

## LANCASHIRE BAP SPECIES ACTION PLAN

### BLACK POPLAR (*Populus nigra* ssp. *Betulifolia*)

#### Summary

*Considered to be the rarest native timber tree in Britain, the native Black Poplar is at the north west limit of its British distribution in Lancashire. Most of these trees are planted – the descendants of wild trees that centuries ago grew in the county's river floodplains. Black Poplars have separate male and female trees: only 2 female trees are known to survive in Lancashire.*

*The purpose of this Action Plan is to ensure the survival of the local strain of Black Poplar in Lancashire, through protection of surviving trees and a programme of planting cuttings taken from them.*

#### Action Plan Aim-

***To ensure the survival of male and female native Black Poplar in Lancashire***

#### Species Description

The native Black Poplar *Populus nigra* ssp. *betulifolia* is a large majestic tree up to 30 metres high with a broad spreading crown. A feature of mature trees is the burred trunk and lower limbs. Its leaves are generally diamond shaped with long pointed tips. The tree is dioecious, that is, there are male trees and female trees. Male trees produce red catkins in spring and are commoner than female trees, which produce green catkins that turn to fluffy "cotton" seed heads in early summer. However, good seed is rarely produced, as most trees are isolated preventing pollination. A major account is given in Cooper *et al.* (2002).

Trees in the Manchester area have been named 'Manchester Poplar'; these appear to be a local (male) clone. The trees found in urban East Lancashire may be identical. Hybrids with other species of poplar have, in the past, been mistaken for the native Black Poplar.

#### Main Habitats

The tree was typically associated with lowland river flood plains in areas where alluvial deposits of mud, sand and gravel were thrown up during times of flooding. River engineering over the last two centuries has effectively destroyed the Black Poplar's natural habitat in Britain. It survives mainly in hedgerows and as individual trees in fields or by ponds, usually but not always associated with its former habitat.

It is also found as an amenity tree in urban areas and sometimes in the curtilage of dwellings where these have involved former hedgerows.

### **National Status**

The native distribution of the Black Poplar in Britain was formerly considered to lie south of a line between the Mersey and Humber estuaries (Milne-Redhead, 1990). However, recent fieldwork and other studies have indicated that it is also likely to be native in parts of north-west and north-east England (Cooper *et al.*, 2002). The species also occurs in Wales and Ireland. Our native Black Poplar is thought to be the most endangered native timber tree in Britain (White, 1993) with the national population estimated at around 7,000 trees of which about 600 are female. There are thought to be a further 4,000 Manchester Poplars in and around Manchester though these are declining in number due to disease and planning decisions (Cooper *et al.* 2002). It is recorded as occurring in 601 10 km<sup>2</sup> in Britain (Preston *et al.* 2002). This species has no formal protection in Britain.

### **Regional Status**

Black Poplar has important populations in north-west England, trees in Lancashire and Cumbria being at the north west limit of the species' native distribution in Britain. Known in Cumbria only from a few locations by the River Eden, its frequency increases in the southern part of the region, with Cheshire holding a nationally notable concentration of female trees (Cooper *et al.*, 2002). The Manchester Poplar still occurs widely as a planted street or amenity tree in and around the Manchester area. In Cheshire, Black Poplar is the subject of a County BAP.

### **Local Status**

No accurate assessment has been made of the County Population, although it is estimated that there are fewer than 200 trees. Whilst male trees are widespread, occurring in all local authority districts as well as the unitary authorities of Blackpool, and Blackburn and Darwen; only two female trees are known, one in Fylde and the other in Lancaster. A third female tree fell in a winter storm in 1997. The two surviving female trees are within Biological Heritage Sites.

Most Lancashire trees are considered to be the descendants from local and regional trees originally growing in floodplain situations and propagated by cuttings over the last 200 years. In this respect most trees must be considered planted but derived from local stock.

### **Current factors affecting the Species**

The principle threat to this species is the lack of natural recruitment to an ageing population. This is mainly due to a combination of scarcity of habitat and lack of seed production. Black poplars may also be felled to make way for development, or in the perceived interests of health & safety: the typically burred trunk is often mistaken for signs of disease. There is also a potential threat of hybridisation with non-native poplars.

Since 2000, the spread of Poplar Scab, a fungal disease so far mainly restricted to the Manchester Poplar that usually proves fatal within 3 years of symptoms appearing, has been widely identified in Greater Manchester. It was reported from

south Lancashire (Blandford and Walsh 2004) and in the last year or so individual trees in the Preston area have begun to show signs of the disease.

In the past trees would have been propagated from cuttings of local stock, but such material is not generally available from tree nurseries from which most planted trees are now obtained.

Incomplete information exists over recent losses, although it is known that two trees were felled on Danesway at Walton-le-Dale, whilst another was lost from adjacent land in the development of South Ribble Tennis Centre. In Blackburn two trees were felled after complaints of shading from the residents of newly constructed houses and one tree was felled on the side of the Leeds/Liverpool Canal at Whitebirk. A single male tree along Savick Brook was also felled, to make way for the Ribble Link Canal; however, cuttings were taken, grown-on and replanted as part of the landscaping of the new canal.

Whilst the conservation of this tree species by natural regeneration is not achievable, a programme of propagation from cuttings can easily achieve its survival into the future. Black Poplars propagate readily from hardwood cuttings.

## **Current Action / Mechanisms**

- *Policy*  
The Black Poplar *Populus nigra* ssp. *betulifolia* is included in the *Provisional Lancashire Red Data List of Vascular Plants* and therefore capable of protection through the Biological Heritage Sites system (LCC 1998). All Local Development Plans in Lancashire contain policies to protect trees and woodlands, and Biological Heritage Sites.
- *Site Safeguard*  
The two known female trees are given a degree of protection as they occur on Biological Heritage Sites. It is not known how many (if any) native Black Poplars are covered by Tree Protection Orders in Lancashire.
- *Land and Species Management.*  
The Lancashire Black Poplar Project has involved a limited programme of propagation of the two female trees and male trees, undertaken by Lancashire County Council in partnership with the Land Base Unit of the Brothers of Charity at Lisieux Hall. These have been planted at suitable sites within the geographical context of their parental origin.
- *Advisory*  
No advice currently given.
- *Research and Monitoring*  
Trees in Lancashire were included in a recent national survey of Black Poplars (Cooper, 2002). No current systematic monitoring takes place in Lancashire.
- *Public Relations*  
LCC has issued a Press release over initial stages of Lancashire Black Poplar Project.

## Species Targets

Target	Area	Measure	Timescale
<i>To secure the protection of all known mature Black Poplars by TPOs or other means</i>	Lancashire	No. of trees protected	2010
<i>To plant 250 new trees (male and female) in suitable locations</i>	Lancashire	No. of trees planted	2015

## Proposed Actions

Action (priority: H,M,L)	Area	Milestone/ Measure	Partners	Timescale
<b>Site safeguard</b>				
Place Tree Preservation Orders (TPOs) on all significant mature Black Poplars (H)	Lancashire	No. of trees/ sites protected by TPOs	District local authorities, LCC, TWT	2008
Consider designation of suitable sites as BHS (H)	Lancashire	No. of sites assessed; no. of sites designated	BHSP	2008
<b>Species management and protection</b>				
Establish ongoing programme of propagation by cuttings, grown on to planting size (H)	Lancashire	No. of new cuttings taken/ no. of cuttings growing on	LCC, Lisieux Hall, Myerscough	2008
Introduce to suitable sites, including opportunities for 'planning gain' (M)	Lancashire	No. of trees planted; no. of sites planted	LCC, LWT, FWAG, BTCV, LAs	Ongoing
<b>Research and monitoring</b>				
Maintain database of localities of all verified mature Black Poplar (H)	Lancashire	No. of records	LCC, EA, LWT, BSBI	Ongoing

Establish and maintain database of suitable planting sites, together with data on genetic source, numbers and sex of trees planted (H)	Lancashire	No. of records	LCC	Ongoing
Monitor the spread of Poplar Scab in Lancashire (H)	Lancashire	No. of records	LCC, EA, LWT	Ongoing
<b>Publicity</b>				
Publicise Lancashire Black Poplar Project (M)	Lancashire	No. of articles, media appearances	LCC, EA, LWT	Ongoing

## Related Action Plans

### *Habitat Action Plans*

- Rivers and Streams
- Broadleaved and Mixed Woodland (wet woodland)

## References

Blandford N. and Walsh J. 2004 *Poplar scab and its implications for the Manchester Poplar* (restricted local authority officers circulation only).

Cooper F.M.P., Jones M., Watkins C. and Wilson Z.A., 2002, *Geographic Distribution and Genetic Diversity of Black Poplar*, Environment Agency.

LCC 1998, *Biological Heritage Sites Guidelines for Site Selection*. Lancashire County Council.

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Preston C.D., Pearman D.A. and Dines T.D., 2002, *New Atlas of the British & Irish Flora*. OUP.

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