Alder was the wood most frequently occurring in the structures and it was present in a range of sizes from large diameter upright posts to smaller diameter pieces described as 'wattles'.

The other species occurred much less frequently, but most also seem to have been used for different structural elements. There was a noticeable concentration of different species, including elm, ash, maple and Pomoideae in the north-east corner of Building 2.

In some parts of Building 2, two upright posts were set close together, and in a few cases, where both have been identified, these were of different species, e.g. alder/birch, alder/maple.

Alder was also the most frequently occurring species in the tree stump samples, along with some birch and willow.

On present evidence, it seems that the buildings were largely constructed of alder, possibly from timber felled at the site. The occurrence of pairs of posts of different species may represent later repairs, using wood from further afield, an impression which is reinforced by the particular concentration of species other than alder in the corner of Building 2.

These are, at present, only suggestions but it is hoped that clearer patterns will emerge when more samples have been examined.

The above points are at this stage provisional and subject to further work on the remainder of the timbers during 1992. Some of the issues raised by the identifications may also be resolved by Ruth Morgan's ongoing work on the tree rings.

Su Johnson, Saint David's University College, Lampeter.

## Initial Woodworking Analysis from the Goldcliff Site

The basic recording of the wood lifted from the Goldcliff site in 1991 has been largely completed. Analysis of the toolmarks will be carried out later in 1992. The wood assemblage consists of flooring material within the houses, posts and wattles forming the walls and internal divisions of the buildings, and scattered groups of woodchips mainly concentrated outside the doorways.

All the 'flooring' lifted this year was in a very poor state of preservation, being both badly decayed and compressed. A minimum of woodworking seems to have been used in the preparation of this material, consisting as it does of large roundwood logs retaining their bark, with no indication of any use of axe or adze after the initial felling of the tree. The one exception to this was a single plank which appears to have been pegged down.

The wall posts and wattles were all truncated by rot and erosion at the top but decay was usually limited to the portion immediately below the

surface. However, the stakes were often buckled or bent and compressed at the tip, either as a result of being driven into the ground, or by subsequent compression from above, or a combination of the two. This means that the toolmarks were sometimes badly distorted and unclear, but where this did not occur they were in a pristine condition.

Although the toolmark analysis has not yet started the long flat facets with very shallow cutting angles suggest the use of iron axes with fairly thin blades, corresponding to the general pattern from the Somerset levels (Coles and Orme 1985, p. 50) and the recent detailed analysis from Ireland (O'Sullivan 1991). This agrees with the radiocarbon date for the site, although it should be noted that there were a few rare instances of facets with a more concave horizontal profile, which is more usually associated with bronze axes. A combination of flat and dished facets was recorded at an earlier date from the Stileway platforms and dumps in the Somerset Levels (Coles and Orme 1985, pp. 47-8).

There were no visible axe signatures on the facets. Experimental work in the Somerset Levels has shown that this can occur after a tool has been used for a long period when the blade will have been worn smooth of major irregularities (Coles and Orme 1985, p. 30). However, miniature striations were left on some pieces indicating the direction and curve of the blow. These may help to estimate the length of the tool handle used.

The working of the uprights seems to have been kept to a minimum with the bark intact apart from the removal of side branches and where the bottom ends were cut to a point. On the smaller pieces chisel shaped ends predominate, possibly representing the original cutting rather than a later sharpening to a point. On the larger posts pencil type ends become more common, usually with shallow angled facets over a considerable length.

There were some split uprights usually, but not always, being radially split. A large proportion of these boards were oak, many of which could have come from the same tree. The clusters of oak heartwood woodchips dumped immediately outside the doorways of the buildings may be the waste from the production of these timbers, in which case a phase of rebuilding or redesign is suggested after the initial form of the buildings had been created. Tree ring analysis may come up with the answers later in 1992.

Richard Brunning.

## Excavations at Newton Moor, South Glamorgan: an Interim Statement

In April 1991 Mr. J. Sallam was prospecting in an area known as Newton Moor, to the north of Cowbridge (South Glamorgan; SS 991 751), when he discovered a silver penannular brooch and pin of Early Medieval type. The object was brought to the National Museum of Wales for identification. The coronor was informed, and at his request the Museum undertook an investigation of the findspot in June 1991. Geophysical surveying of a 60 m x 60 m area at the alleged findspot (Note 1) by