

Action Plan Scope:

This Action Plan covers all waxcap fungi belonging to the *Hygrocybe* genus.

## 1. CURRENT STATUS

### 1.1 Legislation and priority status

International	None known
UK and Wales	SSSI legislation <sup>a</sup> UK BAP Priority <sup>b</sup> CROW Act 200 <sup>c</sup> SoCC <sup>d</sup>
Gwynedd	None known

### 1.2 Status in Wales and beyond

Waxcaps belonging to the *Hygrocybe* genus, many of which are also resident in the UK (e.g. *H. calyptriformis*), have been reported in the Caribbean and Australasia where they have been found to be residing in woodlands. In the UK and the rest of northern Europe, the same *Hygrocybe* species tend to favour unimproved or semi-improved grasslands where they seek the warmer temperatures provided by direct sunlight. In the UK alone there are over 40 *Hygrocybe* species<sup>1</sup> and, in fact, the UK holds a significant proportion of the European waxcap resource.

### 1.3 Status in Gwynedd<sup>e</sup>

Two UK BAP priority waxcap species have been recorded in Gwynedd, namely the pink meadow waxcap *Hydrocybe calyptriformis* and date-coloured waxcap *Hydrocybe spadicea*. The former is found in Tregarth near Bethesda, and the latter in Bangor at Brewery Fields. Other species found within Gwynedd include *H. helobia*, *H. lacmus*, the crimson waxcap *H. splendidissima*, *H. punicea*, *H. citrinovirens*, the parrot waxcap *H. psittacina*, the conical waxcap *H. conica*, *H. miniata* and the scarlet hood waxcap *H. coccinea*.

## 2. FACTORS AFFECTING THIS SPECIES IN GWYNEDD<sup>f</sup>

- Destruction of hay meadow and grassland habitats through agricultural intensification e.g. ploughing, re-seeding and high levels of fertiliser
- Destruction of habitats through urban or suburban building programmes
- Reduction in the levels/or cessation of grazing or mowing, leading to growth of rank vegetation and woody species
- Heavy disturbance by man i.e. trampling, can be a problem for some species

<sup>a</sup> Wildlife and Countryside Act 1981, Countryside and Rights of Way (CROW) Act 2000. Waxcaps are not a feature of any SSSI in Gwynedd but may be indirectly protected through associated habitat features.

<sup>b</sup> Only pink meadow cap *Hydrocybe calyptriformis* and date coloured waxcap *Hydrocybe spadicea* are UK priority species

<sup>c</sup> Under Section 74 of the CROW Act 2000, the Welsh Assembly Government have produced a "List of Species and Habitats of Principal Importance for the Conservation of Biological Diversity". Crown Copyright 2003 (pink meadow cap *Hydrocybe calyptriformis* and date coloured waxcap *Hydrocybe spadicea* only).

<sup>d</sup> UK Species of Conservation Concern List (pink meadow cap *Hydrocybe calyptriformis* and date coloured waxcap *Hydrocybe spadicea*)

<sup>e</sup> Within this document the term "Gwynedd" refers to areas outside the Snowdonia National Park area, except where specified otherwise

<sup>f</sup> See also associated HAPs for more general factors affecting this species habitats

- Potentially damaging gardening activities include excessive shade, moss killers, and the use of fungicides.

### 3. ASSOCIATED GWYNEDD SAPS / HAPS

Lowland dry acid grassland, Lowland meadows and pasture, Gardens

### 4. CURRENT ACTION IN GWYNEDD

#### 4.1 Site and habitat protection

§ Waxcaps may be found in areas of Gwynedd identified as potential Wildlife Sites or designated as LNR, NNR or SSSI.

#### 4.2 Management and programmes of action

§ None known

#### 4.3 Survey, research and monitoring

§ The British Mycological Society is undertaking a 'waxcap grassland' survey which began in 1996

§ The Countryside Council for Wales have been involved in survey work on grassland fungi and have consequently produced a glossy leaflet on 'Grassland Fungi'.

§ A methodology has been devised (by Rald, 1985) to evaluate the conservation value of nutrient poor grasslands through the use of waxcaps and other fungi as indicator species<sup>9</sup>.

### 5. ACTION PLAN OBJECTIVES

1. To establish the current status and distribution of waxcaps in Gwynedd.
2. To protect, maintain and enhance current populations of waxcaps and related grassland fungi and habitats at all existing sites.
3. To restore and enhance other suitable sites in order to increase the population and distribution of waxcaps.
4. Raise awareness of the diversity and biological importance of waxcaps

### 6. PROPOSED ACTIONS

Code	Action	Partner(s) <sup>h</sup>
Policy and legislation		
1	Through the planning process, ensure developments in sensitive locations are compatible with conservation of waxcaps TARGET/TI MESSCALE: Ongoing	GC, Relevant partners
2	Designate all known waxcap sites as Wildlife Sites and propose that important sites for grassland fungi in Gwynedd are designated as SSSIs	GC, CCW

<sup>9</sup> Grassland are scored in terms of the number of CHEG species (fairy clubs Clavarioid, waxcaps Hygrocybe, pink gills Enteloma and earth tongues Geoglossum) which are found on site: 17-32 (national importance), 9-16 (regional importance) and 4-8 (local importance).

<sup>h</sup> Lead partner for this action is indicated by bold typeface, see section 7.2 for explanation of abbreviations

	TARGET/TIMESCALE: By 2005	
Species / habitat management and protection		
3	Promote and support grant schemes including Tir Gofal, Llŷn ESA and / or use management agreements where appropriate to secure favourable habitat management of sites with established waxcap populations, and adjacent areas which could provide linkages between isolated populations, taking into account the needs of other associated LBAP species and habitats TARGET/TIMESCALE: To be set, Ongoing	CCW, CLA, WAG, FWAG Cymru, FUW, GC, NFU Cymru, NT, Plantlife
4	Ensure that the potential presence and management requirements of waxcaps are considered within any relevant management plans or grant schemes (including SSSI management plans, Tir Gofal, ESA) by liaison (including consultation and provision of comments) between key organisations TARGET/TIMESCALE: Ongoing	CCW, WAG, GC
5	Implement the NGIP to bring about appropriate management and / or restoration of suitable waxcap habitat TARGET/TIMESCALE: By 2008	GC, Relevant partners.
Advisory		
6	Provide integrated advice to landowners and managers on appropriate management of all grassland fungi, such as the continuation of grazing/mowing, and no re-seeding, fertiliser or pesticide inputs. TARGET/TIMESCALE: Ongoing	CCW, CLA, WAG, FUW, GC, NFU Cymru, NT, NWWT
Survey, research and monitoring		
7	Encourage more survey work of suitable sites through partnership with other organisations TARGET/TIMESCALE: Ongoing	BMS, CCW, SNPA, GC NWWT, UWB
8	Collate records for waxcaps and grassland fungi found in Gwynedd and target surveys work. TARGET/TIMESCALE: By 2006	GC, Local recorders
Communications and publicity		
9	Raise awareness of the existence of grassland fungi with farmers and landowners by producing an information leaflet, and through local agricultural shows and events. TARGET/TIMESCALE: Ongoing	GC

## 8 PARTNERS & OPPORTUNITIES

### 8.1 Overall Lead Partner for SAP

British Mycological Society (BMS)

Countryside Council for Wales (CCW)

### 8.2 Key Partners

Gwynedd Council (GC)

Welsh Assembly Government (WAG)

Country Land and Business Association (CLA)

Farmers Union Wales (FUW)

National Farmers Union (NFU)

Snowdonia National Park Authority (SNPA)

North Wales Wildlife Trust (NWWT)

Plantlife

University of Wales Bangor (UWB)

## 8.3 Opportunities

Volunteers, students, farming unions, landowners and managers

## 9. ACKNOWLEDGEMENTS

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## 9. ABBREVIATIONS

BAP: Biodiversity Action Plan, SSSI: Site of Special Scientific Interest, SAP: Species Action Plan, HAP: Habitat Action Plan, LBAP: Local Biodiversity Action Plan, LNR: Local Nature Reserve, NNR: National Nature Reserve, ESA: Environmentally Sensitive Area, NGIP: Natur Gwynedd Implementation Project, SoCC: Species of Conservation Concern.

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<sup>1</sup> Griffith GW, Bratton JH & Easton G; 2004. Charismatic megafungi – the conservation of waxcap grasslands, British Wildlife, Vol 16 (1), pp 31-43.