipo* (see Vink *et al.* 2008).

*** Subspecies added through inclusion in the Wildlife Order 1986.