

The status of *Populus nigra* L. in the Republic of Ireland

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ABSTRACT

The presence of the Black Poplar *Populus nigra* L. in Ireland is confirmed and it is shown to be locally common in rural habitats in the Midlands and along the Shannon river-system. It is suggested that *P. nigra* is an Irish native and evidence supporting this is put forward.

INTRODUCTION

The results of the B.S.B.I. Survey of the distribution of *Populus nigra* L., the native Black Poplar, in England and Wales have recently been published by Milne-Redhead (1990). I have been interested in the Black Poplar since E.M.-R. showed me some when I was staying in Suffolk in 1977, and I started to find them near my home in Dorset. I have given the Survey records from many other places in England and rediscovered the tree on Putney Heath (v.c. 17), recorded by J. Fraser in 1924 but missed by local botanists!

I have also planted out near my home in Dorset 13 seedling Black Poplars raised by E.M.-R. in 1977 from seed gathered in Cheshire, and observed their not inconsiderable genetic variation. I am, therefore, thoroughly familiar with the tree.

So, when E.M.-R. asked me to undertake a reconnaissance of *P. nigra* in Ireland, I willingly agreed. Very little was known about the Irish status of this tree. A few records had come in from the Survey, including two from Co. Kildare and another from Co. Cork, but not enough to suggest a natural distribution, and none from Northern Ireland, so the map (Milne-Redhead 1990) was left blank. *Populus nigra* was not considered a native tree in Ireland by Colgan & Scully (1898). Praeger (1934), in his account of Irish vegetation, mentions that 'poplar' occurs in some areas but does not say which species. Black Poplar seemed to be most likely. But the view held by Irish botanists has been that it is a very rare, introduced tree, planted from English stock by Anglo-Irish settlers.

OCCURRENCE IN IRELAND

A circuit was planned round the Republic of Ireland south and west of Dublin. It was felt that, because of the limited time available, it would not be worthwhile to explore farther north, as the tree has a southern distribution in Britain. It seemed that the tree was most likely to be found in the low-lying fertile river-basins of the Irish Midlands, but I also had to investigate elsewhere and check several possible records. My route took me from Co. Wexford, north up the Barrow and Slaney rivers and up to Dublin. I also looked at specimens named *P. nigra* in the herbaria at DBN and TCD. Some of the specimens were obviously hybrids, but others were very clearly correctly named.

From Dublin, I travelled west to the Bog of Allen, an area of wet loamy farmland and vast lowland peat-bogs which covers much of Co. Kildare and Co. Offaly around the headwaters of the River Liffey. *P. nigra* proved to be locally common across a wide area between Edenderry and Clane, and I collected 32 records.

I then moved to the Shannon river-system and based myself at Portumna on the northern tip of Lough Derg. At Ballyshrul Bridge, just to the west of Portumna, I found *P. nigra* to be the commonest tree, but of an unusual, unbossed clone. E.M.-R. tells me that he knows of only one unbossed clone in England. However, in all other respects these trees conformed to the typical *P. nigra*. In the close vicinity of the bridge, 80 trees were recorded. Around the lake, a further 77 trees were found, with a particularly impressive group of 17 at Ballinderry on the eastern side.

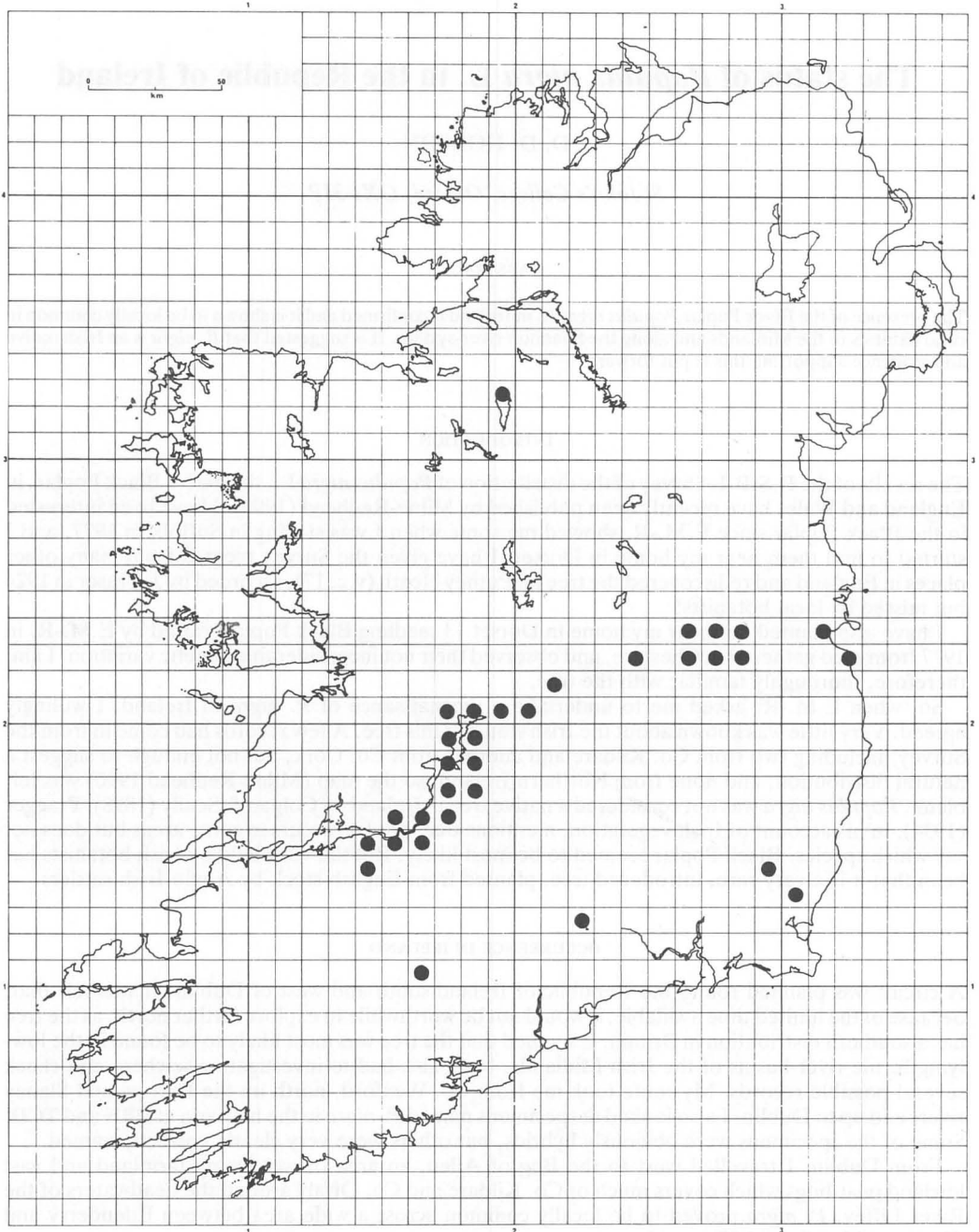


FIGURE 1. Distribution of *Populus nigra* L. in Ireland.

South of Limerick, the banks of the River Maigue yielded a further eight trees, but in the Blackwater and Suir river-valleys farther south, only another four trees were found.

A map of the known distribution in Ireland is given in Fig. 1.

Contrary to existing opinion that all Irish *P. nigra* have been planted from introduced stock, only a few of these trees are associated with farmyards and farmhouses. Most of them are growing in hedges in wet farmland, often with deep, water-filled ditches draining the fields. The trees were never found in peat-bogs but always in the surrounding loamy soils. Moreover, the trees were found almost exclusively in the river-valleys and floodplains, which E.M.-R. considers to be their natural habitat in England and Wales, and rarely on hillsides.

As *P. nigra* has been considered an introduction to Ireland, it seemed probable that one method of entry of the tree into the Irish countryside might have been during the building of the extensive canal system across Ireland in the late 18th century, during the era of British domination. In Co. Kildare, I searched along a stretch of the Grand Canal south-west of Clane and discovered that the only poplars were old *P. × euramericana* hybrids. It appears that, as early as 1794 when this stretch was built, *P. nigra* had been replaced with cultivated hybrid trees. This seems to indicate that any introduction of *P. nigra* must have occurred before the 18th century. Furthermore, I found Black Poplars in the hedges of the pre-existing field-system, through which the canal had been built.

Older planned tree-planting would have occurred on the extensive parkland that grew up in Ireland. However, only one of the trees found could be the result of such a planting – the vast old tree near Cahir.

It seems reasonable to conclude that *Populus nigra* is a native tree of the Irish Midlands. It is not a woodland tree, so has had to survive amidst agriculture. It is almost exclusively propagated from cuttings so, as in England and Wales, relies on man's assistance. Even now it is still being planted by Irish farmers; several trees found were no more than ten years old. In Co. Galway the timber is used for joists and floorboards. I am inclined to consider the tree native because it does not appear necessarily to be associated with settlements and its distribution is very tightly linked with river-valleys and flood-plains – too closely to be haphazard introduction. The local density and distribution of the tree in Kildare and around Lough Derg is such that, if indeed the tree has been introduced, it must be an ancient introduction. But why then is this ancient introduction not concentrated along the eastern coast – the easiest point of access for English settlers and the area of densest English settlement?

It seems necessary for further research to be conducted into whether the tree is indeed native; possibly pollen analysis could provide evidence. I think it is also necessary to build up a complete picture of the distribution of the tree across Ireland; for instance, north up the Shannon river-system from Lough Derg to Lough Allen. I hope local B.S.B.I. members will carry on where I left off and not rely on visiting botanists from England or Wales. Perhaps someone will discover it in Northern Ireland.

In all, I discovered 210 trees and it appears that Ireland is a very important station for this rare and unusual species. I am confident that the status there of this tree of "rugged grandeur" (Rackham 1986), is, at the moment, secure.

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