

Black Poplar

Populus nigra subsp *betulifolia*

Species Action Plan

1. Introduction

In Britain the black poplar was once a characteristic feature of lowland river valleys, but it has now declined to the extent that it is one of our rarest native trees. In Worcestershire black poplar would have been a characteristic floodplain tree along the River Severn and its tributaries, but it has now all but disappeared from much of its former range.

2. Current Status

2.1 Ecology and habitat requirements

The black poplar once played a substantial role in local economies and culture. In some parts of the country it was (and still is) used in traditional village tree dressing events and spring fertility festivals. Black poplar timber is particularly shock and fire resistant and was widely used in wagon bottoms, for scaffolding, fence posts and in the roofs of buildings. The typical cultivation practice was to cut and plant truncheons from local, usually male, trees. Female trees were less favoured because they produce copious amounts of seed fluff in spring and historically many female trees were systematically removed.

Historically the black poplar was a tree of floodplain woodland, its decline being brought about by the conversion of that habitat to farmland, and its now limited range is a reflection of the lack of suitable habitat. The majority of

Commons. Lack of suitable habitat together with the limited number of female trees that exist in the county means it is virtually impossible for the trees to reproduce by seed. Thus artificial propagation is the only means of re-establishing them as a viable, reproducing population.

Today, there is a significant gap in the age demographic of black poplar within Britain. Over the last decade there has been a renewed interest in planting for nature conservation reasons and, very recently, some use of black poplar within tree planting schemes in place of species such as ash, in light of new tree diseases such as Chalara arriving in the UK.

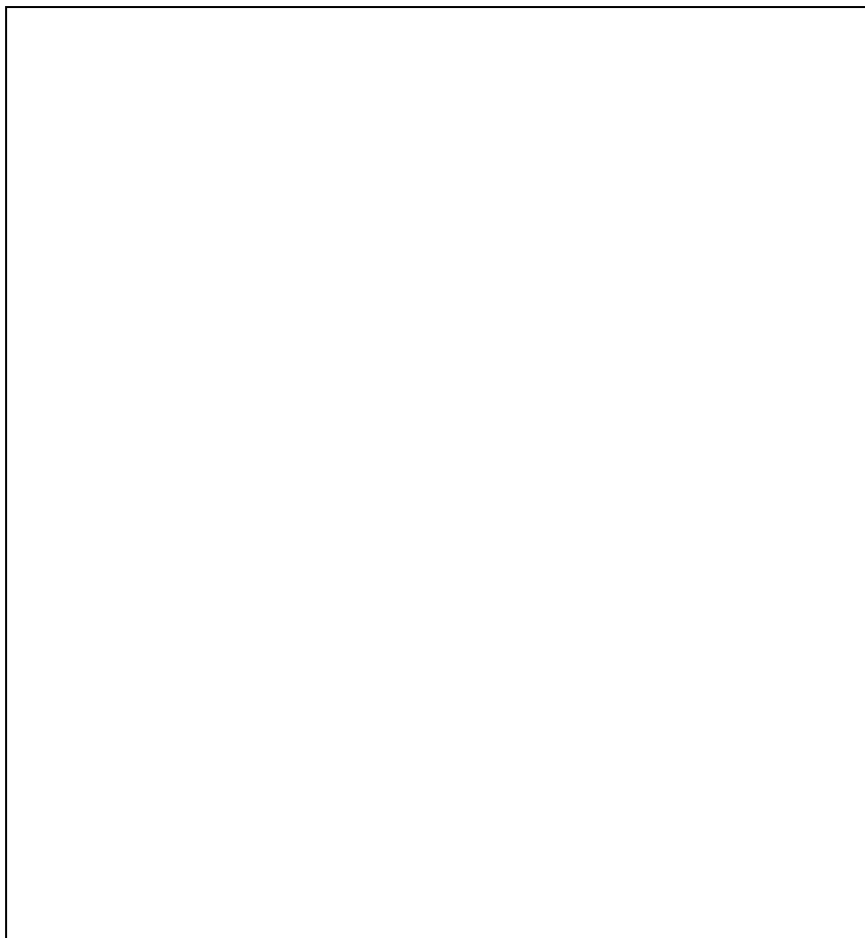


Figure 1. Records of black poplar in Worcestershire. Data supplied and map prepared by Worcestershire Biological Records Centre.

2.3 Legislation

Tree Preservation Orders can be made under the Town and Country Planning (Tree Preservation) (England) Regulations 2012 (as amended).

2.4 Summary of important sites

Castlemorton Common is notable, with over 80 black poplars recorded.

Sites where female black poplars have been confirmed are all highly significant. Female trees recorded on the Worcestershire Flora Project database include:

- Ashmoor Common
- Harvington Brook and Harvington Lock Island
- River Teme below Berrington Court

Female trees have also been planted in recent years within the Bow Brook catchment as part of Worcestershire Wildlife Trust's Living Landscape project.

3. Current Factors Affecting the Species

The majority of the remaining trees in Worcestershire are ancient and, despite recent planting, the age structure of the overall population is highly unbalanced.

Winfield *et al* (1998) carried out a study within the Upper Severn region on the genetic diversity of 146 individual trees considered to be black poplar *betulifolia* and 3 trees thought to be non-*betulifolia*. Overall, the study found a pronounced lack of genetic diversity within the individuals examined. Those plants exhibiting the maximum amount of genetic diversity were considered to have the potential

Corenblit, D., Steiger, J., González, E., Gurnell, A. M., Charrier, G., Darrozes, J., Dousseau, J., Julien, F., Lambs, L., Larrue, S., Roussel, E., Vautier, F and Voldoire, O (2014). *The biogeomorphological life cycle of poplars during the fluvial biogeomorphological succession: A special focus on Populus nigra L*