



BLACK POPLAR

Populus nigra betulifolia

1. INTRODUCTION

The black poplar (*Populus nigra*) is Britain's rarest native timber tree and the native race *betulifolia* is special to Great Britain and N.W. Europe, though other forms of *P. nigra* extend across southern Europe and across middle Asia. Fully-grown trees are often highly majestic with massive down-arched, side branches and very rough bark that often bears bosses. Constable often featured them in his paintings. The densely clumped, upturned twigs and leaning trunk are another good clue to this species and it never supports mistletoe (unlike hybrid poplars). Natural populations grow in river and flood plains but they have been widely planted elsewhere for timber and landscaping, and good specimens can be seen at Coombe Countryside Park and at the Moathouse Car Park in Stratford-upon-Avon. Most trees are males, but females can be distinguished by green catkins followed by fluffy seeds. Almost all the specimens in Warwickshire, Coventry and Solihull have been deliberately planted, but some of the oldest ones may be part of the genetic stock of those which once naturally occurred here.



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2. OUR OBJECTIVES & TARGETS

	Target
A. To maintain a complete directory of black poplars in the sub-region and to safeguard them.	review biannually
B. To increase population size and range by identifying gaps along river valleys and encourage new plantings there.	2010
C. To raise local awareness of the rarity, location and appropriate management of black poplars in the sub-region.	2002-2015
D. To raise awareness of the black poplar, its life cycle and habitat requirements.	2002-2015

ASSOCIATED HABITAT PLANS

- Rivers & Streams
- Parks & Public Open Spaces
- Gardens
- Roadside Verges
- Hedgerows

ASSOCIATED SPECIES PLANS**3. NATIONAL BAP OBJECTIVES & TARGETS**

There are no national BAP objectives and targets, but the Black Poplar Conservation Group has prepared the following 2001 draft national targets for the species.

- *To locate existing trees.*
- *To safeguard existing trees.*
- *To increase the number of black poplars by developing a diverse age structure by planned planting.*
- *To inform and educate landowners and managers about black poplars and to raise public awareness*
- *To ascertain, maintain and increase the genetic variability.*
- *To seek protection through the planning system.*
- *To adopt Best Practice Guidelines on planting and pollarding published by the UKCG*

4. CURRENT STATUS

In past centuries, the native black poplar appears to have been numerous within England's flood plains and, to a lesser extent, its wider agricultural landscape. Over the past 200 years, however, it has gradually been replaced by hybrid black poplars and balsam poplars of various sorts. Increasing concern over its decline resulted in a BSBI survey in the 1970s followed by the Daily Telegraph 'Black Poplar Hunt' in the 1990s. The latter suggested that only 2,500 trees survived nationally. Since then, increased survey effort has pushed that figure up to c10,000, with about half of these within the Aylesbury Vale in Buckinghamshire. Concerted recording in Warwickshire since the mid-1990s has produced a list of about 350 specimens with associated information on age and location.

About a third of our trees are within flood plains, important concentrations of mature trees occur along parts of the Blythe and Tame, the Alne and lower Avon and the lower Dene. In addition, black poplars have been planted widely elsewhere in screenings, on road verges, in parks and within field boundaries. About 10 exist within gardens. About a third of our trees are mature (100+ years) and several trees near Welford-on-Avon may exceed 300 years. Much of the non-flood plain planting is less than 50 years old suggesting that *betulifolia* stock has been available commercially (possibly not labelled as such), and these account for some two-thirds of our trees due to the often considerable numbers in certain

screens (e.g. about 70 just around one field near Crackley Wood!). Some fine urban/suburban specimens exist in Coventry, Leamington, Stratford and Solihull. Most of the trees are standards, though a few fine multi-stemmed ones exist (e.g. beside the Dene near Charlecote) and important concentrations of mature pollards occur in the Alne Valley around Great Alne. The only deliberately coppiced tree is on the A4177 near Hatton, though several old stumps and fallen trunks have produced vigorous natural re-growth.

Few of the trees have been sexed, though most appear to be males, and only two females are currently known. Recent planting for conservation purposes has taken place, but is not well documented. It is unclear whether the native black poplar has ever been a true native of the sub-region and the vast majority of trees are clearly deliberately planted (though possibly derived from ancient Warwickshire floodplain stock).

4.1 Legal and Policy Status

Black poplars receive the same protection as all other wild plants in the UK through the Wildlife and Countryside Act, 1981. Therefore, they may not be uprooted without permission of the landowner. The felling of trees may be prevented by Tree Preservation Orders (on the basis that the trees are healthy, have amenity value and for there to be a known threat). Black poplars are also within the list of point-scoring species used in assessing hedges under The 1997 Hedgerow Regulations.

4.2 Current Factors Affecting The Habitat

- **Development pressures** including new housing and industrial estates and road schemes resulting in destruction of trees.
- **Safety considerations and insurance.** Landowners and managers are increasingly managing their estates in a liability-conscious manner, which may have resulted in the felling of trees and may threaten some mature specimens in the future.
- **Recent planting has tended to be for screens** rather than flood-plain character or conservation, and the latter category of planting needs to be increased.
- **Cross-pollination from hybrid poplars** could dilute the gene-pool of our *betulifolia* stock (though most flower at slightly different times).
- **Planting methodologies** mean that stock of limited genetic variety is being planted, and the scarcity of females means that little sexual propagation is possible.
- **Poor quality planting**, especially in some property screens and field margins which will limit the life expectancy of many trees.
- **Hedgerow removal and garden management** could potentially remove some trees.
- **Lack of regeneration from rootstocks.** Some very old trees have died without further regeneration and those in tightly planted screens tend to exhibit poor growth.
- **Most old pollards are no longer managed** and could become top-heavy and moribund in time.
- **Poor quality tree surgery** can result in premature death.

5. CURRENT LOCAL ACTION

- Steven Falk at Warwickshire Museum has been the County Recorder since c1994 and maintains a listing of trees. He attends meetings of the Black Poplar Conservation Group and has liaised with certain key site owners e.g. Coombe Countryside Park and local authority tree officers. He checks the identity of potential trees upon request and has removed some erroneous records from older listings in the process.
- Liaison has also taken place with Fiona Cooper (the National Recorder, EA), and formerly between the late Pam Copson and John Bowra of Warwickshire Museum, John White (Forestry Authority), Edgar Milne-Redhead (BSBI), Severn-Trent and the Environment Agency. This has resulted in regular sending of records to the national database and some genetic analysis of Warwickshire trees (revealing a mixture of clones).
- Some recent planting of confirmed *betulifolia* material has taken place in the Great Alne area (by Severn Trent using Castlemorton cuttings), at BAD Kineton, and in the grounds of Ashorne House (Brian Laney). Coombe Countryside Park have been propagating cuttings of their Capability Brown stock which should be ready for targeted local use by 2005.
- The Habitat Biodiversity Audit Project has produced several valuable records for trees on private land away from footpaths in recent years.
- The UK Black Poplar Conservation Group held its annual conference at Coombe Countryside Park in October 2002, and used this as an opportunity to examine the management of problematic mature specimens at a site receiving high levels of public usage.

6. PROPOSED LOCAL ACTIONS (some dates amended - Core Steering Group - Feb 2008)

ACTION	Lead	Partners	By	Meets objective
Policy & Legislation				
PL1. Ensure that all relevant policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9) to safeguard and promote black poplars.	LBAPSG	WM NE WWT EA LAs	2002- 2015	A
PL2. Support the protection of black poplars through the Hedgerows Regulations.	WBRC	LAs	2002- 2015	A
PL3. Provide Tree Protection Order coverage to vulnerable trees.	LBAPSG	WM LAs	2002- 2015	A
PL4. Ensure black poplars are accounted for in planning applications work, including Hedgerows Regulations surveys, felling/surgery applications and environmental assessment	LBAPSG	WM LAs	2002- 2015	A
Site / Species Safeguard & Management				
SM1. Attempt to contact all landowners/land managers with black poplars on their land to ensure they understand their significance and promote their longevity.	WM	NE LAs	2005	A, C
SM2. Identify areas of river and wetland habitat suitable for planting black poplars and promote this through Countryside Stewardship, the Leam Strategy etc, referring to any planting strategies/guidelines available and promoting varied age structure in the long-term.	WM	NE FWAG	2005	B
SM3. Promote the establishment and maintenance of locally-sourced cuttings of recorded provenance e.g. at Coombe Countryside Park.	LBAPSG	CCP	2002- 2015	B
SM4. Establish 20 female trees in scattered localities, ensuring these are close to males (preferably just in the north east of the region), but avoid planting females where the seeds could produce a nuisance.	WM	CCP EA NE WWT FWAG HBA LA LBAPSG LO MMC TO WCC WBRC	2005	B

Advisory				
A1. Provide advice to key groups including landowners, local authorities, agri-environment organisations and commercial tree organisations regarding the location, determination, planting, management and conservation of black poplars.	WM	TOs	2002-2015	C
A2. Provide all local authority tree officers and appropriate planning officers with user-friendly information on the location of Black Poplars within their area of work, including inclusion within Habitat Biodiversity Audit maps.	WM		2005	A, C
Research & Monitoring				
RM1. Maintain an up-to-date listing of confirmed and unconfirmed black poplars and monitor losses and gains.	WM		2002-2015	A
RM2. Set up a new student or volunteer-based project to establish detailed location, dimensions & growth form and other valuable information for all Warwickshire's black poplars.	MMC	CovUni WM WarUni	2005	A, B
RM3. Place all black poplar locations on the Habitat Biodiversity Audit (in GIS format).	HBA	WM	2004	A, C
RM4. Investigate other aspects of black poplar ecology such as associated insects. Determine priorities for investigation and seek resources.	WM		2004	
Communication & Publicity				
CP1. Raise the profile of black poplars in Warwickshire using leaflets, tree labels, site interpretation, a Museum web page and publication and possibly training days.	WM	CCP EA NE WWT FWAG HBA LA LBAPSG LO MMC TO WCC WBRC	2005	C
CP2. Encourage communication between local black poplar owners and managers and Warwickshire Museum.	WM	LOs	2002-2015	C

CP3. Maintain contact with the national Black Poplar Conservation Group.	WM		2002-2015	D
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Abbreviations: CCP – Coombe Country Park, EA - Environment Agency, NE – Natural England,, FWAG – Farming & Wildlife Advisory Group, HBA – Habitat Biodiversity Audit, LA – Local Authority, LBAPSG – Local Biodiversity Action Plan Steering Group, LO – Landowner, MMC – Moreton Morrell College, TO – Tree Officer, WBRC – Warwickshire Biological Record Centre, WCC – Warwickshire County Council, WM - Warwickshire Museum, WWT – Warwickshire Wildlife Trust.

7. REFERENCES (see LBAP bibliography web page)

8. FURTHER INFORMATION (see separate Links web page for links to web sites)

Warwickshire Museum - *The Big Tree Hunt* – an initiative to promote the appreciation of trees. To become involved contact Steven Falk on 01926 412481 (see below)

9. CONTACT

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