

REVISED PLAN NOVEMBER 2021

LOWLAND HEATHLAND

1. INTRODUCTION

Lowland heathland is typified by the presence of heather (*Calluna vulgaris*), dwarf gorse (*Ulex minor*) and cross-leaved heath (*Erica tetralix*) and is generally found below 300 metres in altitude on poor acid soils. Areas of good quality heathland should consist of an ericaceous layer of varying heights and structures, some areas of scattered trees and scrub, and areas of bare ground, gorse, wet heaths, bogs and open water.



Lichen heath at Coombe Country Park © Paul Hodges

Lowland heathland is a priority for nature conservation because it is a rare and threatened habitat. Areas of heathland in good condition should consist of an ericaceous layer of varying heights and structures, plus some or all of the following additional features, depending on environmental and/or management conditions: scattered and clumped trees and scrub; bracken; areas of bare ground and acid grassland; lichens; gorse; wet heaths, bogs and open waters (JNCC, 2008).

The following moths are useful indicators for assessing the quality of heathland habitat: Aristotelia ericinella (Micro), Narrow-winged Pug (Eupithecia nanata), True Lovers' Knot (Lycophotia porphyria), Heath Rustic (Xestia agathina agathina) and Beautiful Yellow Underwing (Anarta myrtilli), the latter known only from Grendon Common and Sutton Park, (K.Warmington, 2015).

2.	OBJECTIVES	TARGETS	
	Associated Action Plans are: 'Lowland Acid Grassland', 'Bats', 'Adder', 'Dingy Skipper', 'Argent & Sable' and 'Rare Bumblebees'		
	PLEASE CONSULT THE 'GENERIC HABITATS' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL HABITAT PLANS		
A.	To restore the 2ha of existing lowland heathland above 0.25ha that are currently in unfavourable condition, to favourable or recovering, giving priority to those holding UK Priority Species* & Red Data Book species. *The UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework (2012-2019)' in July 2012. The UK list of priority species, however, remains an important reference source.	2030	
В.	To expand the extent of the habitat by 7ha.	2030	
	Target has been reset from 5ha in view of progress 2011-2015		

3. NATIONAL BAP OBJECTIVES & TARGETS

Lowland Heathland is on the current UK Biodiversity Action Plan (BAP) list of Priority Habitats published in 2007(<u>Joint Nature Conservation Committee</u>). The targets and objectives for the <u>Lowland Heathland BAP</u>, updated in 2010-11, may be seen online.

4. CURRENT STATUS

The UK has an important proportion (about 20%) of the international total of this habitat. with c. 58000 ha of lowland heathland of which the largest proportion (55%) is found in England. Only one sixth of the heathland present in 1800 in England now remains.

Heathlands are rare and not extensive in the sub-region, being mainly associated with common land and woodland. They occur on the acid glacial soils in the north of the county on the Midlands Plateau Natural Area (Hartshill Ridge) and can be seen as outliers to the very extensive areas of Heath in neighbouring counties, e.g. at Sutton Park, <u>Chasewater</u> and particularly <u>Cannock Chase</u>. Heathland has been lost from Warwickshire largely as a result of urban development in the 19th century and is now just recalled in place names, e.g. Dickens Heath, Hockley Heath.

Baseline data from the 1998-2001 Habitat Biodiversity Audit recorded the total area of heathland in Warwickshire, Coventry & Solihull to be around 20ha on nine sites. However, the figure from the HBA for in 2012 dry heath/acid grassland mosaic was 7.76ha. This apparent large reduction in area may reflect both a decrease in the area through degradation of the habitat to acid grassland and to some extent re-classifying of habitat through detailed ground- truthing surveys compared with earlier use of aerial photographs. By 2015 an expansion of the habitat by 2.53ha had been achieved.

The total resource within <u>Sites of Special Scientific Interest</u> (SSSI) is 1.5ha on 3 sites (2019 data, see chart below). Natural England estimates of heathland on SSSIs in Warwickshire, Coventry & Solihull (pers.comm. Anton Irving, 2011) are:

SSSI	Heathland area (ha)	Associated habitat
Coleshill & Bannerley Pools (38ha)	1.0 (now only a wet heath fringe to the pool)	Swamp/Woodland
Clowes Wood & New Fallings Coppice (46ha)	0.25 (being lost)	Acid grassland/ Woodland
Rough Hill & Wirehill Woods (52ha)	0.25	Acid grassland/ Woodland
Total	1.5ha max	

- The largest area of this habitat is in the order of 3.7ha at Grendon (1.3ha) and <u>Baddesley Common</u> (2.4ha), both designated Local Wildlife Sites (LWS). Much of the heathland and associated acid grassland here has developed on restored open cast coal workings since the 1950s but unfortunately is now mainly woodland.
- Other fragments of heathland, of 1.0ha or less, occur at the three SSSIs (Coleshill Pool, <u>Clowes Wood</u>, <u>Rough Hill Wood</u>), and at Corley Moor, Kenilworth Common, Yarningale Common, Frogmore Wood and Hay Wood (all LWS), also at Purley / Mancetter Quarry following restoration in 2011.
- At Coombe Country Park (LWS) the heathland grows on a 1ha sand lens; there is also a very small area (0.0625ha) of lichen heath, similar to <u>Breckland vegetation</u> (home to over 120 nationally rare and threatened plant species).
- There may be more heathland LWS in addition to the 8 listed here but the data is not yet available (Ruth Moffatt, pers.comm. 2021)

 Heather occurs at Mays Wood and Poors Wood (both LWS) and Arley Wood, also at Kingsbury Old Colliery and Coughton Court following restoration; it is possibly still present at Alvecote Pools / Pooley colliery.

4.1 Legal and Policy Status

A wide range of species and habitats are protected under international and domestic laws, including the Wild Birds Directive (1979), the Wildlife and Countryside Act (1981), the Conservation Regulations(1994) and EC Habitats Directive (1992). Protection of sites is afforded nationally through SSSI, Special Areas of Conservation (SAC) and Local Nature Reserve (LNR) statutory status. Other sites are offered recognition of their value through Local Wildlife Site status (LWS), Local Character Areas and identified Landscape Scale Areas. The National Planning Policy Framework (2012) chapter/section 11 states conditions with regard to any development negatively affecting biodiversity, including protected sites, ancient woodland and other irreplaceable habitats (paragraph 118). The Wildlife & Countryside Act and schedule 2 of the Conservation of Habitats & Species Regulations 2010 make it an offence to intentionally kill, injure, take, possess, sell, buy or transport a range of species.

Just over 19% of the known area of heathland in Warwickshire, Coventry & Solihull is on SSSI land with the largest area at Coleshill Pool where there is a 1ha wet heath fringe to the water and other small areas at Rough Hill Wood and at Clowes Wood where it is being lost. The largest areas in the sub-region are within the Grendon and Baddesley Common LWSs. Work within the LBAP area continues to classify other heathlands as Local Wildlife Sites (LWSs) which will afford them policy protection within the planning system.

4.2 Current Factors Affecting the Habitat

In the past heathland was lost across England primarily to agriculture, forestry, mineral extraction and development. Uncontrolled burning has also been a particular threat to bryophyte and lichen-rich heathland. The main factors affecting the habitat in our area at present are:

- **Encroachment of trees** and scrub and the simplification of vegetation structure due to a lack of conservation management such as light grazing, controlled burning and cutting.
- Loss of age structure of scrub due to lack of awareness of its importance for wildlife and the need to manage it for this.
- Fragmentation and isolation as the few sites in Warwickshire are widely scattered.
- **Danger of fires** particularly in the large areas at Grendon and Baddesley Common.
- Lack of public awareness as most heathland has been lost from development in the 19th century, and is not part of the public perception of the area.
- Development of post-industrial sites and disused railway lines which contain fragments of developing heath.
- Agricultural improvement such as intensive fertilizer, lime and herbicide application.
- Inappropriate grazing regimes that may encourage a net loss of biodiversity

5. LOCAL ACTION

- An accurate digitised database of heathland in the sub-region has been established by the Habitat Biodiversity Audit (HBA) and is annually updated.
- The existing management of most sites is known but further new heathland creation schemes may be possible, based on present or proposed new nature reserves. Some old sand and gravel pits such as Lawford Heath, and Cornets End near Coventry, offer the opportunity for heathland creation (J.Bowley, pers.comm. 2015).
- Favourable condition is being maintained / achieved at the following sites:
 - in 1997 at Grendon and Baddesley Common, the <u>Merevale Estate</u> began a plan to manage Warwickshire's largest lowland acid grassland and its associated heathland, with financial support of <u>agri-environment schemes</u> administered by Natural England; this agreement no longer applies. By 2015, 0.25ha had been maintained by FoBC (KW, pers.comm.)
 - Warwickshire Wildlife Trust (WWT) is actively managing an area of under 1ha of lowland heathland/acid grassland mosaic at Clowes Wood and Rough Hill Wood SSSIs, also areas at Alvecote outside the SSSI. Smaller fragments of heathland / acid grassland on other sites, e.g. Priory Fields Nature Reserve, are also actively managed by WWT.
- Restoration of the habitat has taken place at the following sites:
 - In 2011 <u>Friends of Baddesley Common</u> set up work parties to remove invasive scrub from areas of heather and acid grassland. Pond restoration and creation is also planned at the site. A management plan for the heathland and acid grassland, written by group, has been agreed by Merevale Estate (the land owners). By 2015, 0.25ha had been restored (KW, pers.comm.) The pond projects have had input from WWT and <u>Pond Conservation Trust (Million Ponds Project)</u> who have helped with funding.
 - in 2011 a 0.5ha reserve was set up at Kenilworth Common Sidings. Tree removal has been carried out by Warwickshire County Council to open up the site in order to restore the heath and dry grassland habitat. The site will be managed by Warwickshire Amphibian and Reptile Team (WART).
 - in 2014 the Grendon Common Heathland Restoration Project began with the cutting and burning of silver birch (*Betula pendula*) saplings from amongst the heather and the treatment of stumps using non-hazardous glyphosate by <u>Butterfly Conservation Warwickshire</u> (BCW) and the Merevale Estate. Its aim is to maintain about 1ha of existing heathland by doing this. By 2015, 0.64ha had been completed (Keith Warmington,pers.comm.) A moth trapping event in 2014 revealed that the specialist heathland moth species are still present despite lack of site management.
 - work by <u>Heart of England Forest</u> at Coughton Park has restored a substantial amount of heather to create probably the largest patch of heathland outside Sutton Park and Grendon Common. Though not a rare moth nationally, colonisation by the common heath moth (*Ematurga atomaria*) is very notable (Mike Slater pers.comm. 2015).
 - At Coombe Countryside Park:
 - bracken is controlled on the 1ha sand lens to the north of the site by cutting using volunteer labour. This has focused on keeping the best

- quality areas in terms of heathland flora, which includes heath bedstraw (*Galium saxatile*), sheeps sorrel (*Rumex acetosella*), early hair grass (*Aira praecox*), sand spurrey (*Spergularia rubra*), dog lichen (*Peltigera canina*), *Cladonia* spp. and a variety of acid loving mosses, in good condition along with help from wild rabbit grazing.
- the small area of lichen heath (20-25m2) is located in a small disused sand/gravel quarry, now re-vegetated, situated behind High Fields House. In close proximity to this area of *Cladonia* spp. are small soft sand cliffs, home to a variety of solitary mining bees, wasps & their cuckoos and parasitoids (Paul Hodges, pers.comm.2020).
- At Hay Wood, in collaboration with the <u>Forestry Commission</u>, BCW and WART have cleared birch and pine saplings and widened the rides, making it the second largest concentration of heathland in the sub-region after Grendon Common.
- At Coughton Court, with the restoration of 1ha, heather has sprung up.
- Expansion of the habitat has occurred at the following sites:
 - In 2011 at Purley/Mancetter quarry <u>Tarmac</u> undertook restoration works including the creation of areas of heathland within the restored area using heather seed from the nearby Merevale estate. The company referenced the BAP plan for this operation. (Camille Newton, pers.comm. 2013).
 - At Kingsbury Old Colliery the Ministry of Defence Estate stabilised a spoil mound in 1989-91, leaving it to vegetate naturally. Heather has come in, along with other heathland plants such as wavy hair-grass (*Deschampsia flexuosa*) and Western gorse (*Ulex gallii*,) covering an area of 2-3ha on the east facing side of the mound which is threatened by birch invasion. (Jon Bowley.pers.comm.2016).

6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	Ву	
PLEASE CONSULT THE 'GENERIC HABITATS' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL HABITAT PLANS				
Policy, Legislation & Protection				
PL1. Ensure that any site meeting the relevant criteria is considered for designation as an SSSI.	NE	WWT WCC	ongoing	
PL2. Continue to select all qualifying lowland heathland sites as LWSs and enter onto database.	LWSP	NE HBA WCC NWBC WDC SMBC	ongoing	
PL3. Ensure that the protection of all heathland is included in Local Development Plans, Neighbourhood Plans and any other relevant strategies.	WCC	NE WWT NWBC WDC SMBC	ongoing	

ACTION	Lead	Partners	Ву	
PLEASE CONSULT THE 'GENERIC HABITATS' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL HABITAT PLANS				
PL4. Ensure that new minor or major developments aim for net biodiversity gain through adherence to the mitigation hierarchy, in view of previous high losses of heathland.	WCC	NE LPAs WWT NWBC NBBC	ongoing	
Site / Species Safeguard & Management				
SM1. Maintain the 8.27ha of heathland already in favourable condition by ensuring the appropriate management of all sites.	CSG	NE CCP WWT NWBC BCW SMBC WDC FoHW LOs	ongoing	
SM2. Restore the remaining 2ha of existing heathland in unfavourable condition, and further sites if identified, by 2030 by appropriate management.	CSG	NE CCP WWT NWBC BCW SMBC WDC FoHW LOs	2030	
SM3. Continue restoration of degraded heathland at the three SSSIs and other agrienvironment sites.	NE	WWT FC NWBC FoHW LOs SMBC BCW WDC	ongoing	
SM4. Continue to expand the area of heathland by 3ha by 2025 and a further 4ha by 2030, including sites of at least 1ha.	CSG	WWT WCC SMBC FoBC NWBC BCW LOs QOs WDC	2025- 2030	
SM5 . Manage or create areas of scrub (see RM1) to achieve a varied age structure, to a maximum 0.5% of each site.	CSG	NE CCP WWT WBRC NWBC WDC SMBC LOs WART FOBC BCW	ongoing	
Advisory				
A1. Inform landowners of their heathland resource and provide management advice, sources of machinery etc.	NE	WWT WCC	ongoing	
A2. Signpost Best Practice Guidelines to appropriate landowners via agri-environment schemes.	NE	CFE	ongoing	
Research & Monitoring				
RM1. Survey and map digitally all areas of acid grassland and heathland to establish a true baseline of data for these, often co-existing, habitats.	НВА	LWSP WWT WCC NWBC WDC SMBC BCW LOs QOs	ongoing	

RM2. Identify sites for potential heathland restoration and expansion.	НВА	NE WWT WCC NAM	ongoing
RM3. Record areas of scrub with biodiversity potential (see SM2).	НВА		ongoing
RM4. Identify plant indicator species to establish criteria for assessing the quality of heathland habitat.	HBA	NE WCC BCW LWSP	Achieved
RM5. Use indicator species criteria for monitoring heathland condition and expansion every 5 years, particularly on LWSs.	HBA	NE WWT BCW LWSP	ongoing

Abbreviations: BCW - Butterfly Conservation Warwickshire, CCP - Coombe Country Park, CFE - Campaign for the Farmed Environment, FC - Forestry Commission, FoBC - Friends of Baddesley Common, FoHW - Friends of Hay Wood, HBA - Habitat Biodiversity Audit partnership, LNPIG - Local Nature Partnership Implementation Group, LOs - landowners, LPAs - Local Planning Authorities, LWSP - Local Wildlife Sites Project, NE - Natural England, NWBC - North Warwick Borough Council, SMBC - Solihull Metropolitan Borough Council, WART - Warwickshire Reptile & Amphibian Team, WBRC - Warwickshire Biological Record Centre, WDC - Warwick District Council, WCC - Warwickshire County Council, WWT - Warwickshire Wildlife Trust.

7. PROGRESS WITH ACTIONS

From 2015–2020 there will be a rolling programme of reporting on progress, of 10 action plans per year with an annual summary of results. Progress with this plan up to 2015 can be seen at https://www.warwickshirewildlifetrust.org.uk/LBAP

8. BIBLIOGRAPHY

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Denton, J. (2013) 'Conservation grazing of heathland – what is the logic? British Wildlife, June 2013.

RSPB (2016) <u>State of Nature</u> – a stocktake of all our native wildlife by over 50 wildlife organisations.

Natural England (2016) Conservation Strategy for the 21st Century. Sets out how NE will help deliver DEFRA's ambitions for the environment to reverse biodiversity loss, sustain distinctive landscapes and enhance engagement with nature.

Overall, A. (2017) Fungi: Mushrooms & Toadstools of Parks, Gardens, Heaths and Woodlands.

Hitchcock, G.H. (2018) Restoring lowland heath through small-scale turf removal at Cooper's Hill Nature Reserve. Bedfordshire. Conservation Evidence 15. 2-4

Worldwide Fund for Nature (2018) <u>The Living Planet Report:</u> aiming higher. Published in collaboration with the Zoological Society of London.

FURTHER INFORMATION

Habitat Biodiversity Audit (HBA) for Warwickshire, Coventry & Solihull – mapping data set and associated information. Phase 1 (<u>JNCC</u>) 1996-2002 and Phase 2 (Local Wildlife Sites) ongoing.

Statutory conservation agencies, WWT and Royal Society for the Protection of Birds staff can provide advice on appropriate management, restoration and expansion of heathlands.

Biodiversity Planning Toolkit - a new online resource to help incorporate biodiversity and geodiversity into the planning system and new development.

<u>Plantlife</u> - a charity which carries out plant species and habitat conservation, owns and manages nature reserves, campaigns, and raises awareness through education.

Nature After Minerals provides advice on creating and managing different grassland habitats.

MineralsUK - the British Geological Survey's <u>Centre for Sustainable Mineral</u> <u>Development</u>. This website has a wealth of information on mineral resources, mineral planning, policy and legislation, sustainable development, statistics and exploration.

<u>Warwickshire CC Mineral Strategy</u> - the minerals development framework consists of a number of documents.

Symes, M. & Day, J. (2003). <u>A Practical Guide to the Restoration and Management of Lowland Heathland</u>. RSPB.

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Natural England (2005). Thames Basin Heaths. Pulling together for access, conservation and development (leaflet available from 01635 268881)

<u>Buglife</u> - the Invertebrate Conservation Trust (2014) 'Promoting habitat mosaics for invertebrates in lowland heathland 'provides information on the habitat management requirements of key invertebrates.

RSPB. Heathland re-creation on agriculturally improved grass fields.

Urban Heaths Partnership (based at the Dorset Wildlife Trust) – the video 'Backfire' is available by post from the Urban Heaths Partnership Education Office, Urban Wildlife Centre, Beacon Hill Lane, Corfe, Mullen, Dorset BH21 3RX

<u>British Wildlife</u> (2017) What does 'traditional' management really mean: Heaths and other commons? Vol.29, no.2, pp.115-117.

10. CONTACT

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