

Figure S1a. Pollen profiles Behy I and Behy II, north Mayo (Moore, 1979)

Both profiles are from blanket bog contexts. Behy I is from beside Behy court tomb; Behy II is from lower ground 2 km to the west. In the plot both profiles share the same depth scale.

These pollen profiles have been reconstructed from summary diagrams published by Moore (1979) and other photocopy versions of these profiles. Neolithic Landnam and the 'pine flush' (both recorded in Behy II; the latter only in Behy I) are useful biostratigraphical and also chronological marks.

The mid-Holocene Elm Decline is not a well-defined feature in these or other north Mayo pollen diagrams, e.g. in profile BDG1 (see Fig. S1b), for instance, *Ulmus* never greatly exceeds 1%.

The column labelled 'NAP p.p.' was unlabelled in the published plots (Moore, 1979). Included are probably NAP taxa such as *P. lanceolata*, *Potentilla erecta*, etc. but excluding Poaceae which is plotted in a separate column.

The inset shows age-depth curves that have been constructed based on the ages for recognisable features in the profiles, the ages for which are known; i.e. Neolithic Landnam, the 'pine flush' and the top of the profiles (assumed to reach recent times). The ages suggested for specific depths on the profiles (should be regarded as indicative especially in the mid part of the profiles which lack fixed points) are derived from these curves.

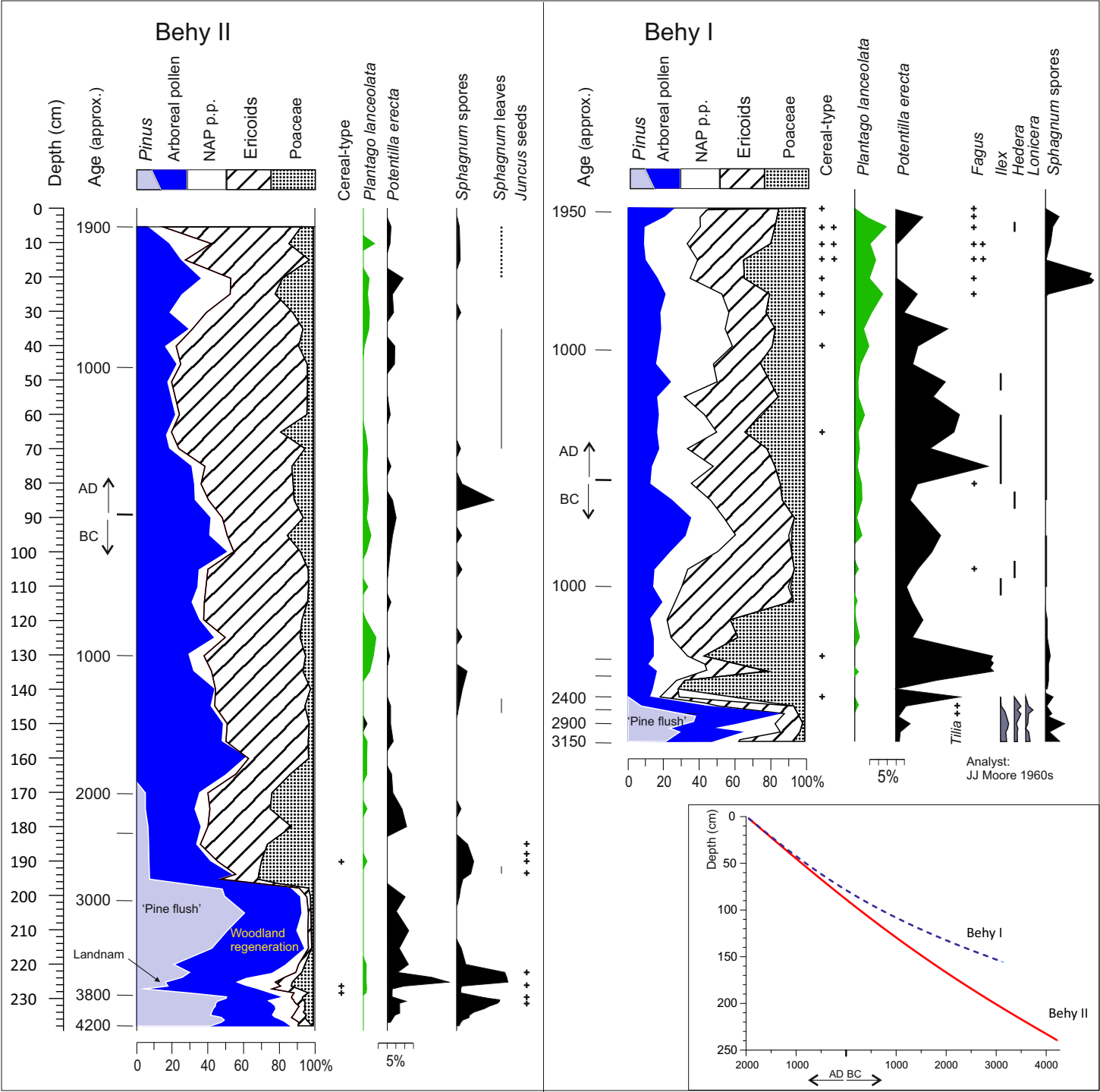


Figure S1b. Pollen profile Belderg (BDG1) from Belderrig, north Mayo (after Bourke, 1972)

Percentage pollen profile from beside a stone wall (north of wall, i.e. outer side of wall 3 in Verrill and Tipping, 2010b).

The profile has been reconstructed from a photocopy of the pollen profile by Bourke (1972). It is assumed that the percentages are based on a total terrestrial pollen sum from which *Sphagnum* is excluded, and Poaceae and *Calluna* are the main components of the GRASSLAND and HEATHLAND curves, respectively. *Plantago lanceolata* includes *P. coronopus* (this appears to be justified since small pollen of the former can easily be confused with pollen of the latter species).

A note by MO'C from the 1970s indicates that the unknown pollen type that was plentiful in pollen spectrum from 29 cm is most likely *Melamyprum* (it was included in the pollen sum). This herbaceous plant is usually associated with heath.

PAZs and vegetation/land-use are changes as follows (ca. late Neolithic to Bronze Age)

- 7 Woodland (pine and hazel) regenerate but farming continues. This relates to after extension of an earlier constructed stone wall onto peat in this part of the site. That recent developments (e.g. pine planting in the wider region) are represented here cannot be excluded. An interruption/hiatus at the 5c/6 boundary is likely.
- 6 High *P. lanceolata* suggests considerable farming after the construction of the stone wall.
- 5 Further decline in trees.
 - 5c: NAP (grassland taxa) strongly represented presumably as a result of local farming activity.
 - 5b: further expansion of heath; few trees; pastoral farming important.
 - 5a: pine no longer present locally.
- 4 Expansion of grassland and, to a lesser extent, heath. Birch declines.
- 3 Decline of pine and expansion of birch. First cereal-type record.
- 2 Pronounced 'pine flush' (ca. 3000 BC).
- 1 Hazel scrub and heath. Few tall canopy trees.

Peat (darkness)

