# WET WOODLAND

#### Action Plan Scope:

This action plan covers the UK BAP priority habitat Wet woodland $^{I}$ , which occurs on poorly drained or seasonally wet soils, in river floodplains, in flushes on valley sides and on wetlands such as fens,

bogs and wet pastures. Usually alder Alnus glutinosa, willows Salix spp. or birch Betula spp. are the dominant tree species within wet woodlands. Boundaries with dry woodland may be sharply defined or more gradual, and may (although not always) change with time through the processes of succession, depending on the hydrological conditions and the treatment of the wood and its surrounding land. Therefore wet woodlands are often found in mosaics with other woodland habitat types and with wetland habitats such as fens. Hillside alder woods often occur as mosaics or minor components with upland oakwoods or upland mixed ashwoods.



#### 1. CURRENT STATUS

#### 1.1 Legislation and priority status

International Habitats Directive (Annex I)<sup>a</sup>

UK and Wales SSSI legislation (some wet woodlands)

TPO legislation<sup>c</sup> UK BAP priority Welsh S74 list<sup>d</sup> Snowdonia BAP

Gwynedd Snowdonia BAP

#### 1.2 Status in Wales and beyond

Wet woodlands occur throughout Europe, and many types are closely related to those found in the UK. Floodplain woodlands are fragmentary throughout most of Europe, although large examples persist along some rivers.

Wet woodlands remain widespread within the UK but different types are often localised. Outside Wales, concentrations of wet woodland on fens are found in East Anglia, Shropshire and Cheshire, whilst bog woodlands are mostly confined to Scotland. Hillside alder woods are largely restricted to Wales, northern England and Scotland. Floodplain forests are rare and highly fragmented throughout.

The total area of wet woodland in the UK is estimated at 50,000 to 70,000 ha, of which around 10% is in Wales². Wales has a particular responsibility for hillside alder wood types, oceanic variants of fen woodlands, and for the protection and re-creation of floodplain woodlands wherever possible². Notable concentrations of wet woodland have been recorded for the LBAP areas of Powys, Carmarthenshire, the Brecon Brecons and Snowdonia National Parks, Gwynedd and parts of Glamorgan².

<sup>&</sup>lt;sup>a</sup> "alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*" and "Bog Woodland" are listed on Annex I of the "Habitats Directive" - Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

<sup>&</sup>lt;sup>b</sup> Wildlife and Countryside Act 1981, Countryside and Rights of Way (CRoW) Act 2000

<sup>&</sup>lt;sup>c</sup> Environmental and Planning Assessment Act 1979

<sup>&</sup>lt;sup>d</sup> Welsh Assembly Government, Going Wild in Wales - List of Species and Habitats of Principal Importance for the Conservation of Biological Diversity. Crown Copyright 2003.

#### 1.3 Status in Gwynedde

There are estimated to be 860 ha of wet woodland in Gwynedd, within a probable range of 700 to  $1100\text{ha}^2$  (but see footnote<sup>f</sup>). Wet woodland sites are widely spread across Gwynedd associated with river floodplains, hillside flushes, ponds and mires, often occurring as a mosaic with other habitats such as fen, marsh and swamp. The wetland in the floodplain of the Afon Penrhos near Pwllheli has an extensive mosaic of wet woodland, reedbed and wet grassland, with both otter and water vole populations. The Llŷn Peninsula is potentially of importance for wet woodland in a Welsh context, as there are many quite extensive areas of willow woodland about which there is little information known.

# 2. FACTORS AFFECTING THIS HABITAT IN GWYNEDD

- Past loss of habitat to land developments (roads, housing etc) or to agriculture.
- Wet woodlands are a successional habitat and are often undervalued in wetland habitat management.
- Inappropriate management (such as overgrazing, undergrazing, poaching of the soil by domestic stock, scrub clearance) which leads to a loss of diversity in the ground flora, reduced structural diversity and reduced opportunities for regeneration.
- Cessation of management on formerly coppiced sites, which may encourage succession to drier woodland types.
- Drainage and lowering of water tables.
- Flood prevention measures and water course management.
- Phytophtora disease in alder, a fungal water borne disease often fatal to alders along rivers.
   Impact on extensive wet woodlands is unknown, however the disease is present on the Seiont and Glaslyn catchments.
- Colonisation by invasive alien species (e.g. Japanese knotweed on the Dwyfor flood plane).
- Air pollution impacting lichen communities.
- Pollution and nutrient enrichment from surrounding land.

# 3. ASSOCIATED GWYNEDD SAPS / HAPS

Upland oakwoods, Upland mixed ashwoods, Scrub woodlands, River corridors, Wetlands

Otter, Lesser horseshoe bat, Bats, Green woodpecker, Newts

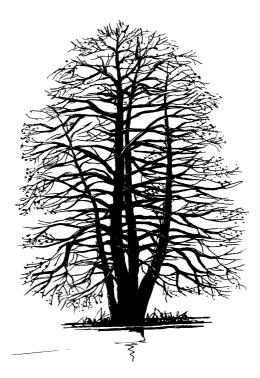
 $<sup>^{\</sup>rm e}$  Within this document the term "Gwynedd" refers to areas outside the Snowdonia National Pæk area, except where specified otherwise

f these estimates should be treated with particular caution, as wet woodlands are unlikely to have been surveyed as thoroughly as other woodland types.

#### 4. CURRENT ACTION IN GWYNEDD

# 4.1 Site and habitat protection

- A number of wet woodlands in Gwynedd are designated as SSSI, including Pont Croesor woodland on the Glaslyn Marshes (ash alder woodland), Llyn Ystumllyn (although much has been removed to produce a reedbed), Coed Elernion and Llyn Cororian. Some wet woodlands may be protected through NNR designation, under TPO legislation, may lie within Conservation areas or may have been designated as potential Wildlife Sites.
- Some important sites have no legal protection.
- Forestry Commission felling licences are required for the felling of more than 5 cubic metres of timber in any one quarter.
- EIA regulations (uncultivated land etc<sup>9</sup>) offer some protection against drainage and improvement of sites over 1 hectare.



# 4.2 Management and programmes of action

- Grant aid is available via the Forestry Commission Woodland Grant Scheme for managing and expanding this habitat. Forestry Commission also provides for the preparation of Native Woodland Management Plans. Within the Better Woodlands for Wales scheme due to be introduced in 2005 the grant system will be revised and grants will be based on long term management plans.
- Currently Native Woodland Management Plans are required for all Tir Gofal farms with areas
  of woodland greater than 3 ha. These may be funded on a voluntary basis for other areas of
  woodland, or on Tir Gofal farms with less woodland.
- Agreements under Tir Gofal and other agri-environmental schemes may include stock exclusion from woodlands.
- All woodlands are expected to be managed according to the UK Forestry Standard 1998, a
  national standard for sustainable forest management which can also be enhanced by an
  industry agreed sustainability mark, the UK Woodland Assurance Scheme.
- All the National Assembly's own woodlands (the Forestry Commission woodlands in Wales)
  have been independently certified to UK Forestry Standard 1998.
- The Welsh Assembly Government's Woodland Strategy for Wales sets out a vision for future sustainable management of Welsh woodlands, which is promoted locally by Coed Cymru.
- The Coed Cymru woodland initiative has been prominent in enabling appropriate management of native woodlands at a local level, with support and grant aid from Forestry Commission, local authorities and others.
- A local cluster group of the Forest Education Initiative ("Hadau") was launched in 2001, based in University Wales Bangor.

 $<sup>^{\</sup>rm g}$  Environmental Impact Assessment regulations for use of uncultivated land and semi-natural areas for intensive agricultural purposes

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 Gwynedd Council runs a nursery at Glynllifon who's aim is to grow and promote the use of local provenance stock.

# 4.3 Survey, research and monitoring

- Countryside Council for Wales is currently measuring the extent of existing areas of woodland through a programme of survey and inventory.
- Ecological surveys are required as part of the Native Woodland Management Plan process.

# 5. ACTION PLAN OBJECTIVES

- 1. To increase our knowledge of the distribution and condition of wet woodlands in Gwynedd.
- 2. To maintain the existing area of wet woodland and secure its appropriate long-term management.
- 3. To expand / restore areas of wet woodland where appropriate, in order to increase the total area of wet woodland by about  $10\%^h$ .

# 6. PROPOSED ACTIONS

Code	Action	Partner(s) <sup>i</sup>
Policy o	and legislation	
1	Consider developing a joint working group with SNPA to ensure effective implementation of Snowdonia and Gwynedd woodland action plans.  TARGET/TIMESCALE: BY 2005	GC, CC, CCW, FC, SNPA
2	Use planning conditions to ensure developments in sensitive locations are compatible with conservation of wet woodlands  TARGET/TIMESCALE: Ongoing	GC, Relevant partners
3	Ensure that all examples of wet woodland which meet the relevant criteria are designated as Wildlife Sites TARGET/TIMESCALE: Start process of designation by 2005	GC, CC, CCW, FC, NWWT
4	Ensure that any grant schemes administered by partner organisations, e.g. FC grants, Tir Gofal, require any trees planted to be of local provenance and sustainably produced and take full account of the management requirements of wet woodlands  TARGET/TIMESCALE: Ongoing	GC, CCW, DEPC, FC, WDA
Species	s / habitat management and protection	
5	Promote and support grant schemes including FC grants and / or use management agreements where appropriate to secure favourable management, restoration and / or creation of wet woodlands, taking into account the needs of associated LBAP species and habitats  TARGET/TIMESCALE: Favourable management of 75%, Restoration / creation of 100ha by 2009	CC, CCW, CLA, DEPC, EAW, FC, FUW, FWAG Cymru, GC, NFU Cymru
6	Seek funding for land management by developing a biodiversity grant scheme, which would include grants for appropriate management, restoration and / or creation of wet woodlands  TARGET/TIMESCALE: By 2005	GC, Relevant partners
7	Protect water table around known sites with careful assessment of routine and non-routine flood defence works or drainage TARGET/TIMESCALE: Ongoing	EAW

<sup>&</sup>lt;sup>h</sup> Ensuring that this is not to the detriment of any other Gwynedd BAP habitat and / or species. In particular delivery of this Action Plan must be closely integrated with delivery of the Wetlands HAP.

Lead partner for this action is indicated by bold typeface, see section 7.2 for explanation of abbreviations

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Advisory		
8	Continue to provide advice on the use of natural methods of woodland establishment and the use of local provenance planting material TARGET/TIMESCALE: Ongoing	CC, CCW, FC, GC, NWWT
Survey,	research and monitoring	
9	Identify all wet woodland sites through a programme inventory of available data (Phase One, Wildlife Site and other surveys) and appropriate ecological surveys, and target key sites for management and restoration, taking into account the recommendations outlined within Priority Habitats of Wales, 2003 (CCW) (information to be stored electronically)  TARGET/TIMESCALE: By 2006	GC, CC, CCW, CEH, FC, NWWT, UWB
10	Identify wet woodlands providing potentially suitable seed sources for the continued operation and expansion of Glynllifon and potentially other nurseries growing stock of local provenance  TARGET/TIMESCALE: By 2006	
Commun	ications and publicity	
11	Continue to support and develop further the NW cluster group of FEI (Hadau) TARGET/TIMESCALE: Ongoing	FEI, Relevant partners
12	Continue to run a Native Tree Nursery at Glynllifon, and through this initiative promote the use of native provenance stock, and the growing of native trees from seed on a local basis  TARGET/TIMESCALE: Ongoing	GC
13	Raise public awareness of wet woodlands and their conservation through open days, walks, interpretation and events, e.g. Seed Gathering Sunday.  TARGET/TIMESCALE: Ongoing	FC, CC, FEI, GC, NWWT, SWA

# 7. PARTNERS & OPPORTUNITIES

# 7.1 Overall lead partner for HAP

Forestry Commission (FC)

# 7.2 Key partners

Coed Cymru (CC)

Country Land and Business Association (CLA)

Countryside Council for Wales (CCW)

Centre for Ecology and Hydrology (CEH)

Department for Environment, Planning and Countryside (Welsh Assembly Government) (DEPC)

Environment Agency Wales (EAW)

Farming and Wildlife Advisory Group Cymru (FWAG Cymru)

Forest Education Initiative (FEI)

Farmers Union of Wales (FUW)

Gwynedd Council (GC)

National Farmers Union Cymru (NFU Cymru)

North Wales Wildlife Trust (NWWT)

Snowdonia National Park Authority (SNPA)

Small Woods Association (SWA)

University of Wales Bangor (UWB)

Welsh Development Agency (WDA)

#### 7.3 Opportunities

Timber growers, woodland owners, tree and woodland contractors, schools, colleges, community centres and groups

#### 8. ACKNOWLEDGEMENTS

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Line drawings: English Nature

#### 9. ABBREVIATIONS

BAP: Biodiversity Action Plan, HAP: Habitat Action Plan, JNCC: Joint Nature Conservation Committee, LBAP: Local Biodiversity Action Plan, NNR: National Nature Reserve, SAP: Species Action Plan, SSSI: Site of Special Scientific Interest, TPO: Tree Preservation Order.

Version 1, 2004

<sup>&</sup>lt;sup>1</sup> UK Biodiversity Group classification - Jackson, D.L. 2000. Guidance on the interpretation of the Biodiversity Broad Habitat Classification (terrestrial and freshwater types): Definitions and the relationship with other habitat classifications. JNCC Report No. 307.

<sup>&</sup>lt;sup>2</sup> Jones, P.S. et al, 2003. Priority habitats of Wales: a technical guide. CCW.