UPDATED PLAN DECEMBER 2021

BLACK POPLAR
Populus nigra betulifolia

Since the writing of this plan in 2002, the status of the species in the sub-region has changed remarkably, thanks to the launch in 2005 of the Big Tree Hunt of Warwickshire, Coventry & Solihull by Steven Falk. With one of the highest figures of confirmed specimens for any county (Falk, 2011), the action plan has been altered to focus action on veteran specimens and increasing the number of female trees.

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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 further good clues to this species.

© Steven Falk

The foliage of nearly all local specimens (unlike hybrid black poplars) features spiral galls of the aphid *Pemphigus spirothecae*, resembling knots tied in the leaf stalks and the species never supports mistletoe (again unlike hybrids). The galls have become increasingly common in recent years to the extent that it is unusual to find a native black-poplar without them today. Mistletoe (*Viscum album),* in contrast, often infests hybrids but has not been found on a single Warwickshire native black poplar to date.

Older trees tend to grow in river and floodplains or by streams and ditches but they have been widely planted elsewhere for timber and landscaping. Most trees are males (purple catkins in spring), 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 (including numerous twentieth century municipal schemes in urban parks and streets), but some of the oldest rural ones may represent descendents of those which once naturally occurred here.

2.	OBJECTIVES	TARGETS
	Associated actions plans are: *Parks & Public Open Spaces', 'Rivers & Streams', 'Marsh & Swamp'* 'and *'Old Parkland & Veteran Trees'*	
	PLEASE CONSULT THE ***'GENERIC SPECIES'*** ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL SPECIES PLANS	
A.	**To maintain a complete directory of black poplars in the sub-region and to safeguard the trees.**	**ongoing**

B.	**To maintain and stabilise current population size, age structure, range and genetic variety.**	**ongoing**
C.	**To increase population size and range.**	**2030**

3. NATIONAL BAP OBJECTIVES & TARGETS

The black poplar is not a UK Biodiversity Action Plan (BAP) Priority Species (Joint Nature Conservation Committee, 2007) but the Black Poplar Conservation Group has prepared the following 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 UK Conservation Group.*

4. CURRENT STATUS

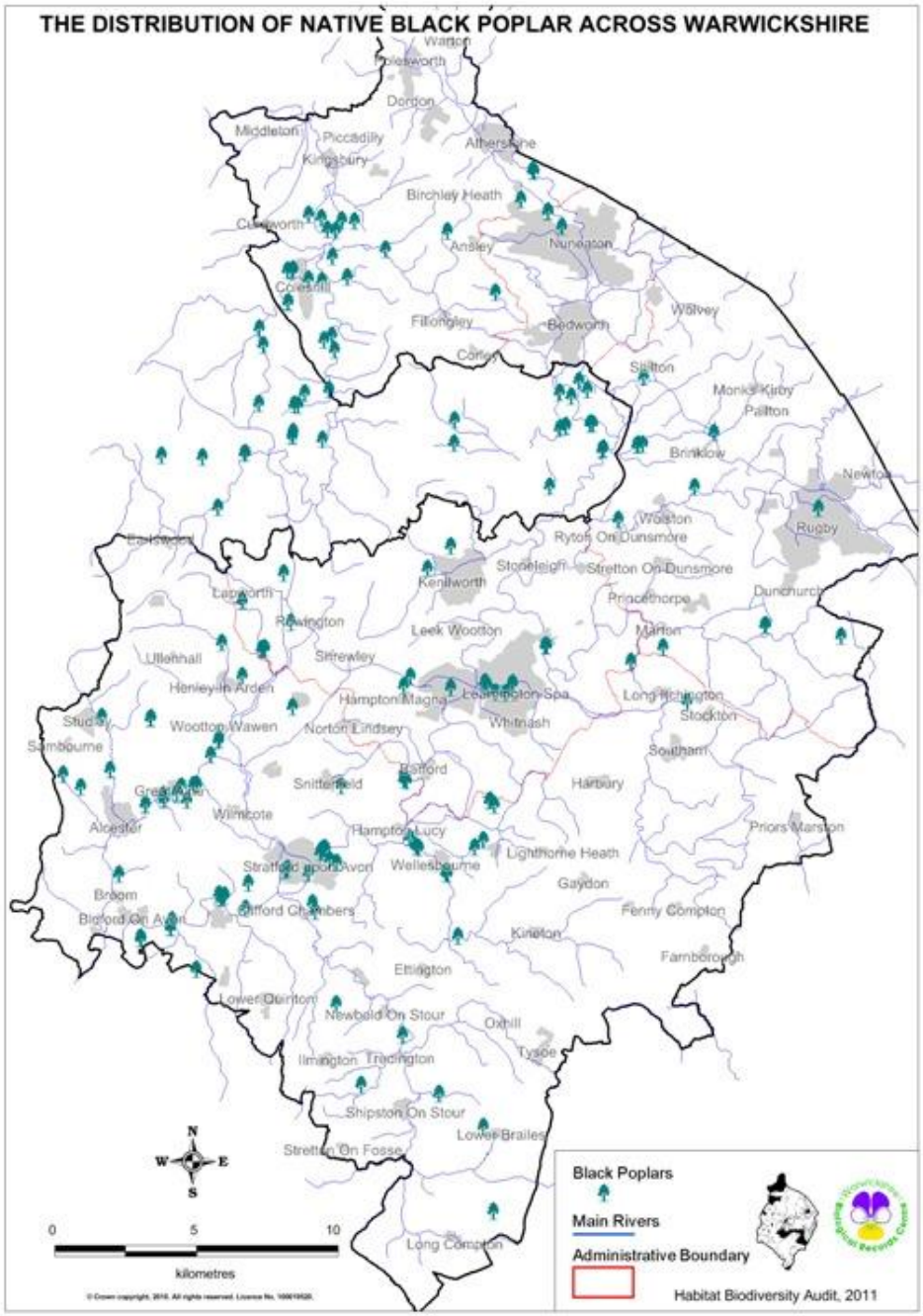
In past centuries, the native black poplar appears to have been numerous within England's floodplains and, to a lesser extent, its wider agricultural landscape. Over the past 200 years, however, it has gradually been replaced by hybrid black poplars and balsam poplars of various sorts. Increasing concern over its decline resulted in a Botanical Society of Britain & Ireland (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 10,000, with about half of these within the Aylesbury Vale in Buckinghamshire.

The status of the species in the sub-region has changed remarkably, thanks to concerted recording in Warwickshire since the mid-1990s and the launch in 2005 of the 'Big Tree Hunt' of Warwickshire, Coventry & Solihull by Steven Falk. By 2011 the initial list of 30 confirmed specimens had swelled to almost 600 records, one of the highest figures for any county, with associated information on age and location (Falk, 2011)

Good specimens can be seen at Coombe Country Park and at the Moathouse Car Park in Stratford-upon-Avon; a full list of sites is maintained by the Warwickshire Biological Records Centre.

There are interesting patterns in Warwickshire's native black poplar population, such as the ratio and distribution of males and females (only about 20 of the latter are confirmed to date though they may be under-recorded), of different genetic clones, of older versus

younger trees, of municipal plantings versus old waterside specimens, of mature pollards, and so on. Black poplar may or may not be native to the river valleys of Warwickshire but it is clear that most existing trees have been deliberately planted, and for a variety of purposes. They were a popular choice within municipal and property screen schemes in the mid-1900s, and are to be found in a number of municipal parks, around various colleges, schools and industrial estates, and in good numbers along certain roads. No doubt they were simply supplied as undifferentiated 'poplar', and in several instances singletons can be found growing incongruously within rows of Lombardy poplar.



About a third of our trees are within floodplains, with important concentrations of mature trees occurring along parts of the R. Blythe, R. Tame, R. Alne, lower R. Avon and the lower R. Dene. In addition, black poplars have been planted widely elsewhere in screenings, on road verges, in parks and within field boundaries. Some also exist within

gardens. About a third of our trees are mature (100+ years) and several trees may exceed 300 years (rootstocks may be much older than the aerial growth they produce). Much of the non-floodplain planting stems from the latter half of the twentieth century 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 Spa, 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. A few deliberately coppiced trees exist locally, though several old stumps and fallen trunks have produced vigorous natural re-growth.

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). A small number of losses have been noted over the past 10 years, some due to fatal windblow (not all windblow necessarily kills this tree), but some due to deliberate felling (e.g. Coventry Power Station and one potentially hazardous tree at Stratford's Moathouse Car Park; several have partially collapsed.

4.1 Legal and Policy Status

A wide range of species and habitats are protected under international and domestic laws, including the Wild Birds Directive (1979), the Wildlife and Countryside Act (1981), the Conservation Regulations(1994) and EC Habitats Directive (1992). Protection of sites is afforded nationally through Sites of Special Scientific Interest (SSSI) designation, Special Areas of Conservation (SAC) and Local Nature Reserve (LNR) statutory status. Other sites are offered recognition of their value through Local Wildlife Site status (LWS), Local Character Areas and identified Landscape Scale Areas. The National Planning Policy Framework (2012) chapter/section 11 states conditions with regard to any development negatively affecting biodiversity, including protected sites, ancient woodland and other irreplaceable habitats (paragraph 118). The Wildlife & Countryside Act and schedule 2 of the Conservation of Habitats & Species Regulations (as amendment, 2019, EU exit) make it an offence to intentionally kill, injure, take, possess, sell, buy or transport a range of species.

Black poplars receive the same protection as all other wild plants in the UK through the Wildlife & Countryside Act and therefore 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 that a known threat exists. Black poplars are also included within the list of point-scoring species used in assessing hedges under the Hedgerow Regulations 1997.

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 has resulted in the felling of a few local trees and may threaten some mature specimens in the future.
- **Recent planting has tended to be for screens** rather than floodplain 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. LOCAL ACTION

- Steven Falk has been the County Recorder since 1994. He has liaised with many site owners and provides data to numerous interested parties e.g. district councils and volunteer tree recorders. The identity of potential trees have been checked upon request and some erroneous records removed from older listings in the process.
- Liaison has also taken place with Fiona Cooper (the National Recorder, Environment Agency), and formerly between the late Pam Copson and John Bowra of Warwickshire Museum, John White (Forestry England), Edgar Milne-Redhead (BSBI), Severn Trent Water 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).
- The UK Black Poplar Conservation Group held its annual conference at Coombe Country Park (Coventry City Council), in October 2002, and used this as an opportunity to examine the management of problematic mature specimens at a local site receiving high levels of public usage.
- Various amateur wildlife recorders have been sending in records of previously unrecorded trees since the launch of The Big Tree Hunt of Warwickshire,

Coventry & Solihull in 2005 to gather information on unusual cultivars and important local fruit tree collections.

- The Environment Agency maintains a record of all overhanging trees including black poplars along rivers as they provide shading and food for fish stocks.
- An accurate digitised database of black poplars in the sub-region has been established by the Habitat Biodiversity Audit (HBA) and is annually updated. Survey has produced several valuable records for trees on private land away from footpaths.
- Three of the actions (see **section 6: SM1, RM3 and RM4)** have been offered to Warwick and Coventry Universities as potentially suitable for post-graduate projects, given the right student. None has been taken up to date, possibly because they are field-based projects requiring transport.
- At Coombe Country Park (CCP), selected host black poplars ready for pollarding were used in 2013 to establish potted up cuttings. These are still on site and are now trees; unfortunately the female cuttings never materialised. In 2018 Solihull Scouts contacted CCP for cuttings to plant at the local scout group in Solihull.
- Planting of confirmed *betulifolia* material has taken place at the following sites:
  - in 1985-88: at Hampton Wood by the meadow in 2 batches; mature trees are all male, the immature trees have no catkins (Wager,. *pers.comm.* 2019).
  - pre-2013: at MOD Kineton and Ashorne House, and in the Great Alne area by Severn-Trent.
  - in 2015: by Warwickshire Wildlife Trust (WWT) at Kingsbury Water Park (sex unknown at present).
  - in 2016: 8 trees (sex unknown at present) by WWT at Guphill Brook, Coventry, with spiling along the eroding river bank to protect the bank area.
  - In 2019: one of the Hampton Wood volunteers, Martin Hicks, obtained a cutting from a female black poplar at Bidford on Avon and planted it in the meadow at Hampton Wood among the older black poplars. In 2021 it is thriving and growing (Dave Sollis, *pers.com.).*

6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	By
PLEASE CONSULT THE '***GENERIC SPECIES***' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL SPECIES PLANS			
Policy, Legislation & Protection			
PL1. Support the protection of black poplars through the Hedgerows Regulations.	WCC	LAs EA	ongoing
PL2. Provide Tree Preservation Order coverage to veteran and vulnerable trees.	LAs	WCC TOs	ongoing

ACTION	Lead	Partners	By
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PL3. Ensure female black poplars are accounted for in planning applications work, including Hedgerows Regulations surveys, felling/ surgery applications and environmental assessment.	WCC	LAs	ongoing
Site / Species Safeguard & Management			
SM1. Contact landowners/land managers with black poplars on their land to ensure they understand their significance and promote their longevity especially those with veteran trees, including pollards.	CSG	NE WCC LAs Unis	2030
SM2. Establish at least 20 female trees in identified areas **(see RM3),** ensuring these are close to males.	WCC	CCP EA NE HBA WWT WBRC LAs TOs LOs	2030
SM3. Maintain a supply of cuttings of recorded provenance for distribution to other sites in the county, e.g. at Coombe Country Park.	CCP	WWT EA	ongoing
Advisory			
A1. 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.	WBRC	WCC WWT	ongoing
Research & Monitoring			
RM1. Maintain an up-to-date listing and map of confirmed and unconfirmed black poplars, including specifically veteran trees, and record in Phase 1 habitat target notes.	HBA	WBRC CCP LOs WWT EA TWGs	ongoing
RM2. Identify areas of river and wetland habitat suitable for planting female black poplars near to male poplars and deliver this through appropriate plans e.g. R. Blythe SSSI restoration plan, Tame Valley Wetlands NIA and the Leam Catchment Plan, in order to achieve varied age structure in the long-term (**see SM2**).	WWT	NE EA SRT	2030
RM3. Extend information in the existing black poplar dataset by establishing dimensions, gender & growth form and any other valuable information, particularly	CSG	WBRC Unis	2030

ACTION	Lead	Partners	By
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for veteran and mature trees, e.g. through a student or volunteer-based project, and assess distribution.			
RM4. Undertake a biennial review of data, recording veteran trees and identifying trees in need of management. Aim to ensure the succession of trees and mix of ages within an area, retaining veteran trees for as long as possible.	CSG	WBRC Unis	ongoing

Abbreviations: **CCP** – Coombe Country Park, CSG **– Core Steering Group, EA** - Environment Agency, **NE** – Natural England, **HBA** – Habitat Biodiversity Audit partnership, **LAs** – Local Authorities, **LOs** – Landowners, **SRT** – Severn Rivers Trust, **TOs** – Tree Officers, **TWGs** – Tree Warden Groups, **Unis** – Universities, **WBRC** – Warwickshire Biological Record Centre, **WCC** - Warwickshire County Council, **WWT** – Warwickshire Wildlife Trust.

7. PROGRESS WITH ACTIONS

From 2015–2020 there will be a rolling programme of reporting on progress, of 10 action plans per year with an annual summary of results. Progress with this plan up to 2018 can be seen at https://www.warwickshirewildlifetrust.org.uk/LBAP.

8. BIBLIOGRAPHY

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Worldwide Fund for Nature (2018) The Living Planet Report: aiming higher. Published in collaboration with the Zoological Society of London.

9. FURTHER INFORMATION

Habitat Biodiversity Audit (HBA) for Warwickshire, Coventry & Solihull – mapping data set and associated information. Phase 1 (JNCC) 1996-2002 and Phase 2 (Local Wildlife Sites) ongoing.

UK Black Poplar Conservation Group (2001). Species Action Plan for Black Poplar (*Populus nigra* ssp. *betulifolia*). Also in (2002). Guidelines for Planting & Repollarding. Aylesbury Vale District Council (informal leaflet).

The Populus nigra network started its activities in 1994. Members from 17 countries meet regularly to exchange information, coordinate activities, identify common needs and priorities, develop and implement joint tasks, prepare collaborative projects and promote awareness at national and international levels.

10. CONTACT

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