

Ancient Monuments Laboratory
Report 76/87

TREE-RING STUDIES IN THE SOMERSET
LEVELS: DECOY POOL COVER 1984.

Ruth A Morgan

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Summary

A collection of 31 wood samples, salvaged during peat-cutting at Decoy Pool Cover, were thought to have originated in the Sweet track. Cross-matching of one oak (Quercus spp.) and at least 6 hazel (Corylus avellana) ring patterns with the established chronologies from the Sweet track confirmed their origins, and added further detail to the range of felling dates of the hazel poles.

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Wood samples were salvaged during peat-cutting in the Decoy Pool Cover area in December, 1984; they lay along the line of the Sweet track or just to the east, as shown in the field plan in Fig. 1. The wood probably originated as backfill material from the Sweet Factory and Drove excavations of 1971-2 and 1977 respectively (Coles, Hibbert & Orme 1973; Coles & Orme 1979). Tree-ring studies were carried out on the samples to see if they provided any additional information on oak (Quercus spp.), ash (Fraxinus excelsior) and hazel (Corylus avellana) from the Sweet track, particularly since the Factory site was excavated before the tree-ring sampling program was initiated.

The 31 samples included one of oak, three pieces of ash and 19 samples of hazel. The remaining 8 pieces of diffuse-porous roundwood were not further identified.

Ring-width measurement of the 150mm wide radial oak plank, sample 10A, revealed 80 growth rings, the pattern of which correlated with the Sweet master chronology between floating years 278 and 357 ($t=4.7$). The pattern and time span were consistent with the other oak material from the southern end of the track (Morgan 1979; 1984).

The patterns of 11 hazel roundwood stems, of 55-100mm

in diameter and with 22-44 rings, were compared to the already established network of hazel 'site master chronologies' (Morgan 1984 and unpub). The results are shown in Fig. 2. Two samples, 4F and 9, matched with the site masters from the Turbary and Drove sites, and four samples, 7, 9, 10E and 11, matched with the later felled Cover group. Three more pieces, 1, 4J and 14, matched uncertainly with the Cover master and their possible positions are shown in Fig.2; if the position of sample 1 is correct, it must have been cut some 20 years later, although its outer 15 or so rings were extremely narrow.

Thus most of the hazel material proved to have a growth pattern consistent with an origin in the Sweet track.

Three ash samples had been split from trunks 60-140+mm in diameter. 43 rings of sample 12 were measured, but no certain correlation of sufficient overlap with the other ash tree-ring data from the Sweet track would be found.

Most or all of the wood salvaged from Decoy Pool Cover came originally from the Sweet track. The hazel results in particular added further interesting detail to the complex evidence of varied felling dates and localised growth patterns.

References:

- Coles, J.M., Hibbert, F.A. & Orme, B.J. 1973 Prehistoric roads and tracks in Somerset: 3. The Sweet track Proc. Prehistoric Soc. 39 256-293
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Fig. 1 Field plan sketch of Decoy Pool Cover showing the source of the tree-ring samples and their species. Drawn by Brown.

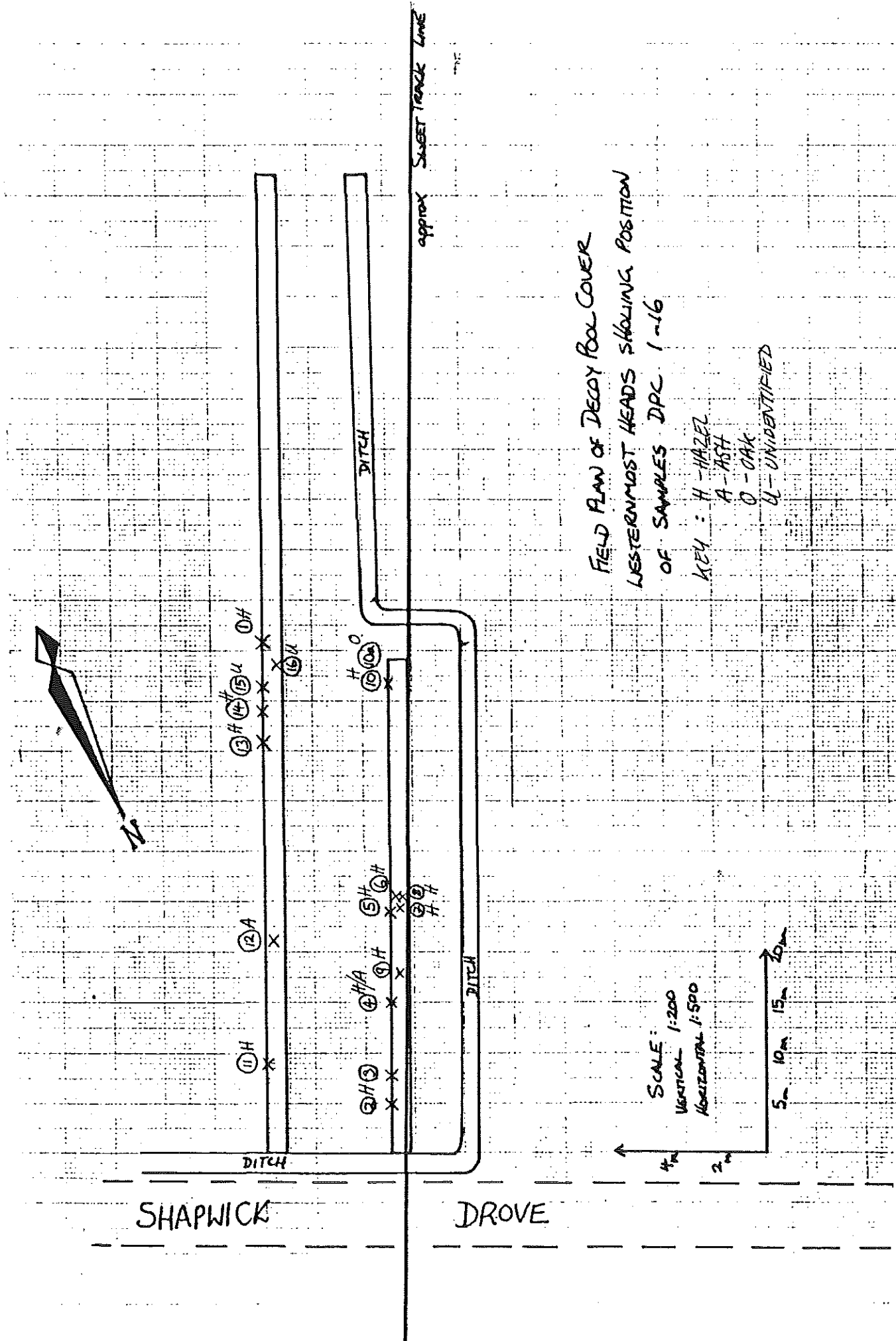


Fig. 2 Bar diagram showing the correlations of hazel samples from Decoy Pool Cover 84 with hazel mean curves from other parts of the Sweet track.

DECOY POOL COVER 84

HAZEL

