



Greenham and Crookham Commons SSSI – condition assessment, 2012

Unit 1 Airbase & unit 2 Crookham Common

Date of survey: 18 June 2012 Surveyors: Graham Steven, Rebecca Hart

Time on site: 5.5 hours

Summary

Greenham and Crookham Commons SSSI includes some of the most extensive areas of dry heath, acid grassland and neutral grassland in Berkshire. The SSSI areas in unit 1 consist largely of the grassland and heath formerly situated between the runways and hardstandings of the airbase. These areas were included in the SSSI primarily because they support a very unusual, highly diverse habitat mosaic characterised by a high representation of species associated with open ground and short vegetation with low levels of competition. Crookham Common in contrast was included in the SSSI because it supported mature heathland, scrub-dominated heath and alder woodland. In the period since the SSSI designation the character of both areas has changed significantly as the infrastructure associated with the airbase has largely been removed and restored to semi-natural habitat, and the area dominated by scrub, particularly common gorse, has increased. This is having clear detrimental impact on the designated interest features as the amount of short, open heath is much reduced. There is also evidence that the abundance of gorse may be causing undesirable soil nutrient enrichment. The whole of the former airbase is covered by a HLS agreement but none of unit 2 is currently included in that agreement.

The heather-dominated dry heath and the heath-acid grassland mosaic were treated as a single habitat type for the purposes of this assessment. The neutral grassland and alder woodland habitats were assessed separately.

This assessment focusses largely on the condition of the SSSI units but also considers the areas outside the SSSI but covered by the HLS agreement. Standard assessment procedures were followed.

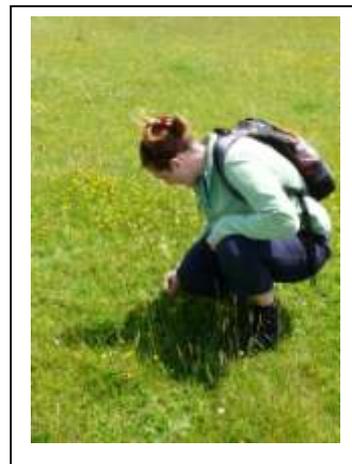
Graham Steven

21 June 2012

Methods

The standard procedure for detailed condition assessment of SSSI designated interest features was followed. This is based upon the production of a bespoke recording form created using standard attributes for the habitats, but with site-specific targets. This is to ensure that the assessment is based on the aspects which contribute towards the special nature conservation interest of the SSSI. The targets are derived from the SSSI citation and SSSI Favourable Condition Tables.

The assessment process involves the recording of data in relation to the various targets at a number of points across the SSSI unit. The recording points are selected to reflect the range of variation in habitat across the area. The condition of the units is reported via the Natural England website, either as favourable, unfavourable-recovering, unfavourable-no change, unfavourable-declining or destroyed. For a unit to be assessed as being in favourable condition all of the relevant designated interest features in that unit must meet all of the various targets set out in the Favourable Condition Tables.



Unit 1 Airbase

The unit includes extensive areas of species-rich neutral grassland. There is no evidence of significant loss of extent of this habitat type within the SSSI boundary but scrub encroachment and development of secondary woodland is leading to loss of grassland in parts covered by the HLS agreement. The feature is otherwise in good condition.



The neutral grassland generally meets all targets for habitat condition. Cover of bare ground, amount of leaf litter, cover of weedy species and coarse grasses are all well within target. The proportion of herbs to grasses is generally very high ranging from about 50% to 90%, an indication that grazing levels and nutrient status are appropriate. A wide range of characteristic plants typical of the habitat is present. Particularly frequent are milkwort, lesser hawkbit, birdsfoot trefoil, fairy flax and kidney vetch. Also of note is the occurrence of cowslip, dwarf thistle, eyebright, glaucous sedge, pyramidal orchid and common broomrape. Average sward height is generally in the range of 2-4 cm and appropriate to maintain high plant diversity. No indications of significant sward damage were noted. Cover of scrub is generally within target although there are localised areas where scrub development is creating a closed, dense habitat producing dense shade likely to result in loss of grassland.



The development of dense scrub is the key aspect of concern in relation to the neutral grassland habitat. This area is close to Bury's Bank Road near the western car park. Without intervention areas such as this are likely to quickly develop into closed canopy secondary woodland of low nature conservation value with consequent loss of grassland.



The dry heath areas are generally dominated by common gorse with heather-dominated patches. The quantity of common gorse is the key aspect of concern as other aspects are generally meeting targets for habitat condition. There is no evidence of loss of extent of dry heath or acid grassland although the expansion of gorse is resulting in loss of heather and associated plants and could ultimately result in habitat loss. The heath vegetation includes a range of age classes of heather, with young, pioneer and building-stage heather predominant, which is appropriate in relation to the special interest of the site. Bell heather is frequent throughout. Bare ground in the form of exposed gravel and soil is well represented throughout and additional habitat diversity is provided by wet hollows and shallow pools. Cover of heather is generally within target, at least where gorse is not dominant, in the range of 30 to 70%. In the areas of acid grassland and grass-heath the sward height is appropriate at 2 to 4 cm. There are very low levels of leaf litter and no indications of weed problems. Typical associated plants well represented throughout include heath grass, pill sedge, carnation sedge, mouse-ear hawkweed, catsear, heath milkwort, tormentil and heath speedwell. There are smaller amounts of mat grass, pale sedge, heath bedstraw and devilsbit scabious. There is no bracken and cover of scrub other than gorse is within target.



The amount of common gorse is the key issue of concern in the dry heath and acid grassland habitat. Over much of the feature it makes up 70-80% cover, well above the target of 1-10%. This is resulting in loss of heather and other associated species through shading and there are indications of localised soil nutrient enrichment in the occurrence of weedy species such as spear thistle where gorse has been removed.

Unit 2 Crookham Common

This unit includes Thornford Gully, one of the small valleys on the slopes of the plateau which support alder woodland. This example is in good condition with no indications of adverse impacts. The woodland is typical of the habitat type with a mature tree canopy dominated by alder but with frequent ash and occasional oak. There are gaps in the canopy and moderate structural diversity. The ground layer has good representation of typical plants including remote sedge, yellow pimpernel, lesser spearwort, lesser celandine, lady fern and patches of Sphagnum. Of particular note is the occurrence of the uncommon long-stalked sedge.

The larger part of Crookham Common has areas of mature to over-mature heath overwhelmingly dominated by tall heather and other areas recently cleared of dense scrub. The extent of dry heath in good condition is currently small in relation to the total area.



Most of the remaining open heath on Crookham Common is dominated by over-mature heather with low structural and species-diversity. These areas fail to meet most targets for habitat condition. The extent of open ground is much lower than target, cover of heather is above the upper desirable limit of 75%, frequency of characteristic associated plants is very low, and cover of scrub is close to the upper desirable limit of 5%. Suitability of such areas for reptiles, heathland birds and heathland invertebrates is currently very low.



The areas on Crookham Common recently cleared of dense tree cover are generally dominated by dense vegetation consisting of wavy hair-grass and sheep's sorrel. Young plants of heather are present in places but species-diversity is generally very low. Birch saplings are frequent. These areas are not meeting targets for the dry heathland habitat.



That part of Crookham Common south of Brimpton Road includes small areas of heathy vegetation amongst birch scrub and secondary woodland. Species present include heath bedstraw, pill sedge and wood sage. These gaps are gradually becoming more enclosed and there is a risk that the current structural and species diversity will be lost without management intervention.

Overall condition assessment

In the case of unit 1, all of the targets for the condition of the neutral grassland, acid grassland and dry heath are being met with the exception of habitat extent as a result of the threat of loss through scrub development, and the excessively high cover of gorse. Without appropriate intervention to address these aspects the condition of the designated features will deteriorate.

For unit 2, aspects currently failing to meet target include structural diversity of heather, cover of heather, habitat composition and occurrence of key species, proportion of bare ground, and cover of scrub. Significant intervention is needed to ensure that targets are met.