

Black Poplar

Common name - Black Poplar

Welsh name - Aethnen Ddu

Scientific name -
Populus nigra subsp. *betulifolia*



Description

The black poplar *Populus nigra* subsp. *betulifolia* is Britain's rarest native timber tree. A thousand years ago it thrived across the lowland floodplains of the British countryside. It was once such a common sight that it features in many classic paintings of the British countryside, including John Constable's *The Hay Wain*.

The trees are typically characterised by their large ungainly appearance with massive arching down-turned branches and burred trunks with rough dark bark. In the spring the male trees have distinctive red catkins. Female trees have green catkins followed by fluffy white seeds. For the seeds to germinate they need to lie undisturbed on bare, wet mud from June to October. Trees can also be propagated from cuttings.

Black poplars were commonly planted near farms and developing villages as they were considered so useful for building and scaffolding.

The shaped lower branches were especially prized for cruck frames and its toughness made it a favourite of wagon makers, bowl turners and fletchers. In general only male trees were planted as females were considered a nuisance because of the drifting white down they produce, thus few remaining specimens have the opportunity to propagate naturally.

Black poplars grow by watercourses, by ponds and in hedgerows, especially on lowland floodplains. The original habitats of this species has long been modified beyond recognition and it is no longer possible to separate native trees from those planted long ago. (Preston et.al.2002)

Since the start of the 19th century its natural habitat has been steadily destroyed by property development and over intensive farming resulting in the species quite literally vanishing from our landscape. Many trees are old and in decline, therefore action is needed to secure the survival of this tree.

Current Status

International

The European black poplar is confined to Britain, Ireland, Northern France and parts of Western Germany.

United Kingdom

The black poplar is native to England and Wales as far north as a line from the Mersey to the Humber, with a few specimens occurring in south Yorkshire and as far north as the River Tees. In 1993 it was described as the most endangered timber tree in Britain with only 1000 trees left in the country, it was thought that this species would be extinct in 20 years. Following increased and more detailed surveys 6 - 7,000 trees have now been recorded, with about half being found in Aylesbury Vale in Buckinghamshire. The ratio of male to female trees is 50:1. Genetic research has found 65% of black poplars to be the same genotype.

Wales

NE Wales has between 250-300 trees, but only two of these are female.

Wrexham

After a public appeal for local black poplar records and field work in the late 1990s there are now about 50 known black poplar trees in the County Borough of Wrexham. The trees generally are found on the borders of the Dee flood plain east of Wrexham. All, however, are male.





Legal Status

The Black Poplar is not a protected species but individual trees may be protected by Tree Preservation Orders (TPO's). Certain trees may have a degree of additional protection because they are within protected areas such as nature reserves, Wildlife Sites or SSSIs. A felling licence from the Forestry Commission may also be required for felling large trees. Black poplars are also within the list of point scoring species used in assessing hedges under the Hedgerow Regulations 1997.

Current factors causing loss or decline

- Felling of trees for development and road building
- Felling for safety concerns.

- Removal of wind-fall trees which would otherwise survive in situ or regenerate from the stump.
- Lack of regeneration because of a lack of female trees in the area.
- Loss of suitable habitat (i.e. floodplains; drained for agriculture).
- Hybridisation with non-native poplars
- Widely dispersed population makes site based conservation difficult.

Current Action

National Action

- Black Poplar Conservation Group set up in 1996 aims to bring together practitioners to share experience and ideas and has produced a National Biodiversity Action Plan for the black poplar.

- Genetic research has been done by Nottingham and Edinburgh universities as part of an international programme studying the number and distribution of black poplar clones.
- Work on the DNA testing of around 600 Black Poplar samples is being undertaken at Nottingham University together with the Environment Agency. The first analysis of the results, 'A study of genetic diversity in *Populus nigra* subsp. *betulifolia* in the Upper Severn area of the UK using AFLP markers' by Fiona Cooper, has been published.
- Several regional Black Poplar groups are working hard to preserve, maintain and promote known trees in their own regions - notably in Cheshire, Norfolk, Cambridgeshire, Huntingdonshire and Gloucestershire.
- Vetted new trees are being added to the central database.

Local Action

- The Forestry Commission office in Clawd Newydd collates records of all the black poplars in NE Wales.
- 50 Black Poplars in Wrexham County Borough have been catalogued and the locations and conditions of each are noted.



- Black poplars have been planted along River Dee and River Gwenfro.
- Hundreds of cuttings from proven native stock are being grown on, ready for replanting in the vicinity of the parent trees. In NE Wales, Alyn Waters (Wrexham), Llysfasi College (Denbighshire) and



Celyn Collage (Flintshire) are currently growing cuttings taken from local trees. Cheshire has two black poplar tree nurseries.

- Liaising and working with neighbouring LBAP groups such as Cheshire.

Links to other plans

Wood-pasture and veteran trees HAP

Woodlands HAP

River, stream and canal HAP

Cheshire Black Poplar SAP

Sources of Information

Preston, C.D., Pearman D.A. & Dines,

T.D. (2002) *New Atlas of the British and Irish Flora.*

Oxford University Press

Objectives

1	Retain and encourage protection of existing black poplars.
2	Establish the current extent and distribution of black poplar in Wrexham.
3	Encourage the natural regeneration of existing trees and the planting of new trees.
4	Raise awareness of the importance of Black Poplars.

Abbreviations

EA
Environment Agency

NEWPBG
North East Wales Plant
Biodiversity Group

WCBC
Wrexham County Borough
Council

BSBI
Botanical Society of the British
Isles

FC
Forestry Commission

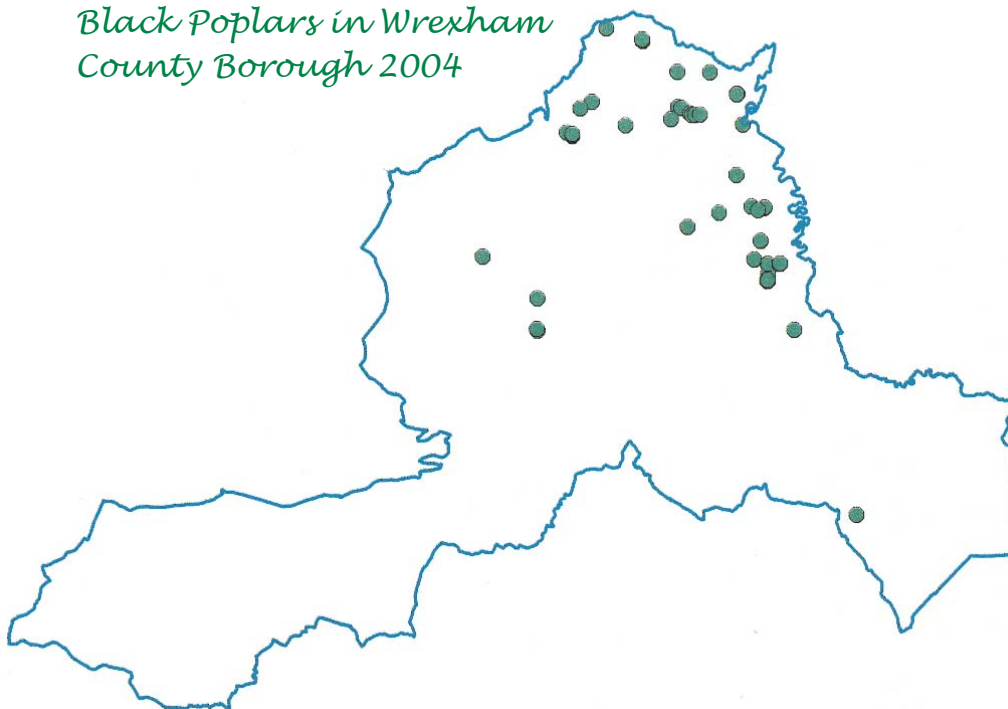
NWWT
North Wales Wildlife Trust

LBAP
Local Biodiversity Action Plan

BTCV
British Trust for Conservation
Volunteers

WBG
Wrexham Biodiversity Group

Black Poplars in Wrexham
County Borough 2004



Proposed Actions - Black Poplar

	Objectives	Partners	Target
Policy and Legislation			
Ensure existing black poplars are protected.	1	WCBC	No net loss of black poplars as a result of developments.
Consider protection of certain specimens through the initiation and application of Tree Protection Orders.	1	WCBC	From 2004
Species/Site Safeguard and Management			
Seek to fence off or otherwise protect dying and fallen trees to encourage natural regeneration & sucker growth.	1, 3	WCBC Landowners	From 2004
Propagate and plant cuttings taken from existing local trees.	3	FC, Lysfasi College, Celyn College, BTCV, CWT, EA	From 2004 / Ongoing
Investigate sites for the planting of new trees.	3	WCBC, NWWT, Tree Wardens	Ongoing CCW, EA,
Communication and Publicity			
Continued development of links with other black poplar projects nationally and based upon genetic work, investigate transfer of stock around the country.	1, 2, 3, 4	WCBC, Cheshire Black Poplar Biodiversity Group WBG	From 2004
Inform the public about the plight of the species and of the care of trees.	1, 2, 3, 4	WCBC, FC, WBG Tree Wardens	By 2007
Provide advice on propagating and planting new trees.	3	WCBC, FC	ongoing
Encourage members of the public to send records of sightings of black poplars to the Biodiversity Officer.	2, 4	WCBC, NWWT, WBG	From 2004
Hold awareness raising events and identification training.		NEPBG, WBG	One event over duration of plan
Research and Monitoring			
Create and maintain an up-to-date register of all trees and historic sites and landowners.	2	WCBC, BSBI, FC	From 2004 genetic
Consider fingerprinting to establish the genetic base of the population.	2	WCBC, CCW, Nottingham University	
Continued recording / verification of new sightings and plotting locations on GIS.	2	WCBC, BSBI, FC	From 2004

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Further information

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