



5.1 Amenity Grassland Habitat Action Plan

VISION

Every road verge, sports field, park and recreation area contains areas where wildlife can thrive alongside people. Wildflower rich verges should be allowed to flower before cutting, and all public open spaces should incorporate areas with longer, less intensively managed grass.

KEY FACTS

What have we got?

1,815 open spaces are identified in Swindon Borough, comprising 1,542ha, the vast majority of which is amenity grassland. This is the accumulated total of sports pitches, general recreation areas, roadside verges and incidental open space (Open Space Audit and Assessment: Adopted August 2004).

The Open Space Audit and Assessment (SBC August 2004) has mapped the majority of open spaces within Swindon Borough and in doing so it captured most amenity grassland sites.

However, Swindon Borough Council does not own all amenity grassland sites. There are business parks, private recreation areas and verges, all owned or under the management control of other organisations. Mapping the extent and area of amenity grassland may, therefore, become problematic if the HAP is to influence the management of these areas.

The industrial revolution saw the development of many open areas for the residents of towns and cities. They were created close to settlements for the purpose of recreation or landscaping. The way in which towns and cities have been planned over the last century has affected the layout of amenity grassland. It is often used for roadside

verges, and to soften the impact of visually obtrusive urban developments.

In recent years, the pressure of development in Swindon has seen a decrease in the area of amenity grassland if not in the actual quantity of sites. Planning guidance currently recommends an increase in housing density, which will affect the distribution of amenity grassland (SBC, 2003).

Sections of some sites such as New College have been developed, with the consequent loss of their playing fields. In the Borough as a whole, however, the amount of amenity grassland has increased with the development of new housing and business districts such as Haydon 3 (Northern Development Area (NDA)).

There are areas of amenity grassland that are subjected to little or no management. This neglected form of amenity grassland may only be periodically cut for tidiness, access, or for security reasons (HMSO, 1995). This provides a better habitat, as it at least allows plants to flower and seed, and provides food and refuge for wildlife. Eventually, non-intervention may lead to an area becoming "scrub". This often occurs on sites with poor access.

Why is this habitat important?

Amenity grassland sites are highly valued by local communities. While 72% of people surveyed believed that parts of their green space had been set aside for wildlife, 58% felt more could be done for wildlife in their local green space (WWT, 2003). Consulting with, informing and actively involving local communities in managing their local amenity grassland areas could make them better places for wildlife. Amenity grassland is appreciated for its recreational purpose but unappreciated as a valuable habitat for wildlife. Programmes to involve local communities will need to be developed if management regimes are to be altered.

The primary function of amenity grasslands is recreation. Typically, it is clinically managed under intensive regimes and can be cut every 10 – 14 days. The practice of leaving grass cuttings to rot back fertilises the soil, making grass grow strongly to the detriment of wildflowers, and the rapidity of growth demands more frequent cutting. This is a resource-demanding management cycle with little benefit to wildlife. In terms of management, the development of labour and cost-saving machinery has seen grass being cut more often.

In addition to local communities, contractors will need to be made aware of the reasons for alterations in site management plans and the benefits that can accrue.

How is this habitat protected?

Planning Policy Guidance Note 17: Open Space, Sport and Recreation (PPG 17) identifies the need for the provision of open space. It details an assessment process to determine the future need of open space, advises that open space of value and importance should be protected, and requires that a locally based standard of provision should be identified (SBC, 2003).

A simple classification system to grade the wildlife potential and management of amenity grassland (and other open spaces) is suggested below. The classification system could be a useful tool in site assessment, mapping and creation. It indicates that amenity grassland can be of high value to wildlife. In addition, appropriate management techniques can be adopted to allow sites to act as corridors linking fragmented sites.

Classification of amenity grasslands

Wildlife rich – managed

Example: Seven Fields.

Flower rich meadows with links to other habitats. Used for informal recreation. Cut annually for hay.

Potential HIGH – Ensure that a management plan incorporating biodiversity protection and enhancement is in place and resourced.

Wildlife rich – unmanaged

Examples: Rivermead and River Ray Parkway
Extensive grassland sites with good links to several other habitat types. Priority species such as the grasshopper warbler and jacksnipe present. No regular/consistent management regime. Potential HIGH – Develop site management plan and seek resources/community backing to implement.

Wildlife-poor – managed

Example: sports fields and intensively mown areas

Intensively managed sites with little access to other habitats.

Potential MEDIUM - Potential for biodiversity gain by developing links to other habitats (e.g. uncut headlands).

(There is always potential for far greater biodiversity gain on these sites but this would require change in management and attitude by local residents.)

Wildlife-poor – unmanaged

Example: some small enclosed backlands.

No links with other habitats, difficulty in management.

Potential LOW - little potential for biodiversity improvement.

OPPORTUNITIES AND THREATS

Opportunities

- Limited access to management techniques on urban sites and a difficulty of access for machinery onto some sites. This can lead to sporadic or no management, resulting in a loss of habitat to scrub. Alternatives to “traditional management” may be more appropriate to smaller, inaccessible sites.
- There is an opportunity to manage less intensely or leave headlands on rotation.
- Fragmentation: it is possible to counteract this and leave buffer strips to increase refugia and passage.
- The purchase of a forage harvester by SBC will allow grass arisings to be collected and green composted in the Borough’s new facility.

- Being close to people, these sites provide a wonderful opportunity to develop learning and education programmes.
- The Grassland Strategy Group can assess areas of priority and facilitate the initiation and management of potential flagship sites.
- Specific gaps in cutting can permit particular wildflower species to become abundant providing local pleasure and benefit to selected fauna. For example, spring-flowering ladies' smock would benefit the orange-tip butterfly, in mid-summer; bird's-foot trefoil in abundance would benefit the common blue butterfly. Wildflowers could become a "crop" of value to Swindon residents, and thus a key focus of grass management.

Threats

- Intensive management across the whole of a site, removing its potential as a source of food and shelter.
- Pressure to keep sites tidy and lack of understanding (contractors/community) of the need for longer grass areas and less frequent mowing.
- Fragmentation/loss of habitat due to inconsistent management.
- Fragmentation/loss of habitat due to development.
- No facilities for removing clippings, creating a build-up of nutrients and thatch.
- Social pressures of litter, dog fouling, fly-tipping and arson.
- Scrub encroachment onto unmanaged, wildlife rich sites.
- The practicality of managing some roadside verges i.e. safety, spraying and size of sites etc.

PRIORITIES FOR ACTION

What needs to be done?

We need to develop a strategic plan and to schedule resources in the management and promotion of amenity grasslands as a habitat. This is to encompass all elements, from practical management right through to empowering communities, in the progression of Swindon's amenity grassland for wildlife and people.

WHERE CAN I FIND EXAMPLES OF THIS HABITAT?

- Amenity grassland can be found throughout Swindon Borough.
- The Hreod Burna Corridor from Tydeman Street through to Moredon provides an interesting walk through a variety of habitats.

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5.2 Unimproved Neutral Meadows Habitat Action Plan

VISION

A significant increase in the area of traditionally managed, high-quality hay meadows, where people can experience first hand the marvels of one of the most colourful and wildlife rich but also the most threatened, of all UK habitats. Where sustainable management of meadows is achieved through maintaining extensive livestock grazing

KEY FACTS

What have we got?

Nationally, unimproved neutral grasslands were found in 1984 to cover only 3% of the area of England and Wales which they occupied in the 1930s (Fuller, 1987). More recent estimates suggest that the cover may be down to only 2% of the 1930s figure (Plantlife, 1999). In some areas of the country, losses have continued through the 1980s and 1990s at rates ranging from 2% to 10% per annum. Lowland unimproved neutral grassland is the single most threatened type of grassland habitat in the United Kingdom. 98% of lowland meadows have been lost since World War II.

Neutral grasslands are either managed for hay, which is cut then grazed in the autumn, or simply grazed as pasture. Unimproved neutral grasslands are floristically rich, particularly when actively managed as haymeadows. The floristic richness of hay meadows is associated with a similarly rich invertebrate fauna. Grassland types are classified according to the National Vegetation Classification (NVC) system, and the NVC type relating to unimproved neutral (mesotrophic) meadows covered by this chapter is the crested dog's tail – black knapweed community (NVC type MG5).

The UK Biodiversity Action Plan Habitat Statement (1995) indicates that there are now less than 15,000ha of species-rich neutral grassland remaining in England and Wales, and of this, less than 4,000ha of MG5 grassland survives. A more up-to-date figure from DEFRA (Department of the Environment, Food and Rural Affairs) indicates that there are now 8,500ha of species-rich neutral grassland in England.

In Swindon, the lack of a Phase 1 Survey for the Borough makes estimates for overall cover of unimproved neutral grassland difficult. Known sites, which have been found to meet the criteria for designation as SSSIs and/or recognition as County Wildlife Sites (also known as Sites of Nature Conservation Interest) amount to just over 120ha.

However, there may also be unidentified sites, of nature conservation interest, which have not been designated as County Wildlife Sites. For example, Moredon Meadows were only identified and added to the register of County Wildlife Sites as recently as 2001.

Why is this habitat important?

This habitat is incredibly rare nationally, with 98% of this habitat being lost last century. As the map at the end of this chapter indicates, unimproved neutral grassland has a wide and scattered distribution throughout the Borough. This reflects the fragmented nature of much of the surviving resource. Within Swindon Borough, sites of unimproved neutral grassland covering an area of 4.1ha have been degraded since 1990 and a further area of 17.5ha has been destroyed in the same period (Ref: WSBRC - Jan 2004). Analysis of the causes of destruction indicated a variety of activities ranging from motorbike scrambling to by-pass construction but the overwhelming cause was agricultural improvement, particularly ploughing-up and the application of chemicals.

Causes of degradation again included agricultural improvement, but also over- and under-grazing by stock and encroachment of scrub due to a lack of management.

Unimproved neutral and slightly calcareous alluvium grasslands are the primary biodiversity interest of the Thames and Avon Vales Natural Area.

Unimproved neutral grassland also occurs in transitional situations throughout the Borough in proximity to wetland, woodland and semi-urban habitats. Some good, albeit small, areas of unimproved neutral grassland also occur on some road verges.

- Haydon Meadow SSSI contains a good population (maximum count of 1800) of green-winged orchids that appear in May each year.
- The brown hare can be found in the drier neutral meadows and pastures of Swindon. This UK BAP species has suffered a significant national decline.

How is this habitat protected?

Two sites of unimproved neutral grassland in Swindon have been designated as Sites of Special Scientific Interest (SSSIs), Haydon Meadow and the meadows within Coate Water SSSI. Eighteen sites of unimproved neutral grassland in Swindon have been recognised as being of County Wildlife Site quality. There is a statutory requirement to obtain written consent from English Nature on any proposed activities, which may damage the wildlife interest of any SSSI. English Nature has a Public Service Agreement with the Government to ensure that 95% of SSSIs are in favourable condition by 2010.

There are also two Local Nature Reserves, which are notified partly for their unimproved meadows, Coate Water LNR and Seven Fields LNR.

Swindon Services are responsible for the management of Borough-owned grasslands throughout Swindon, including Seven Fields and Coate Water. To be able to deliver appropriate management on Swindon Borough Council-

owned sites, access to haymaking machinery is required, as well as good relationships with local graziers. As sites depend on grazing to maintain their favourable condition, it is important to recognise that local graziers are often in the best position to deliver conservation aims. The Wiltshire Interactive Grazing Initiative has been active in finding local grazing for the Coate Water SSSI meadows.

OPPORTUNITIES AND THREATS

Opportunities

The wealth of colourful wildflowers and butterflies to be found in unimproved neutral haymeadows provides a particularly satisfying experience for visitors to nature reserves and other publicly accessible sites. Therefore, the opportunity exists to interest and attract many people to the cause of nature conservation who might otherwise not become involved.

New agri-environment schemes provide opportunities to fund the restoration of neutral grasslands throughout the Borough.

Unimproved grassland is now covered by the new Environmental Impact Regulations, effective from February 2002. This may provide some protection from significant damage.

There are many opportunities for volunteers to monitor the condition of sites through botanical surveys. For example English Nature's condition assessment form does not require in depth botanical knowledge, just an ability to recognise some important species. This form can be adapted so a non-SSSI site can be monitored.

Threats

Unimproved neutral grassland in Wiltshire and the UK generally, has suffered quantitative loss of the resource, a qualitative degradation, and a fragmentation of its distribution. This brings an increased risk of species extinctions in the small remnant areas. The current factors responsible include:

- Agricultural improvement through herbicide, pesticide, fertilizer and slurry application and conversion to arable and grass leys. Decline in

the use of species-rich pasture and hay in modern farming practice and a shift from haymaking to silage production. Supplementary stock feeding, associated with increased stocking levels, which can lead to nutrient enrichment and damage to the sward structure through localised poaching.

- Inappropriate grazing by horses and ponies.
- Scrub and bracken invasion because of under-grazing.
- Planting up with trees.
- Development for roads, housing or leisure facilities.
- Lowering of the water table because of land-drainage, gravel extraction in the floodplain or surface and ground water abstraction.
- Lack of appropriate management - a particular problem in urban areas where grazing and hay cutting are not the norm.

The lack of a Phase I Survey in Swindon makes it difficult to accurately measure the overall extent of unimproved neutral grassland in the Borough. It is also difficult to estimate the remaining area of degraded and semi-improved neutral grassland.

PRIORITIES FOR ACTION

What needs to be done?

Key targets include determining all semi-improved and unimproved neutral grassland in the Borough, preventing any further losses, and starting to restore areas of improved or semi-improved grassland.

Consequently, key actions will:

- Reflect the need to protect this existing resource, and to ensure these sites are managed appropriately.
- Identify other existing unimproved neutral meadow sites.
- Enhance, recreate and connect areas of neutral meadows.

WHERE CAN I FIND EXAMPLES OF THIS HABITAT?

- A magnificent example of this habitat can be found at Seven Fields Local Nature Reserve. Contact the Seven Fields conservation Group on 01793 331516.
- Coate Water SSSI. In addition to the well known lake Coate Water also has a selection of wildflower meadows 01793 771419.
- Moredon Meadows. Adjacent to Hreed Parkway school just off Akers Way a number of footpaths cross this area.

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5.3 Downland Habitat Action Plan

VISION

The residents of Swindon to be able to look upon, and walk through, a continuous sweep of wildlife rich chalk grassland spreading across the Marlborough Downs escarpment.

KEY FACTS

What have we got?

In 1990, there were 22 chalk grassland sites in Swindon, covering 432 ha. Within Swindon, one site has been identified as of national importance - Hinton Parva SSSI.

In Swindon, chalk grassland survives on the edge of the Marlborough Downs on slopes that were too steep to plough. These occur in three general locations: the Lower Chalk escarpment above Wroughton and Bishopstone, the Middle/Upper Chalk escarpment at Barbury Castle and Liddington; or along the dry valleys running south, such as the one at Sugar Hill. Some small chalk grassland sites also occur on the flatter areas of chalk, but these are confined to road or path verges, railway lines; or alongside industrial features – airfields, reservoirs, quarries. The quality of these features will be very variable and dependent on how the grasslands have been treated in the past.

Swindon's chalk grasslands have not been monitored closely enough to provide definitive figures on changes in the quality and quantity of chalk grassland. Nationally, studies have suggested losses of between 50% and 90% since the Second World War. Swindon is likely to have lost a similar proportion of downland. Nearly all those grasslands, which have disappeared, came under the plough or ceased to be grazed. Many of those that continued to be grazed were treated with fertiliser or re-seeded – disastrous for downland wildlife. With the possible exception of the M4, development pressures have not directly contributed to losses of Swindon's chalk grassland.

Why is this habitat important?

Chalk grassland is one of the richest habitats for plant life in Europe. As many as 40 different plants can be found in just one square metre of chalk grassland turf. Most of these plants are “specialists” that flourish in the tough environmental conditions of the chalk - drought, low soil nutrients and an alkaline soil. Plants like wild thyme, rock-rose, salad burnet, fragrant orchid and horseshoe vetch are characteristic of chalk grassland. These specialists do not survive in agricultural leys, wet soils, or neutral/acid soils. A large range of invertebrates depends on these species to live. The caterpillar stage of the Adonis blue butterfly lives only on horseshoe vetch, whilst the scarce forester moth lives as a caterpillar on knapweeds. Without chalk grassland, these plants and invertebrates have nowhere else to live.

On its own, the habitat is not self-sustaining – the grassland gets overgrown and covered in bushes. All the chalk grassland in Swindon has been sustained through centuries of grazing with livestock or rabbits. Grazing animals should be considered as an integral part of the habitat if the grassland's plants and insects are to flourish.

How is this habitat protected?

Almost all the Borough's chalk downland lies within the North Wessex Downs AONB, in recognition of the prime landscape significance of the area. This provides an additional perspective in conserving chalk grasslands, which are a key feature of the open down and scarp components of this landscape. Among the actions listed in the AONB Management Plan is the production of a chalk grassland strategy, with the aim of protecting and restoring this habitat.

Many of the remaining downland sites also contain Scheduled Ancient Monuments (SAMs) and other legal designations. Some protection is provided both for the SAMs and the downland.

Open access already exists on many of Swindon's chalk grasslands, and further open access is likely once the CRoW access land is confirmed. There is currently little interaction between the graziers and the wider community.

Swindon Borough Council has declared Barbury Castle as a Local Nature Reserve. This is the busiest chalk grassland site in Swindon, with the Ridgeway path running nearby.

OPPORTUNITIES AND THREATS

Opportunities

- Remaining populations are all on steep slopes. Flatter ground is generally arable. Chalk grassland on flatter ground supports a slightly different community of plants and invertebrates.
- Grazing on downland has been promoted as a priority for Agri-environment schemes. This provides opportunities to fund restoration projects.
- Increasing ownership of downland sites by conservation organisations can protect some sites.
- Encouraging co-operative action between landowners to bring about targeted restoration of chalk grassland across holding boundaries.
- Influencing the targeting of grants to direct towards areas which will achieve multiple benefits.

Threats

- Decline in mixed farming over last 50 years has led many farmers to abandon livestock, leaving downland sites ungrazed. The rank nature of ungrazed sites and the lack of grazing infrastructure discourage restoration of grazing.
- Economic pressures make it harder for farmers with traditional breeds and practices to remain economically viable.
- Appropriate stock may not be available: more commercial breeds are less suited to extensive grazing on downs. This can lead to uneven grazing, deterioration in quality of turf and animal welfare issues.
- Heavy grazing, particularly on pony paddocks, can cause poaching of turf, and reduction in plant and invertebrate interest.

- Indiscriminate use of wormers (e.g. Avermectins) can have a devastating effect on certain invertebrate groups.
- Renewal of rabbit population makes control of grazing levels harder to achieve.
- CRoW Act. Under this legislation, the right to roam may be extended to areas of chalk downland. Increasing public access can discourage grazing on farmed downland.
- Tor grass is increasing in the Borough. This is an unpalatable rough grass, which shades out smaller downland plants. Acid rain encourages the aggressive growth and spread of Tor grass.
- Increasing summer droughts, wetter autumns, and milder winters lead to a greater seasonal unevenness of grass availability for the farm system.

PRIORITIES FOR ACTION

What needs to be done?

Key targets include helping farmers and the public to realise the potential of the downland asset, thus preventing inappropriate changes in land use or management, encouragement of grazing and to begin the process of restoration.

Therefore, key actions will be to:

- Promote Swindon's chalk grassland
- Protect existing chalk grassland
- Identify sites for restoration

WHERE CAN I FIND EXAMPLES OF THIS HABITAT?

- Barbury Castle Country Park and Local Nature Reserve. This site is within the North Wessex AONB and is owned and managed by Swindon Borough Council 01793 771419.
- Liddington Hill. Accessible from footpaths along the A4192.
- Ridgeway Path. Following the Ridgeway Path will provide access and viewing points to many of these areas 01793 762209.

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