# **Maidstone's Biodiversity Strategy**

A Local Biodiversity Action Plan Phase 1: 2009 – 2014

# **HAP 2: Lowland Dry Acid Grassland and Heath**



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#### **Description**

- 1.1 Lowland acid grassland and heath typically occurs on nutrient-poor, generally free-draining soils with pH ranging from 4 to 5.5 overlying acid rocks or superficial deposits such as sands and gravels. Lowland heath is characterised by the dominance of heather species. Heathland sites often also include patchy or scattered gorse, acid grassland areas, bare ground scrub and occasional trees, open water and *Sphagnum*-dominated bogs and fens. Heath develops on acidic sand and gravel substrates, and is normally maintained by light grazing or cutting.
- 1.2 Lowland acid grassland in this action plan refers to plant communities spanning 6 National Vegetation Classification (NVC);

U1: Festuca ovina - Agrostis capillaris - Rumex acetosella (sheep's fescue – common bent – sheep's sorrel)

U2: Deschampsia flexuosa (wavy hair grass)

U3: Agrostis curtisii (bristle bent)

U4: Festuca ovina - Agrostis capillaris - Galium saxatile (sheep's fescue – common bent – heath bedstraw)

Inland vegetation, but not coastal dunes, characterised by;

SD10b: Carex arenaria (Carex arenaria dune Festuca ovina sub-community) sand sedge

SD11b: Carex arenaria - Cornicularia aculeata dune, Festuca ovina sub-community sand sedge – lichen

- 1.3 Definition of lowland acid grassland is problematical but in this Action Plan it is defined as both enclosed and unenclosed acid grassland throughout the UK lowlands (normally below c. 300m). It covers all acid grassland managed in functional enclosures and often occurs as an integral part of lowland heath landscapes, in parklands and locally on coastal cliffs and shingle. It is normally managed as pasture.
- 1.4 Varied communities of plant, invertebrate and other wildlife species can all occur on lowland acid grassland, and as part of a heathland mosaic habitat it can become even richer in species diversity.
- 1.5 It will be important to ensure that acid grasslands are taken into account during implementation of the action plan for lowland heathland. Actions in the two plans need to be closely integrated.

#### **National status**

- 2.1 Cover data for lowland acid grassland across the UK for the full altitudinal range are not currently available. Stands remote from the upland fringe, which are the primary focus of conservation attention, are now of restricted occurrence and it is estimated that less than 30,000 ha now remain in UK.
- 2.2 As with other lowland semi-natural grassland types, acid grassland has undergone substantial decline in the 20th century although there are no figures available on rates of loss.

#### **Local status**

- 3.1 The Kent Habitat Survey 2003 recorded 9 ha of lowland acid grassland occurring in Maidstone Borough, of which none is notified as a Site of Special Scientific Interest (SSSI), however approximately half is within a Local Wildlife Sites (LWS). However, this is clearly an under-representation of the extent of this habitat in Maidstone Borough and fails to register dry acid grassland and heath persisting in woodland locations such as the Kings Wood complex. Dry acid grassland and heath plant species, such as common heather and heath bedstraw, in woodland settings will expand and contract in response to coppice management activity. A good indicator of the geographical coverage of relic areas of these habitats may be gleaned through analysis of records of key indicator plant species within the Atlas of the Kent Flora (E.G Philp Kent Field Cub).
- 3.2 None of the lowland acid grassland within LWS is under positive management or has been under positive management in the last 5 years via an environmental stewardship specifically for grassland.
- 3.3 None of the 9 ha of dry acid grassland identified within the Kent Habitat Survey 2003 is in a favourable condition, however, the small relic areas of dry acid grassland and heath in Maidstone Borough Council ownership at Sandling Park, Penenden Heath recreation area (north of tennis courts), Shaw Close and Weavering Heath (north of tennis courts) are now maintained through a combination of rabbit-grazing / disturbance and mechanical cutting. Characteristic plant species such as gorse, sheep's sorrel, fiddle-dock, bird's-foot, water blinks, hare's-foot clover and common heather still persist on these small relic habitat fragments.

#### **Factors causing decline in biodiversity**

- 4.1 Although changes to acid grassland, both nationally and locally, are difficult to assess there is little doubt that the habitat is becoming scarcer and more fragmented. The fragmentation of the habitat brings increased risk of species extinctions in the small remnant areas.
- 4.2 Agricultural intensification by use of fertilisers, herbicides and other pesticide, liming, re-seeding or ploughing for arable crops.
- 4.3 Lack of appropriate management (such as grazing by livestock or rabbits) leading to rank grassland or invasion by bracken, and scrub and then woodland particularly on commons and at woodland edges.
- 4.4 Direct loss to development such as quarrying, road building and housing.
- 4.5 Lack of ride and glade management affecting acid grassland and heath patches within woodland complexes.
- 4.6 Atmospheric pollution and climate change, the influence of which is not fully assessed.

#### **Current national action**

- 5.1 Lowland acid grassland is a targeted habitat under agri-environmental schemes for maintenance, restoration, enhancement and creation.
- 5.2 English Nature published a 16-page booklet, Lowland acid grassland, a rare and unique habitat <sup>25</sup>, in 1998.

#### **Funding resources**

6.1 The Environmental Stewardship Scheme provides funding the maintenance, restoration and creation of species-rich grassland.

#### National plan objectives and actions

7.1 The UK-BAP Lowland Acid Grassland Habitat action plan objectives and targets cover habitat conservation, restoration and expansion. The plan aims to maintain the current extent, quality and distribution and in addition, achieve favourable condition of 17,295 ha of Lowland Acid Grassland habitat in England by 2015. The plan also targets the re-establishment of 276 ha of Lowland Acid Grassland of wildlife value at carefully targeted sites in England by 2015.

#### Local plan objectives and actions

8.1 The Kent LBAP Lowland Acid Grassland Habitat action plan objectives and targets concentrate on the improvement of designated sites and creation of the habitat. Within SSSIs it seeks wherever feasible, favourable status for all lowland acid grassland by 2020. Within LWS the plan seeks favourable status for 95% lowland acid grassland by 2026. The plan also targets the re-establishment of 332ha by 2020 and an additional 166ha by 2026. Additionally, the plan specifically states that at least 10ha should be created around the northern edge of Maidstone.

#### Maidstone's objectives

- 9.1 Maidstone's objectives are;
  - 1. Maintain the current extent and quality of lowland acid grassland and heath habitat.
  - 2. Ensure positive management of lowland acid grassland and heath habitat.
  - 3. Re-establish lowland acid grassland habitat by expanding the current extent of the habitat (including at least 10 ha of new dry acid grassland and heath along the northern and north eastern edge of Maidstone in line with agreed Kent LBAP target).
  - 4. Raise awareness of the benefits to biodiversity of lowland acid grassland.
  - 5. Survey extent of dry lowland acid grassland and heath within Maidstone Borough with search on areas with correct underlying geology.
  - 6. Investigate potential for creation of large-scale permanent lowland acid grassland and heath within suitable Spanish Chestnut plantations.

# **Objectives and targets**

Objective 1: Maintain the current extent and quality of lowland acid grassland habitat.

Target 1 & 5: Maintain 9 ha (as identified by the Kent Habitat Survey 2003) by 2026.

LAG	ACTION	TARGET	TARGET	KEY	PROGRESS
		START	END	EXTERNAL	
		DATE	DATE	PARTNERS	
1.	Ensure that Maidstone's Local Development Framework contains policies to protect and expand lowland acid grassland and heath.	2009	2010	ALL	
2.	Ensure that regional strategies and plans contain policy to protect lowland acid grassland and heath.	2009	2010	KWT NE KCC	
3.	Ensure all acid grassland of local importance is designated as a Local Wildlife Site (LWS).	2009	2026	KWT	
4.	Develop data recording on environmental stewardship for species-rich grassland to distinguish between the different priority habitats (lowland calcareous grassland, lowland meadows and lowland dry acid grassland) that could be managed under this option.	2009	2014	ALL	Need for recording/monitoring system to be set up as determined by Steering Group. Opportunity for community engagement.

#### Objective 2: Ensure positive management of lowland acid grassland habitat.

Target 2: Ensure the positive management of 5 ha by 2014 and 6 ha by 2026 of lowland acid grassland habitat

LAG	ACTION	TARGET	TARGET	KEY	PROGRESS
		START	END	EXTERNAL	
		DATE	DATE	PARTNERS	
5.	Ensure that all lowland acid grassland identified in the Kent	2009	2026	NE	
	Habitat Survey 2003 is under an environmental stewardship			KWT	
	agreement.				
6.	Provide support to owners and managers of acid grassland	2009	2026	KWT	
	Local Wildlife Sites (LWS)				
7.	Support programmes for the reintroduction of grazing (or other	2009	2026	KWT	
	appropriate management) on acid grassland commons.			NE	
				NFU	

Objective 3: Re-establish lowland acid grassland habitat by expanding the current extent of the habitat.

Target 3, 6: Expand areas of lowland acid grassland habitat at sites adjacent to current heath or acid grassland habitat by 5 ha by 2014 and 6 ha by 2026 (Total 6 ha by 2026).

Restore areas of acid grassland habitat at sites adjacent to current heath or acid grassland habitat by 1 ha by 2014.

Ensure that blocks are no smaller than 2 ha if no more than 500 meters from other existing or new acid grassland, and no smaller than 6 ha if more isolated.

LAG	ACTION	TARGET START DATE	TARGET END DATE	KEY EXTERNAL PARTNERS	PROGRESS
8.	Annually monitor the borough's environmental stewardship data on species-rich grassland to assess current management and expansion of lowland acids grassland, and identify key areas where expansion would reduce current fragmentation of the habitat.	2009	2026	NE	
9.	Target creation schemes for lowland acid grassland environmental stewardships to areas adjacent to area of lowland acid Grassland.	2009	2026	NE	
10.	Work with Developers and others to identify and implement programmes for heathland and/or acid grassland restoration as part of public open space (Section 106 funding) and road verges, particularly in association with growth areas.	2009	2026	Developers KCC-Highways	
11.	Work on MBC owned sites to restore and manage acid grassland – heathland mosaics. Organise volunteer days to restore sites. Seek funding via environmental stewardship or other means for the management of the mosaic habitat. [Current MBC owned Site includes: Weavering Heath, Penenden Heath recreation area, Shaw Close and former TAVR site]	2009	2014	MVCP	

Objective 4: Raise awareness of the benefits to biodiversity of lowland acid grassland.

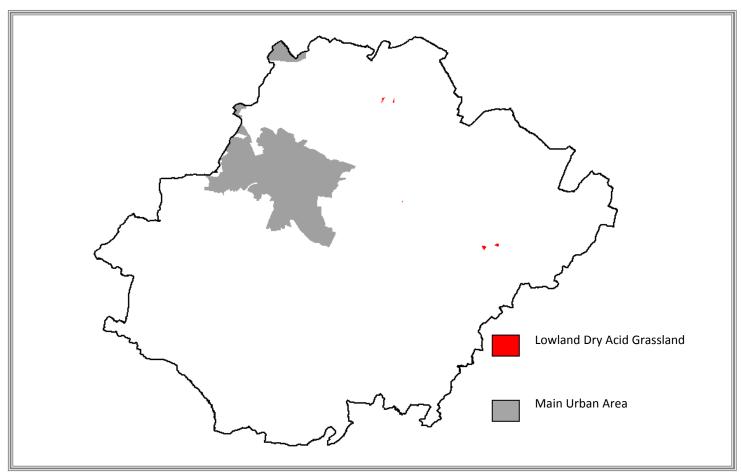
#### Target 4: Form biodiversity community groups at MBC owned acid grassland sites

LAG	ACTION	TARGET	TARGET	KEY	PROGRESS
		START	END	EXTERNAL	
		DATE	DATE	PARTNERS	
12.	Raise awareness of current conservation action with interpretation boards explaining management practice and benefit of acid grassland sites to wildlife.		2014		
13.	Ensure the grounds maintenance team is updated on current biodiversity management on sites and work with current management techniques at times between volunteer days.		2014		
14	Form biodiversity community groups at important MBC owned acid grassland-heathland sites.	2009	2014		

# Lowland dry acid grassland distribution

10.1 The distribution of lowland dry acid grassland can be seen in figure 1.

Figure 1 Distribution of lowland dry acid grassland in the Maidstone borough



Data Source: Kent Habitat Survey 2003

#### Lowland heathland distribution

10.2 The distribution of Lowland Heathland can be seen in figure 1.

Lowland Heathland Main Urban Area

Figure 2 Distribution of Lowland Heathland in Maidstone Borough

Data Source: Kent Habitat Survey 2003