

Visiting the reserve


The reserve is situated in the village of Barnack, 11km north-west of Peterborough in Cambridgeshire. The site is open all the year round and parking is available at several points close by (see map). Cycle parking is also provided. Buses from Stamford and Peterborough serve local villages and stop regularly in Barnack, some 5 minutes walk from the reserve.



Barnack Hills and Holes National Nature Reserve

Visitors can help us to look after this special area by observing a few simple rules:

- Access on foot only – please keep to the main paths
- No hill-sliding or ball-games – rare plants may be damaged
- No fires or barbecues

 There are many steep slopes, and paths may be slippery and uneven on this site.

The Limestone Walk

First time visitors may like to follow the Limestone Walk, a 30 minute walk over 1.3km which takes you through all the main features of the reserve. Follow the orange arrows from the main car parks.

Further information

During the spring and summer you should be able to see our seasonal warden on the site who can give you more information about the reserve and its wildlife. Further information may also be obtained from the Site Manager on 01780 752796, or by writing to English Nature at the address on the back of this leaflet, or visit www.english-nature.org.uk

English Nature is the Government agency that champions the conservation of wildlife and geology throughout England.

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Welcome to Barnack Hills and Holes National Nature Reserve

Arising from the rubble of a mediaeval quarry, Barnack Hills and Holes is one of Britain's most important wildlife sites. Covering an area of just 22 hectares (50 acres), the grassy slopes are home to a profusion of wild flowers. This type of meadowland covered in wild flowers is now all too rare: half of the surviving limestone grassland in Cambridgeshire is found at the Hills and Holes. The area became a National Nature Reserve in 1976, and in 2002 it was designated as a Special Area for Conservation, to protect the orchid rich grassland as part of the Natura 2000 series of special wildlife sites throughout Europe.



spring sedge
March-April



man orchid
May-June



bee orchid
June-July



fragrant orchid
June



frog orchid
June



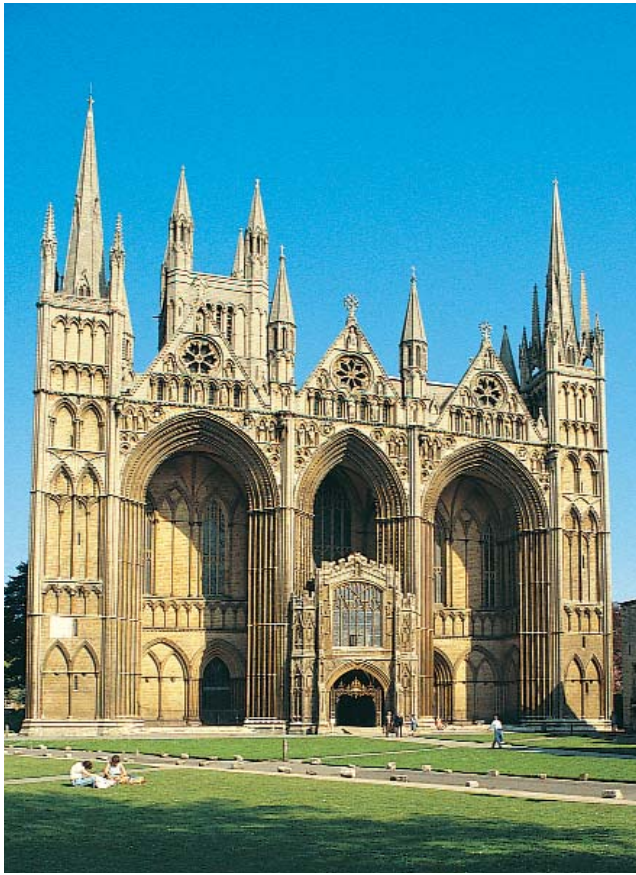
clustered bellflower
June-Aug



stemless thistle
July-Aug



knapweed broomrape
July-Sept



History

The unique hummocky landscape of the Hills and Holes was created by quarrying for limestone. The stone, known as Barnack rag, was a valuable building stone first exploited by the Romans over 1500 years ago. Quarrying continued in mediaeval Times when the Abbeys at Peterborough, Crowland, Ramsey, Sawtry and Bury St. Edmunds all used Barnack stone, and the monasteries frequently argued over the rights to it. Blocks of stone were transported on sleds to the river Welland and loaded on to barges which travelled down the Nene and the fenland waterways. Most famously, stone from Barnack was used to build Peterborough and Ely Cathedrals. By the year 1500, all the useful stone had been removed, and the bare heaps of limestone rubble gradually became covered by the rich carpet of wild flowers that can be seen today.

The limestone was originally formed in Jurassic Times. It is made from the remains of billions of tiny sea-creatures which lived in a warm shallow sea that covered this area 150 million years ago.

Wild Flowers

Over 300 kinds of wild plants have been found on the Hills and Holes, including eight species of orchids. One of the rarest plants found here is the pasque flower, which blooms in April and May, alongside more familiar flowers such as violets and cowslip. The best time to see the flora is in June and July, when large areas are covered in pink, blue, white and yellow flowers. Many of the orchids appear at this time alongside other lime-loving plants including rockrose, wild thyme, quaking grass, and ox-eye daisy. Later in the year further species such as clustered bellflower, carline thistle, and autumn gentian may be seen. You may also notice the upright brown spikes of the knapweed broomrape, a parasitic plant which takes its food from the roots of greater knapweed.

female glow-worm Chris Gardiner/English Nature



chalkhill blue Nick Greatorex-Davies

Management

Nature Reserves such as the Hills and Holes rarely look after themselves, and each year careful management is needed to maintain and improve the wildlife habitat on the Reserve. Limestone grasslands are traditionally grazed with sheep and at Barnack, grazing is carried out in autumn by up to 300 sheep. These remove the summer growth and build-up of leaves, stalks and grass tussocks that would otherwise die back to form a dead layer or 'litter' on the ground. Without grazing, the build-up of coarse grasses and litter would rapidly choke the rarer lime-loving plants. Parts of the grassland also suffer from invasion by scrub – an unwanted growth of shrubs and bushes, which if left unchecked, would rapidly take over the site. Scrub and trees are cleared regularly from the open grassland but a few areas are left as a habitat for birds and other wildlife.

What is a National Nature Reserve?

English Nature designates National Nature Reserves to safeguard areas of outstanding importance for nature conservation. They also give the public a chance to experience at first hand a wide variety of wildlife.



pyramidal orchids Chris Gardiner/English Nature



cowslips Chris Gardiner/English Nature

Wildlife

Not surprisingly, Barnack's rich flora supports a wide variety of wildlife, especially insects, and a number of nationally scarce species are found. Several uncommon butterflies are recorded including marbled white, chalkhill blue, brown argus and green hairstreak. One of the most obvious signs of insect life are the many small mounds dotted across the site. These are the nests of the yellow meadow ant. The Hills and Holes are one of the best places in the region to see the strange green lights of the glow-worm, which occurs in large numbers on warm summer nights. The grubs of this beetle feed on snails, which are common on the limestone soils.