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**The mosses from well 11010 from Thurnham Roman
Villa, Kent (ARC THM 98)**

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1 INTRODUCTION

A Roman well (11010) excavated at Thurnham Villa produced a sequence of water-logged organic fills dating to the 3rd to 4th century. The excellent conditions of preservation provided a substantial quantity of delicate mosses amongst other accompanying plant remains. The question of the origin and environmental implications of these mosses were raised and as such, attempts at identification have been made. The principal questions raised were; (i.) were the mosses growing in the well on the shaft face or (ii.) was the moss taken from elsewhere and brought back to the well as a lining or (iii.) did the moss derive from overhanging trees?

2 METHOD

Samples of mosses were sorted from the preserved flot material by Dr Rob Scaife from contexts 11984 and 11985. These moss fragments were identified using a binocular microscope at both low power (x24) and high power to examine cell structure. The Bryophyte keys of Smith (1980) and Watson (1968) were used and taxonomy follows that of Smith (1980).

3 RESULTS

The following mosses were identified (Table 1).

Table 1: Moss identifications

Context	Sample	Moss Species
11985	10352	<i>Eurynchium</i> (? <i>speciosum</i>) <i>Eurynchium</i> (? <i>praeolongum</i>) <i>Homolothecium sericeum</i>
11985	10304	<i>Leucodon sciuriodes</i> <i>Bryum</i> ? <i>bicolor</i> <i>Eurynchium</i> (? <i>praeolongum</i>) <i>cf. Thamnum</i>
11984	10307	<i>Neckera complanata</i>

4 DISCUSSION

Of the mosses identified, *Neckera complanata* was the most abundant in context (11984) and is a species which typically grows on trees and rocks (Watson 1968,302; Smith 1980, 507). Other species recorded also have similar joint habitat preferences such as the *Homolothecium sericeum* (Smith 1980,587), and *Leucodon sciuriodes* from context (11985) (Watson 1968, 300). It can be noted that the latter was a moss commonly associated with ash trees (*Fraxinus excelsior*) on the Isle of Wight until some decades ago. This is interesting in view of the

importance of pollen, quantities of seed keys and smaller branches from ash recovered from the well (Rob Scaife and Steve Lawrence pers. comm.). Identification of the *Eurynchium* species was problematic since there were not a sufficient number of stem and basal leaves present. However, again, *E. praelongum* is a likely candidate, and typically grows on shaded banks and trees. *Bryum cf bicolor* and *Thamnum* sp. (most probably *T. alopecorum*) were most probably growing on the stone shaft lining of the well where it favours wet shaded habitats (Watson 1968, 304).

5 CONCLUSIONS

Because of the variable habitats, especially walls and trees, which these mosses may grow in, it is not possible to give firm conclusions to the suggestions made in the introduction and it is most likely that the mosses derived from both the walls of the well (both the wet and dry zones) and from any overhead trees and probably not introduced as well lining.

6 BIBLIOGRAPHY

Smith, A J E, 1980 *The Moss Flora of Britain and Ireland*, Cambridge

Watson, E V, 1968 *British Mosses and Liverworts* (2nd Edition), Cambridge