This is a transcript of English Nature's citation document.

County: Berkshire

Site name: GREENHAM AND CROOKHAM COMMONS

Status: SSSI notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authorities: Newbury District Council, Berkshire County Council [now West Berkshire Council]

National Grid Reference: SU490645 and SU523643

Ordnance Survey 1:50,000 sheet: 174

Ordnance Survey 1:10,000 sheets: SU46 NE/SE, SU56 SW/NW

Date Notified (Under 1981 Act): 1985

 Date of Last Revision:
 16 March 1994

 Area:
 278.61 ha (688.45 ac)

Other information: This site includes the former Greenham Common SSSI.

Description and Reasons for Notification

This site comprises of an extensive complex of heathland, grassland, gorse scrub, broad leaved woodland and alder–lined gullies. Much of the heathland and grassland has been maintained by regular mowing within the perimeter of the Greenham Common airbase while the woodland and scrub, predominantly on areas outside the airbase perimeter, has developed with little intervention. The site also includes one large ancient coppice woodland, Peckmoor Copse. The heathland and acid grassland at this site make up the single largest tract of these habitats in Berkshire.

Greenham and Crookham Commons occur on a long ridge between the Rivers Enborne and Kennet. The ridge consists of Eocene deposits of acid, sandy clays of the Bagshot Beds overlain by plateau gravels, and seated on heavy impermeable clays of the London Clay. Consequently the soils are a complicated pattern of variable deposits in which free draining soils dominate, but with clay pockets producing extensive seepage zones and springs. These springs give rise to streams creating the small, flushed and waterlogged valleys of alder woodland.

The heathland is characterised by a mixture of ling *Calluna vulgaris*, bell heather *Erica cinerea* and dwarf gorse *Ulex minor*, with, in some areas, an abundance of heath grass *Danthonia decumbens* and spring sedge *Carex caryophyllea*, a community with a restricted distribution in England. Occasional patches of bare soil support an open acid grassland community with early hair—grass *Aira praecox*, squirrel- tail fescue *Vulpia bromoides* and hair moss *Polytrichum* spp. In some areas mouse—ear—hawkweed *Pilosella officinarum* is particularly abundant. Lichens are a conspicuous feature of the open patches, chiefly *Cladonia* spp., including the nationally scarce *C. cariosa*. Dwarf cudweed *Filago minima*, heath cudweed *Gnaphalium sylvaticum*, bird's—foot *Ornithopus perpusillus*, and annual knawel *Scleranthus annuus* are frequent within this mosaic together with the nationally scarce fine—leaved sandwort *Minuartia hybrida* and upright chickweed *Moenchia erecta*. On damper areas the soil is colonised by many locally rare mosses and liverworts including swards of *Archidium alternifolium* and frequent *Lophozia excisa* and *L. bicrenata*. Also present is the nationally scarce liverwort *Riccia subbifurca*, the only known site in Berkshire for this small plant.

In hollows where water accumulates a flush-type community has developed with sharp flowered rush *Juncus acutiflorus*, carnation sedge *Carex panicea* lesser spearwort *Ranunculus flammula* and mosses including *Climacium dendroides*. A calcareous influence further increases the diversity, with such plants as wild carrot *Daucus carota*, dwarf thistle *Cirsium acaule*, purging flax *Linum catharticum*, pyramidal orchid *Anacamptis pyramidalis*, burnet saxifrage *Pimpinella saxifrage* and the mosses *Trichostomum* and *Encalypta streptocarpa* growing alongside more typically acid-loving plants.

The neutral grassland in the airbase includes locally uncommon plants such as green-winged orchid *Orchis morio*, great burnet *Sanguisorba officinalis*, hare's-foot clover *Trifolium arvense* and meadow saxifrage *Saxifraga granulata*.

On the southern slopes of the Common, on the terraces of gravels and sands, most of the former heathland is now overgrown with silver birch *Betula pendula*, pedunculate oak *Quercus robur* and bracken, *Pteridium aquilinum*. This secondary woodland ground flora includes the moss *Leucobryum glaucum*, pale sedge *Carex pallescens*, green–ribbed sedge *C. binervis* and bilberry *Vaccinium myrtillus*.

The ancient woodland is dominated by ash Fraxinus excelsior, alder Alnus glutinosa, and hazel Corylus avellana with occasional hornbeam Carpinus betulus and aspen Populus tremula. The ground flora includes hard shield—fern Polystichum aculeatum, lily of the valley Convallaria majalis, Solomon's seal Polygonatum multiflorum, a species largely confined to central southern Britain, and large bitter—cress Cardamine amara which is on the south—western edge of its range.

A rich and varied flora characteristic of both base—rich soils and more acid conditions is typical of the alder gully woodlands. Broad buckler fern *Dryopteris dilatata* and male fern *D. filix—mas* are abundant, and scaly male fern *D. affinis* and lady fern *Athyrium filix—femina* are frequent. Other species present include marsh violet *Viola palustris*, alternate—leaved golden saxifrage *Chrysosplenium alternifolium*, thin—spiked wood sedge *Carex strigosa*, smooth—stalked sedge *C. laevigata*, wood club—rush *Scirpus sylvaticus* and wood horsetail *Equisetum sylvaticum*, all of which are uncommon in central England.

The two commons are rich in a wide range of invertebrates. Butterflies recorded include the purple emperor *Apatura iris*, white admiral *Ladoga camilla* and silver–washed fritillary *Argynnis paphia* from the woodland and the silver studded blue *Plebejus argus*, grayling *Hipparchia semel* e and brown argus *Aricia agestis* from the heathland and grassland. The bog bush cricket *Metrioptera brachyptera* occurs on the heathland areas.

Breeding birds recorded include woodcock, nightjar, barn owl and nightingale in the woods and scrub, as well as a number of ground nesting birds in the more open habitats.

Adder Vipera berus, grass snake Natrix natrix, slow worm Anguis fragilis and common lizard Lacerta vivipara are found on Greenham and Crookham Commons, as are the common frog Rana temporaria and toad Bufo bufo. All three British species of newt also occur; palmate, smooth and the great crested newt Triturus helveticus, T. vulgaris and T. cristatus.

GREENHAM AND CROOKHAM COMMONS SITE OF SPECIAL SCIENTIFIC INTEREST OPERATIONS LIKELY TO DAMAGE THE SPECIAL INTEREST

Standard

Ref. No. Type of Operation

- 1 Cultivation, including ploughing, rotovating, harrowing and re-seeding.
- The introduction of grazing or changes in the grazing regime (including type of stock, intensity or seasonal pattern of grazing and cessation of grazing).
- 3 The introduction of stock feeding or changes in stock feeding practice.
- 4 Mowing or other methods of cutting vegetation and changes in the mowing or cutting regime (including hay making to silage and cessation).
- 5 Application of manure, fertilisers and lime.
- 6 Application of pesticides, including herbicides (weedkillers).
- 7 Dumping, spreading or discharge of any materials.
- 8 Burning.
- The release into the site of any wild, feral or domestic animal*, chalk, or any plant or seed.
- The killing or removal of any wild animal*, including pest control.
 - * 'animal' includes any mammal, reptile, amphibian, bird, fish or invertebrate.
- The destruction, displacement, removal or cutting of any plant or plant remains, including tree, shrub, herb, hedge, dead or decaying wood, moss, lichen, fungus, leaf-mould or turf.
- Tree and woodland management and changes in tree and woodland management. (Including afforestation, planting, clear and selective felling, thinning, coppicing, modification of the stand or underwood, changes in species composition, cessation of management.
- 13a Drainage (including moor-gripping, the use of mole, tile, tunnel or other artificial drains).
- Modification of the structure of water courses (eg rivers, streams, springs, ditches, dykes, drains), including their banks and beds, as by realignment, re-grading and dredging.
- 13c Management of aquatic and bank vegetation for drainage purposes. (See also 11)
- The changing of water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes).
- 15 Infilling of ditches, dykes, drains, ponds, pools, marshes or pits.
- 20 Extraction of minerals, including peat, shingle, sand and gravel, topsoil, sub-soil and spoil.
- Construction, removal or destruction of roads, tracks, walls, fences, hard-stands, banks, ditches or other earthworks, or the laying, maintenance or removal of pipelines and cables, above or below ground.
- 22 Storage of materials.
- 23 Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
- 26 Use of vehicles or craft likely to damage or disturb features of interest.
- 27 Recreational or other activities likely to damage features of interest.
- 28 The introduction of game management and changes in game management and hunting practice.