

Notified to the Secretary of State: 30 July 1999

**County:** Dorset      **Site Name:** Blue Pool and Norden Heaths

**District:** Purbeck

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

**Local Planning Authority:** Purbeck District Council/Dorset County Council

**National Grid Reference:** SY 937833      **Area:** 112.54 (ha) 277.97 (ac)

**Ordnance Survey Sheet 1:50,000:** 195      **1:10,000:** SY 98 SW

**Date Notified (Under 1949 Act):** 1977 (part)

**Date Notified (Under 1981 Act):** 1985, 1986, 1999

**Other Information:**

The site includes nature reserves managed by the Herpetological Conservation Trust and a private nature reserve. The site has been amended by additions and consolidates two sites previously notified as Blue Pool and Norden Heaths SSSI and Norden SSSI.

**Description and Reasons for Notification:**

Blue Pool and Norden Heaths is one of a collection of sites which together comprise the Dorset heathlands. Although these heathlands have declined in extent and now occupy only 14% of their original area they show a high degree of ecological cohesion and clear ecological trends and patterns. The Dorset heaths complex is one of the major lowland heathland areas in Britain and is of international importance for its plant and animal communities.

This varied area of heathland, scrub, deciduous and coniferous woodland, pools and streams lies on the Bagshot Sands close to the Purbeck chalk ridge. A substantial part shows evidence of former clay working and the resultant variation in topography and soils helps to account for the mixture of plant communities. Heathland is dominant in the north and west of the site; the southern part, which is close to the chalk, is wooded with open glades. Open water is present in a number of small pools. The site is important for its heath and mire plant communities, for the combination of heathland and mature secondary woodland and for a number of nationally rare and scarce plants and animals.

Dry heath occurs on free draining sands and is of the heather *Calluna vulgaris* – dwarf gorse *Ulex minor* type although western gorse *Ulex gallii* is also found locally. Common gorse *Ulex europaeus* is frequent, including several dense unbroken stands and bracken *Pteridium aquilinum* is also locally abundant. Stands of dry heath are characteristic of the slopes of former clay workings whereas much of the undisturbed land, where soils are wetter, supports humid heath. Heather, cross-leaved heath *Erica tetralix*, purple moor-grass *Molinia caerulea* and bristle bent *Agrostis curtisii* are characteristic plants of this Nationally Scarce community, restricted to Dorset and the New Forest.

Wet heath occurs locally in poorly drained areas. Dominant plants are purple moor-grass, cross-leaved heath, deer grass *Trichophorum cespitosum* and the bog mosses *Sphagnum compactum* and *Sphagnum tenellum*. Strong populations of the Nationally Scarce marsh

gentian *Gentiana pneumonanthe* and Nationally Rare Dorset heath *Erica ciliaris* also occur. Around the edge of clay pools and in narrow valleys, several also derived from old workings, a valley mire plant community has developed. This Nationally Rare community has an exceptionally rich flora. As well as several species of *Sphagnum* moss including the Nationally Scarce *S. pulchrum*, and other bryophytes such as *Drepanocladus fluitans* and *Riccardia pinguis*, these areas support an abundance of plants such as common cottongrass *Eriophorum angustifolium*, bog asphodel *Narthecium ossifragum*, white-beak sedge *Rhynchospora alba*, bog pimpernel *Anagallis tenella* and bogbean *Menyanthes trifoliata*. Open water in bog and clay pools supports aquatic species such as bog pondweed *Potamogeton polygonifolius*, white water-lily *Nymphaea alba* and bogbean.

The southern part of the site reaches the extreme edge of the acidic Tertiary basin and the somewhat richer soils support less heathy vegetation. Locally there are small areas of fen meadow in the richest examples of which purple moor-grass is dominant together with heath-grass *Danthonia decumbens*, carnation sedge *Carex panicea* and abundant herbs including meadow thistle *Cirsium dissectum*, devil's-bit scabious *Succisa pratensis*, saw-wort *Serratula tinctoria*, tormentil *Potentilla erecta* and heath spotted-orchid *Dactylorhiza maculata*. Less herb-rich examples of this community also occur elsewhere on the site on more acid soils.

The richer soils also support areas of ancient woodland with many veteran oak *Quercus robur* trees and similar large mature trees marking old boundary banks. In places, hazel *Corylus avellana* and in the frequent wetter hollows, willow *Salix* sp. form a dense understorey. Golden saxifrage *Chrysosplenium oppositifolium* occurs in the wet woodland and the typical drier acid ground flora includes many ferns and mosses. Broad buckler-fern *Dryopteris dilatata* is abundant and the woodland floor mosses include *Plagiothecium undulatum* which is uncommon in east Dorset. Dog's mercury *Mercurialis perennis* becomes frequent in the woodland closet to the chalk scarp, showing the beginning of a change to calcareous woodland. The mature oaks and willows support luxuriant epiphytes including the uncommon lichen *Usnea florida*. Mature secondary woodland also occurs on old clay workings. The range of species is similar to the ancient woods and the structure is varied with many mature oaks and much dead wood. There are also areas dominated by Scot's pine *Pinus sylvestris*. Numerous open heathland glades occur within both the coniferous and deciduous woodland.

Like the range of habitats, the fauna of this site is varied. Invertebrate groups are well represented. Grasshoppers and crickets include the Nationally Scarce bog bush-cricket *Metrioptera brachyptera* and the Nationally Scarce butterfly silver-studded blue *Plebejus argus* is present on humid and wet heath. Two Nationally Scarce species of dragonfly occur, small red damselfly *Ceriagrion tenellum* and southern damselfly *Coenagrion mercuriale*<sup>1</sup>. Southern damselfly is declining in Europe and the five populations on the Dorset heathlands, of which this is one, constitute one of the national strongholds for the species.

The site supports a number of rare amphibians, reptiles and birds. The protected amphibian, great crested newt *Triturus cristatus*<sup>1,2</sup> breeds in some of the less acidic clay pools. Both of Britain's endangered and protected reptiles, sand lizard *Lacerta agilis*<sup>2</sup> and smooth snake *Coronella austriaca*<sup>2</sup> occur in significant numbers. There are populations of sand lizard on dry heathland throughout the site and it is estimated that together these comprise some 4% of the national population. Smooth snake is also widely distributed.

The heathland birds Dartford warbler *Sylvia undata*<sup>3,4</sup> and nightjar *Caprimulgus europaeus*<sup>3</sup> are present in numbers which contribute to the internationally important populations of these birds on the Dorset heathlands.

<sup>1</sup> Species listed on Annex II to Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

<sup>2</sup> European protected species listed on Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994.

<sup>3</sup> Species listed on Annex I to the EC Birds Directive (79/409/EEC).

<sup>4</sup> Specially protected species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).