

## HEATHLAND HABITAT STATEMENT

### 1. INTRODUCTION

Heathland is characterized by a dominance of dwarf shrubs, usually heather, and is found in both lowland and upland areas. Lowland and upland heath have been afforded priority status in the UK BAP<sup>43, 49</sup> and are covered in this habitat statement:

- **Lowland Heath\***
- **Upland Heath\***

The CCW Phase 1 survey for Mid and South Glamorgan<sup>13</sup> and for Gwent<sup>14</sup> and the Biological Survey of Common Land for Gwent<sup>38</sup> and Glamorgan<sup>39</sup> shows that heathland in Caerphilly county borough is a relatively rare habitat, particularly at lower altitudes, and recorded a total of 180ha of dry and wet heath in the county borough. Lowland heath has declined significantly during the 20<sup>th</sup> century, and upland heath, although more widespread, has declined from a variety of agricultural and forestry practices.

### 2. HABITAT DEFINITIONS

#### 2.1 Lowland Heath

Lowland heath is characterised by the presence of dwarf shrubs such as heather or ling at a cover of at least 25%. In wet situations heather is associated with cross-leaved heath and various bog mosses, while on more freely draining soils, bell heather, western gorse and bilberry occur. Lowland heath is generally associated with thin, acidic and nutrient-poor soils, and is broadly restricted to the area immediately below the unenclosed uplands at elevations of <300m.

The division between lowland and upland heath in Caerphilly county borough is in some areas difficult to define, as several unenclosed uplands are below 300m, while in other places the enclosed fields supporting heath extend to higher than 300m. For the purposes of this plan, lowland heath in Caerphilly county borough includes all enclosed heath regardless of altitude, together with the unenclosed heath that lies on the southern lip of the Caerphilly basin.

#### 2.2 Upland Heath

Like lowland heath, upland heath is characterised by the presence of dwarf shrubs at a cover of at least 25%. They are found on unenclosed uplands generally between the altitudes of 300 to 600m above ordnance datum (measure of land height, approx. from sea level). In Caerphilly county borough the division between lowland heath and upland heath has been drawn to include all heath occurring on commons that lie to the north of the Caerphilly Basin. These commons are generally over 300m above ordnance datum, although occasionally heath extends below 300m on the lower slopes of the commons, for example at Mynydd Machen and Mynydd Meio, or occurs entirely below 300m, for example at Mynydd Dimlaith.

### 3. CURRENT STATUS

The extent and distribution of heathland habitats in Wales has been considerably enhanced as a result of the NCC/CCW Phase 1 Habitat Survey (1979-1998) and from the Upland Vegetation Surveys for Mid-Glamorgan<sup>53</sup> and Gwent<sup>28</sup>, and the Commons Surveys of Mid-Glamorgan<sup>39</sup> and Gwent<sup>38</sup>. There are 6 heathland communities associated with both lowland and upland heath that occur in Caerphilly county borough. They include:

- heather - western gorse dry heath

- heather - bell heather dry heath
- heather - bilberry dry heath
- bilberry - wavy hair grass heath
- deergrass - cross leaved heath wet heath
- cross-leaved heath - *Sphagnum compactum* wet heath

These communities are described in more detail in the appendix to this statement.

### 3.1 Lowland Heath

About one fifth of the world's total area of lowland heathland occurs in Britain and Ireland. The UK holds 58,000 ha, of which 7,000ha occur in Wales. Caerphilly county borough supports relatively few areas of lowland heath, with key areas occurring on Penllwyn Grasslands SSSI, Caerphilly Common SINIC and less extensive areas occurring on Rudry Common SINIC and at Pengam patch<sup>4</sup>. Much of the lowland heath in the county borough is now reduced to small fragments. Several old colliery tips have developed valuable heathland habitat, for example at Deri and New Tredegar.

### 3.2 Upland Heath

The UK holds a large proportion of European heath, which is mainly restricted to the western seaboard. The total UK upland heath resource is between 2 - 3 million hectares, of which 70-80,000ha occurs in Wales. Caerphilly county borough supports several relatively large areas of upland heath, occurring on many of the commons, particularly on Merthyr and Gelligaer Common, which includes Cefn y Brithdir SSSI, Mynydd Machen Common, Mynydd Eglwysilian, Mynydd Meio and Mynydd Maen. Much of the heath occurs as mosaics with acid grassland or bracken.

**Map 8.1** shows the distribution of lowland and upland wet and dry heath in the county borough.

### 3.3 Associated Species

The following species are known to be associated with upland and lowland heath in the Caerphilly county borough area.

- **Birds:**
  - linnet*\* (associated with gorse)
  - nightjar*\* (lowland heath, in south of CCB)
  - skylark*\* (strong population associated with commons)
  - grey partridge*\* (often uses heath habitat for nesting)
  - song thrush*\*
  - curlew* (often uses heath habitat for nesting)
  - yellowhammer* (associated with gorse)
  - green woodpecker*
  - woodlark\* (bred at Penyfan Pond in 1971)
  - grouse (casual records in 1998 indicate that may be present; more research required to confirm)
  - dartford warbler\* (no records; but increasing on heath in Glamorgan)
  - stonechat
  - whinchat
  - wheatear
  - hobby
- **Mammals:** *brown hare*\* (associated with grassland/heath mosaics)
- **Amphibians:** *great-crested newt*\*
- **Reptiles:** *adder* (associated with dry heaths)

<i>slowworm</i>	(associated with dry heaths)
<i>common lizard</i>	(associated with dry heaths)
<i>grass snake</i>	(sometimes associated with wet heath)

- **Invertebrates:**

<i>marsh fritillary*</i>	(occasionally associated with wet heath)
<i>high brown fritillary*</i>	
<i>pearl-bordered fritillary*</i>	
<i>Other moths</i>	
<i>scarce blue-tailed damselfly</i>	(associated with wet heath)
<i>keeled skimmer</i>	(associated with wet heath)
grayling butterfly	(associated with heath)
green hairstreak	(associated with heath)
silurian moth	(no records; but could potentially occur in upland gullies over 1,300ft, with bilberry)

- **Plants:** *Orchids*

### 3.4 Links with other Habitats

- *Wetlands* (ponds, fens, blanket bog, lowland raised bog)
- *Deciduous woodlands* (Upland oak woodland)
- *Species Rich Grasslands* (lowland acid grassland, rhos pasture)
- *Common Land*
- ***Ffridd/Coedcae***
- *Post-Industrial Land* (naturally vegetated colliery spoil)

## 4. CURRENT FACTORS AFFECTING THE HABITAT

Considerable areas of heath have been lost since the 1930s, and many of the remaining areas are either fragmented or exist as mosaics with other habitats. Specific factors and threats relating to this decline include:

- Lack of management on some sites leading to scrub and bracken encroachment, particularly on lowland heath.
- Agricultural improvement including reclamation, and pasture improvement leading to overgrazing. Heavy grazing is thought to be one of the major causes of change from heath to grassland in Wales.
- Fly tipping and uncontrolled burning particularly threatens lichen and moss rich heathland.
- Fragmentation and disturbance from developments such as road building, mineral extraction, house building and associated infrastructure.
- Recreational pressures, such as motorcycles and off road vehicles.
- Land reclamation schemes that result in the loss of secondary lowland heath.
- General lack of public awareness.

## 5. CURRENT ACTION

- 5.1 One key upland heath site **Cefn y Brithdir SSSI** has been designated as an SSSI in Caerphilly county borough for its dry heath habitat, and **Penllwyn Grasslands SSSI** contains lowland wet heath. Owners and tenants of these sites are able to enter into management agreements with CCW to manage SSSI land. Many other sites that support upland and lowland heath have been designated as SINCS<sup>4</sup>.
- 5.2 The agri-environment scheme Tir Gofal offers grant aid on a whole farm basis, and encourages farm management practices that are sympathetic to, or encourage the maintenance of, heathland. However, good habitat quality is not the sole selection criteria for this scheme, and confidence is currently low with regards to its relevance for achieving biodiversity targets.
- 5.3 A management plan has been prepared for Rudry Common which includes a small area of heath. Implementation of the plan has been put on hold awaiting funding.
- 5.4 Caerphilly county borough local Access Forum is currently exploring off-road bike and car issues in an attempt to combat damage.
- 5.5 CCBC's Local Transport Plan<sup>5</sup> provides a commitment to manage important roadside verges for nature conservation. Heathland occurs on several roadside verges in the north of the county.

## 6. CONSERVATION DIRECTION

### 6.1 Main Objectives for the conservation of this habitat will be to:

- **Prevent** further loss of existing habitats, through statutory protection and local designations
- **Manage** existing stands through appropriate management
- **Re-establish** heathland where opportunities arise, particularly in areas where this will reduce habitat isolation and increase size of existing areas

### 6.2 Possible actions:

- Ensure all key heathland sites are designated as SINCS.
- Introduce appropriate management to heathland sites that are currently unmanaged
- Review management of grazed heathland sites to identify practical ways of restoring heathland to favourable condition.
- Engage Commoners in exploring how heathland habitats on commons can best be conserved.
- Restore habitats adjacent to important or vulnerable sites. Develop a fuller understanding of restoration techniques with the aim of expanding remnant patches of heathland.
- Continued monitoring and surveying of sites in Caerphilly county borough to assess habitat value for flora and fauna species.
- Raise awareness of the nature conservation value of heathland and their vulnerability to habitat loss and disturbance; in all sectors of the community, including agriculture, business, developers, government (local, Welsh and national levels), and the general public.

## **APPENDIX - NVC COMMUNITIES**

### **Dry Heath**

**H8: Heather - western gorse heath**

*Calluna vulgaris* - *Ulex gallii* heath

This community type occurs relatively infrequently throughout the county borough, and usually as part of a heath/acid grassland mosaic. It occurs on Gelligaer Common and is characterised by the presence of western gorse.

**H10: Heather - bell heather heath**

*Calluna vulgaris* - *Erica cinerea* heath

This community may occur in small patches within the county borough, but is unlikely to form a major community type within the area.

**H12: Heather - bilberry heath**

*Calluna vulgaris* - *Vaccinium myrtillus* heath

**H18: Bilberry - wavy hair grass heath**

*Vaccinium myrtillus* - *Deschampsia flexuosa* heath

These are the most commonly occurring heath communities in the county borough, occurring on most commons that support heath. More sites are dominated by bilberry than with heather, although the frequency of heather in the community increases in the north of the county borough. Cefn y Brithdir supports one of the largest expanses of bilberry - crowberry heath *Vaccinium myrtillus* - *Empetrum nigrum* heath in the Glamorgan area.

### **Wet Heath**

**M15: Deergrass - cross leaved heath wet heath**

*Scirpus cespitosus* - *Erica tetralix* heath

**M16: Cross-leaved heath - *Sphagnum compactum* wet heath**

*Erica tetralix* - *Sphagnum compactum* wet heath

These communities are found on the wetter parts of the commons with a good example occurring on Gelligaer and Merthyr Common north of Fochriw.