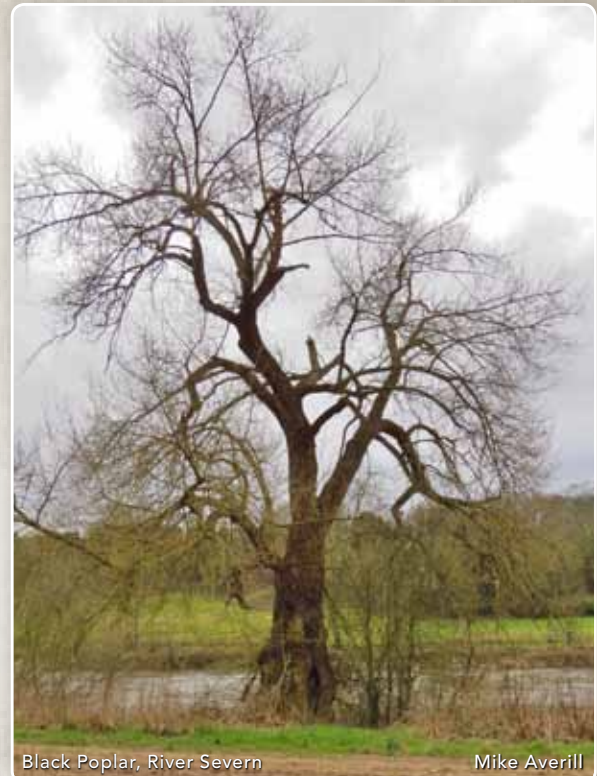


Black Poplars along the River Severn near Bewdley (inspected as part of a WFSG visit on 3 June 2015)

MIKE AVERILL

One of the reasons for the meeting on the 3 June 2015 (see account by Jane Pope on page 7) was to inspect the Black Poplar trees near the old disused railway bridge over the River Severn. Most conspicuous of these is the large (6.35m's girth) tree that stands in the field just above the Environment Agency River Flow measuring station (SO78127630). This splendid tree is a classic Black Poplar (*Populus nigra* ssp. *betulifolia*) with vast downward sweeping branches carrying deltoid shaped leaves. The name *betulifolia* comes from the birch like shape of the leaves. The bark is deeply fissured and this particular tree has a large cavity near ground level, big enough to hold several people. The branches do tend to break off easily and so it is not unusual for a big branch to drop off in high winds. This tree lost a large branch a few years ago but it hasn't made the tree any less stable. Black Poplars were once a feature of the English riverside landscape, the close grained wood being used in the making of wagon bottoms, for scaffolding, fence posts and in the roofs of buildings. Culturally it has been part of village life in some locations as a dressing tree, such as the one at Aston on Clun near Craven Arms.

They are scarce trees in our countryside now because few trees have self-planted over the last 150 years due to the loss of suitable habitat. Regeneration is difficult as the short-lived windblown seeds need to fall onto ground that is kept both bare and wet and free of competition from the end of June until



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October. Any flooding or drought occurring during this period causes seedlings to perish. There has been a concerted attempt to plant new Black Poplars since the 1980's but some of these have been the hybrids mentioned below. In the 1980's it was thought that the Black Poplar was the scarcest native tree in Britain and was quoted as being scarcer than giant Pandas.

According to the BSBI species accounts home page (ref 1), The Black Poplar, *Populus nigra* L., is a distinctive and characteristic feature of the countryside. It was popularised in the 1980s by Edgar Milne-Redhead, who organised a recording project via the pages of the Daily Telegraph. The Western European Black Poplar is *Populus nigra* L. ssp. *betulifolia* (Pursh) Dippel. The closely related ssp. *nigra* occurs in Eastern Europe and Russia, and has entirely glabrous leaves and stems; ssp. *caudina* (Ten.) grows in the Mediterranean region and has caudate leaf bases (Fl. Europeaea). There are a number of varieties and hybrids of Black Poplar that are widely planted. The most common are the Lombardy Poplar *P. nigra* 'Italica', which is a fastigiate form, and the Hybrid Black-poplars, *Populus x canadensis* Moench., which are crosses with the American tree *P. deltoides* (Eastern Cottonwood). The 'native' Black Poplar, *P. nigra* ssp. *betulifolia*, is distinguished in the British Isles by having characteristically diamond-shaped leaves (cuneate leaf-bases) without glands, no balsam smell, a distinctive outline with down swept branches, and it often has burrs on the bark of the trunk.



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The origins of the subspecies *betulifolia* has been researched using DNA analysis by Forest Research collaborating with other laboratories in the EUROPOP project and have determined the routes taken by Black Poplar when it recolonised Europe following the end of the last ice age. These studies clearly showed that there were at least two refugia for Black Poplar, one based in Spain and one based in southeastern Europe. The majority of the clones present in Britain originated from the eastern refugium. The few clones present from the Spanish refugium may have been via human mediated transport.(2)

Along the river upstream of Bewdley, there are a number of other Black Poplars towards Trimpey but none are as complete and as old as the main one. In fact one tree, in the next field up (SO77917675), has fallen in to the river in the last 18 months. This was quite a large tree with a girth of approx 2-3 metres and this one could also provide a rootstock for a new tree as well if not disturbed. It is usually assumed that Black Poplars grow from fertilised seed which falls on fresh silt but they could grow from suckers.

Of the other Black Poplars along the river at Bewdley, there is a self coppiced growth of three branches at SO77957654 (approx 600m upstream of the Railway piers) and it is possible that this has grown from previous stock. Another growth of 6 trunks from the same root stock is on the riverside at SO77907705 (200 metres upstream of Railway piers). This one has the general characters of a true Black Poplar but there is none of the characteristic downward sweeping branches turning up at the ends of the subspecies *betulifolia* so a careful examination of the leaves is needed to check what this is.

Planting hybrids of these poplars was quite popular in the 1950-60's for veneer peeler logs principally for match splint production due to the large expansion

in the home-based matchstick trade created by the Bryant and May Company. Since then, of course, very few matches have been needed due to the advent of lighters and the collapse of smoking tobacco. There are still the remains of these plantations in a few places such as along the Dick Brook and these will be 40-50 years old now.

Since the 1980's awareness campaign there has been concerted planting of Black Poplars and so their future should be safe. Even so, when you find a large tree like the one at Bewdley that has managed to get to an advanced age, it is a special tree. Today in Worcestershire most of the remaining black poplars can be seen in hedgerows, along ditches and on commons. Castlemorton Common is Worcestershire's most notable site as it has over 80 black poplars. Worcestershire Wildlife Trust sites that contain Black Poplars include Feckenham Wyld Moor, Penorchard Meadows, Wilden Marsh and the South West Meadows.

A tree like this in a riverside location is a huge attraction to insects. On the day of the visit we saw many Banded Demoiselle (*Calopteryx splendens*), Scorpion Fly (*Panorpa communis*) the one with the converging hypovalves, Comma caterpillars (*Polygonia c-album*), Peacock caterpillars (*Inachis io*), Downlooker Snipe Fly (*Rhagio scolopaceus*), Water Snipe Fly (*Atherix ibis*), 14 Spotted Ladybirds (*Propylea quatuordecimpunctata*), Tortoise beetle (*Cassida vibex*). Also seen was the Crane-fly (*Ctenophora pectinicornis*) which was found at the base of the old Black Poplar by the large opening. This species is interesting because it is relatively uncommon and the larvae live in the detritus that collects in old tree hollows like this one.

References

1. JNCC 1 <http://sppaccounts.bsbi.org.uk/content/populus-nigra-1>
2. Conservation of Black Poplar (*Populus nigra* L.) May 2004 By Joan Cottrell of Forest Research



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Ctenophora pectinicornis

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