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CHARRED PLANT MACROFOSSILS FROM A MIDDLE-LATE BRONZE AGE SETTLEMENT AND LATER PREHISTORIC FEATURES AT TRETHELLAN FARM, NEWQUAY, CORNWALL.

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Summary

Charred cereals, grain and chaff were recovered from occupation deposits and areas of ritual activity. Most material came from the Bronze Age settlement which consisted of a number of round houses and part of a contemporary field system which were well preserved by a thick covering of hillwash.

The principal crop was naked barley but emmer, spelt and bread wheats, celtic bean and flax were also cultivated. The possible use of Sisymbrium as an oil crop is discussed. A system including both spring and autumn sowing of arable and oil crops, involving rotation or some form of fallowing is postulated.

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CHARRED PLANT MACROFOSSILS FROM A MIDDLE-LATE BRONZE AGE SETTLEMENT AND LATER PREHISTORIC FEATURES AT TRETHELLAN FARM, NEWQUAY, CORNWALL

by Vanessa Straker

SUMMARY

1.0 INTRODUCTION

A welL preserved site of the second millenium BC was discovered during the building of a housing estate on the south side of Trethellan Hill, Newquay in 1987. After a short emergency excavation funding from English Heritage enabled a three month excavation to take place from June to September 1987. This revealed a large open settlement with 6 or possibly 7 round houses and part of a contemporary field system. Preservation of the site was good and later disturbance minimal owing to a thick covering of hillwash which buried the prehistoric layers. Features thought to have been of ritual significance were located between the houses and fields and a subrectangular structure of dry stone construction which may have been used in the Bronze Age was also found. This phase of the site was followed by renewed agricultural activity (Macphail, this vol.).
The radio carbon dates cluster suggesting a short span of occupation of 200 to 400 years at most. The settlement was buried quickly and remained well sealed and post occupational disturbance was minimal, resulting in a large amount of *in situ* material. This provides us with a rare opportunity to look at a middle Bronze Age village which was systematically abandoned by about 1200 BC.

Bulk samples were collected from as many features as possible. Flotation took place at the site. Residues were collected on a 500 micron mesh and floats in a 250 micron sieve. Owing to the nature of the subsoil which contained a large amount of fragmented shillet, the site being in an area of Culm measure solid geology, it was not possible to keep all of each residue. Subsamples of the residues were kept from each sample after finds had been taken out. 20 % of these were sorted as a check on the efficiency of the flotation, which was found to be very effective in general. The figures used in the Tables and Figures refer to plant remains retrieved from the floats only. The samples were sorted and identified using a binocular microscope and a reference collection housed at the Department of Geography, University of Bristol. Classification and most habitat information is according to Clapham, Tutin and Warburg, 1962.

For the purposes of analysing the data it was decided to consider the samples in 8 groups as follows:

1. Intra-site environment during the Bronze Age occupation.
   Samples were taken
   from around houses at the level of the Bronze Age ground
   surface.
2. Layers and spreads within houses and ritual structures. (Figs 3A and B)
3. Pit fills within houses and ritual structures. (Figs 4A and B)
4. Post and stake holes within houses and ritual structures. (Figs 5A and B)
5. Contexts representing domestic activities taking place
   outside the houses.

6. Intra-site environment immediately after the Bronze Age occupation. (Figs 6A and B)
7. Environment during the Iron Age use of the site.
8. Post-prehistoric contexts.

The details of the samples in each group which contained plant remains and are therefore included in the analysis are given in Appendix 1.

This report aims to discuss the assemblage in general, by group, where relevant by context or feature and make brief comparison with the results of other recent studies of plant remains from Bronze Age sites.

2.0 THE CHARRED PLANT REMAINS (GENERAL)

2.1 Crops and weeds

As listed in Table 1 and Figures 1 and 2, the main crop plants represented are barley (*Hordeum sativum*), wheat (*Triticum* spp.), Celtic bean (*Vicia faba*) and flax (*Linum usitatissimum*). The comments made about crop processing in section 3.1 are relevant to the site as a whole and are not repeated elsewhere.

Hordeum sativum (barley)

In terms of quantities of grain, barley is the most common cereal found in all the groups and individual houses Fig 2). On a percentage basis it only falls as low as 40% of cereals in groups where the number of indeterminate grains is high owing to poor preservation, and many of these may well be barley. Where preservation is adequate it has been possible to identify the naked form of barley as the dominant. This form is only differentiated from the more commonly found hulled form by a single recessive gene (Harlan 1976) and its grains are distinguished from the hulled form by having more rounded sides than the angular hulled grains and a fine transverse wrinkling on the surface. The lemma and palea enclose grains of hulled barley tightly and are usually retained after crop processing, but these membranes are loose in the naked form and the grains are released during threshing. Many of the grains are twisted (asymmetrical) which suggests that either entirely six-row or a mixture of two-row and six-row barley were grown. The ratio of straight to twisted grains was 1:3 for the site in general and the contexts containing most grain in particular implying that both forms were grown. However, some of the smaller lateral twisted grains could have been removed during coarse sieving early in the crop cleaning process. Unfortunately barley rachis internodes were extremely scarce and it was not possible to use them to determine whether dense or lax-eared varieties or both were grown. A single grain was positively identified as being of hulled barley, although there may have been others too poorly preserved to identify. The only other large groups of contemporary naked barley (known to the author) come from the settlement at Rowden, Dorset (Carruthers, Unpubl.) and Ness of Grouting (Milles, 1986). The dimensions of a sample of naked barley from Trethellan, including twisted and straight grains are given below. The sample comes from a layer within one of the houses (context 1072 within house 1034).

Hordeum sativum		L	B	T
(naked grain)	min	3.8	2.0	1.5mm
n=50	aver.	4.35	2.61	2.10
	max.	5.1	3.5	2.6

At Rowden a very large sample of clean naked barley was recovered from a pit in a

middle Bronze Age hut (Carruthers Unpubl.). The grains from Rowden were found to be small in size averaging 4.3x2.6x2.0mm, but are very similar to those from Trethellan. Possibly the variety grown in Britain was small seeded, but other comparisons are needed to test this suggestion.

Triticum sp. (Wheat)

Wheat is present on the site in the form of grains and chaff. The chaff consists largely of glume bases, spikelet forks and occasional unreferable rachis internodes. Grain morphology suggests that emmer (*T.dicoccum*) predominates. These grains have a characteristic humped dorsal surface. The dominance of emmer is confirmed by the more reliable identification of the glume bases and spikelet forks showing less pronounced venation than those of spelt wheat, but a better developed secondary keel and more acute glume angles. A few glume bases were identified as belonging to spelt wheat (*T. spelta*), a hexaploid species now known to form part of many middle-late Bronze Age and later prehistoric and Roman assemblages in Britain. Occasional glume bases and spikelet forks were referable only to einkorn or emmer (*T. monococcum* or *dicoccum*) or emmer or spelt wheat, or simply wheat, though this category technically excludes the free threshing forms whose rachises break in a different way. No grains were noticed which resembled free threshing wheats in morphology and there were only two tough rachis internodes to indicate its presence. It is likely that on most sites free threshing wheats are probably under represented in comparison with hulled varieties as they may not require as much heating prior to dehusking. The processing of free threshing wheats is similar to barley and as naked barley is so abundant at Trethellan, the almost complete lack of free threshing wheat such as bread wheat (*T. aestivum* s.l.) may be genuine.

Avena sp. (Oats)

A small number of oat grains are present. No oat florets were found and it is therefore not possible to determine whether the oats are wild or cultivated. Wild oats are still a troublesome weed of cornfields today and occur frequently in assemblages of most periods. However, Jones (1988) points out that the presence of some grains of large seeded edible grasses in the crop may well have been tolerated without concern.

Vicia faba var *minor* (Celtic bean)

This is present in small quantities at Trethellan and for the same reasons as free threshing cereals, may well be under represented on archaeological sites. Celtic beans may well have provided an important dietary component being a rich source of protein. They have been found in small amounts on a number of recently studied sites (Brean Down, Straker 1989; Black Patch, Hinton in Drewett, 1984; and several East Anglian sites (Murphy pers. comm.) and in large numbers at Rowden, Dorset (Carruthers Unpubl.), but not at Potterne. The dimensions of the only measurable specimens from Trethellan are given below:

Vicia faba	L	B	T
grains	6.5	5.5	5.4 mm
	6.4	5.0	5.0
	6.1	5.0	4.9

These specimens fall within the range of sizes recorded at Rowden where many more measurements were possible.

Linum usitatissimum (Flax)
This, like the Celtic bean is present in small quantities at Trethellan. The cultivated form is identified as the seed does not show the 'wing' characteristic of *L. anglicum* and the cell pattern in the central area is small and compares well with that of cultivated flax. Only one seed is measurable and its length and breadth are 2.9 and 1.6mm which is smaller than the seeds of cultivated flax from the Wilsford Shaft in Wiltshire (Robinson 1989), although this may partly be due to the effects of charring on oily seeds causing them to shrink. The Wilsford specimens were preserved by waterlogging rather than charring. Robinson noted that Helbaek (1960) considered that a small-seeded race may have been the original cultivar brought into central and west Europe. It could have been used for its fibres or its oily seeds which are edible, though today is used mostly for cattle feed. Flax is a demanding crop and prefers damp to dry conditions. Today the crop is grown either for its fibre (flax) or seed (linseed) but it is possible that this distinction was not made so rigidly in the Bronze Age. As well as having a high oil content, the seeds are also rich in protein.

2.2 Wild plants
These are listed in Table 1 for the site as a whole and their habitat preferences are also noted. The flora is not extensive particularly in comparison with, for example Runnymede (Greig, forthcoming) where both waterlogged and carbonised plant remains were preserved and Wilsford (Robinson 1989) where the waterlogged plant remains were wide ranging. At both these sites it has been possible to make quite detailed inferences about the environment in the area at the time. At Trethellan and other sites where preservation is restricted to charred plant macrofossils, we are seeing principally the plants of economic importance that came into contact with heat either as a result of cooking, for use as fuel or building materials or as weeds or other impurities in crops which became burnt accidentally with the crop itself. This means that the details about the local environment that can be suggested are only from a limited range of plants that for the most part were used for specific purposes.
A popular approach to the interpretation of plant macrofossil assemblages makes use of phytosociology. This aims to characterise a particular form of vegetatation and its habitat by examining a plant community rather than looking in detail at a single taxon. The principal reference works are concerned with central Europe (eg Ellenburg 1988), but Silverside (unpublished) attempted a similar approach for British arable communities. While these works are of use in a general manner, they should not be used too uncritically, not least because it is most unlikely that former plant communities were exactly the same as present day ones which have evolved as a response to climatic, agricultural and many other pressures. Some of the taxa which commonly occur in assemblages of charred plant remains are not now found growing with crops and therefore will not be classified as crop weeds in modern phytosociological studies. Also, the more 'oceanic' situation of Great Britain means that some of the relatively clear-cut distinctions between spring-sown and winter-sown cereals on the continent are not so obvious here. This distinction may be particularly blurred in Cornwall. Having said this, the presence of *Galium aparine* (cleavers) is usually considered to be indicative of autumn sowing. This species can grow and set seed other than in arable fields, but where it is found charred in such close association with cereals and chaff it is likely to have been growing as an arable weed.
The Tables in this report indicate the habitat preferences for each taxon, and this emphasises that some will tolerate a wide range of soil conditions. Others are more specific in their requirements and some of these will be mentioned below.

Greig (forthcoming) notes that the weeds of Bronze Age crops tend to be characteristic of light, often sandy soils and include taxa such as Fumitory (*Fumaria* sp) which was found at Trethellan.

A number of taxa which were identified at Trethellan and are commonly found in association with charred cereals are still common today as arable weeds; the class Stellarietea in Silverside's classification includes *Stellaria media* agg. (chickweed), *Chenopodium album* (goosefoot), *Bilderdykia* (*Polygonum*) *convolvulus* (black bindweed), *Rumex acetosella* (sheep's sorrell) and *Anagallis arvensis* (scarlet pimpernell). A number of other taxa are typical of arable communities, *Sherardia arvensis* (field madder) and *Urtica urens* (small nettle), for example, are characteristic of light soils. *Sheep's* sorrell *(Rumex acetosella)* grows as an arable weed and in grassland but generally prefers more acid soils. The poor preservation of molluscs at Trethellan except in layers with a high sand content also implies that soils were slightly acid. *Raphanus raphanistrum* ssp *rapanistrum* (wild radish) is usually described as a weed of non-calcareous soils, but it is not easy to distinguish from the subspecies *maritimus* which is a plant of cliffs, the coastal drift line and is found on both sandy and rocky shores. In the present context, either sub species could be represented. *Bromus sterilis* (barren brome) is characteristic of waste places but today is also found as a garden weed, it may have been a more common arable weed in the past. Vetches and/or tares (*Vicia/Lathyrus* spp) are present in many contexts. These plants are often associated with arable assemblages and their numbers may increase in conditions of decreasing soil nitrogen. It is not possible to speculate on this at Trethellan as the numbers are not great and a trend towards an increase or decrease with time cannot be observed.

There is not much evidence of ruderal communities and disturbed nitrogen enriched habitats of the sort expected around settlements. Stinging nettle (*Urtica dioica*) will tolerate a variety of habitats including ruderal situations and *Sisymbrium officinale*, *Malva* (mallow) and *Urtica urens* (small nettle) may also suggest such conditions. Mallow and small nettle are only present in very small amounts however, and the *Sisymbrium* could as easily be an arable weed or, as suggested below, have had other uses.

The plants which today grow principally in marshes or the edges of rivers such as *R. flammula*, (lesser spearwort), *Juncus* sp. (rush) and *Eleocharis* sp. (spike-rush) could have been gathered specifically as discussed in section 3.1, as the fields would have been well drained and unlikely to have supported stands of these plants. However, if flax was grown at Trethellan rather than brought in from elsewhere, it prefers to grow in damp soils. The closest obvious source of wet ground may have been at the bottom of the slope where the Gannel, a tidal inlet is present today. There are no positive indications of salt-tolerant taxa in the assemblage to suggest that salt marsh existed in the vicinity. The *Juncus* could have been a salt marsh species but cannot be identified to species level owing to poor preservation, and could as easily be a fresh water species. This raises the question of the status on the Gannel in the Bronze Age and whether it could have been a fresh water marsh cut off from the sea, but this remains a speculation.

The other taxon which merits a particular mention is *Sisymbrium officinale* (hedge mustard). This is a plant of hedges, roadsides, waste places and arable fields and when found in archaeological assemblages is usually present just as a minor component and is generally regarded as a weed in these circumstances. In one pitfill at Trethellan (house 142, context 50), well over a hundred seeds were found in only a relatively small volume of soil. If more is processed from this context it is reasonable to assume that considerably more will be found. The only other identification was a single seed from the floor of house 2001. If this was

a common arable weed it is surprising that it does not appear at all in any other contexts as, for example do members of the genus *Chenopodium* which are common arable weeds and often occur in large numbers. Very large numbers of *Sisymbrium* were also found in a Bronze Age settlement in Jugoslavia which led Kroll (Forthcoming) to suggest that the seeds were deliberately cultivated as a source of oil. Cultivation or deliberate collection of hedge mustard is equally possible at Trethellan. Flax was certainly being cultivated and could have also been required for its oily seeds as well as fibres. At Potterne (Straker unpublished), large numbers of the seeds of *Brassica rapa* ssp *campestris* were identified from a linear feature under the midden and it was suggested that the plant could have been exploited for its edible foliage or oily seeds. Robinson (1989) identified *Papaver sommiferum* (opium poppy) from the Wilsford Shaft and suggested that it could have been useful for food, oil or medicinal purposes (Robinson, 1989, 83). Perhaps plants with seeds which could be exploited for their oil content were more important in the Bronze Age than we have considered hitherto.
A final group which is well represented is of plants which occur commonly in grassland today. This includes species such as Trifo*lium (clo*ver), Plant*ago lanceolata (rib*wort plantain), Lotus *corniculatus (bird's* foot trefoil) and Prune*lla vulgaris (self* heal). There may well have been neutral to slightly acid grassland in the vicinity of the settlement used for pasture and some of the arable fields may have been allowed to lie fallow. Unfortunately there is no published study to the author's knowledge on ancient grasslands on the culm measures to assist in the interpretation of the grassland part of the flora from Trethellan.

2.3 Charcoal

Table 10 Charcoal identification.

Area 2	cf oak	oak	cf hazel	hazel	cf gorse	elm
2031				+		
2158					+	+
2264				+		
2278				+		
2532		+				
2546		+				
2569		+				
2572		+				
2714		+				
Area 3						
3046	+					
Area 4						
517 (F405)		+		+		
F4					+	
108 (100)			+			

cf Quercus *sp* (cf oak)
Quercus *sp*. (oak)
cf Corylus *avellana L.* (cf hazel)
Corylus *avellana L.* (hazel)
cf *Ulex* sp. (gorse)
Ulmus sp. (elm)
Some of the charcoal was poorly preserved and it was only possible to identify it

to the 'cf'- 'compares with' level. The charcoal has not been quantified as it is very fragmentary and only from selected contexts and therefore not necessarily representative of the frequency of the local woody species. Furthermore, in a coastal location such as at Trethellan, there is always the possibility that drift wood had been collected and this could have travelled a considerable distance. The most useful context for trying to suggest the nature of the woodland/scrub in the vicinity of the site before and during occupation would have been a well preserved buried soil or soils from which charcoal and possibly pollen could be identified, but these were not found at Trethellan. The charcoal was entirely from mature wood, with the exception of some of the probable oak from 3046 and some of the fragments most closely referable to gorse. While it is most likely that *U. europaeus is* represented, it is not possible to differentiate this species from *U. minor* and *U. gallii*.
Making the assumption that the wood had not come from far afield it appears that hazel and gorse, common secondary scrub vegetation with some mature oaks were available to the inhabitants for fuel and building material. It is to be expected that at this stage in the second millenium bc the climax woodland likely to have existed on the sheltered southern slope of the hill would have been cleared or largely cleared. Hazel, as well as being a common component of secondary scrub vegetation could also have formed part of a mixed deciduous climax woodland. On other Bronze Age sites (eg Potterne, Straker unpublished) charcoal has included scrub species such as Pomoidae (hawthorn group), but this was not among the species recorded. Hawthorn berries and sloe stones were found, so the scrub may also have included a number of Roseaceous species unless the fruits were collected from some distance away.

3.0 THE CHARRED PLANT REMAINS

3.1 Groups 1-8

Group 1 Intra-site environment during the Bronze Age occupation. (Table 2 and Figure 1).
Plant remains were scarce and consisted principally of charred barley grains with a few arable weeds (*Chenopodium* species), and a single wheat grain and glume base and two cereal culm nodes. The density of plant remains is very low (.43/litre) but slightly greater in the contexts associated with houses and the ritual structure. The samples from the plough soil contain only occasional cereals burnt perhaps during stubble burning or added to the fields with household refuse.

Group 2 Layers and spreads within houses and ritual structures. (Table 3 and Figures 1 and 3A and B).
This group contains a large number of plant macrofossils as well as the second highest density per litre of soil sieved (7.40). Grain (mostly naked barley) predominates in general, but Fig 3A shows that this is only the case for house 1034 where the large numbers of grain mask the other results. Weeds are also well represented and wheat glume bases and spikelet forks are, as in all the groups, a minor component. Very occasional seeds of plants of wet habitats such as spike-rush (*Eleocharis*) *and* rushes (*Juncus*) *are* present which could have been used for roofing or flooring material. Large numbers of Juncus *seeds* were recovered from houses excavated at Brean Down (Straker 1989). Grassland plants such as self heal (Prune*lla vulgaris*) medick or clover (*Medicago/Trifolium*) *were* represented and could indicate cattle fodder or even tinder collected to start fires. Plants which were most probably arable weeds predominate and include field madder (Sherar*dia arvensis*), goosefoot etc (*Chenopodium spp*), fumitory (*Fumaria sp*,),

twining species such as vetches and tares (*Vicia/Lathyrus*) *and* black bindweed (*Bilderdykia convolvulus*). Low growing weeds such as chickweed (*Stellaria media agg.*) and pimpernel (*Anagallis*) *are* also present. This group of plants suggests that the crops were not fully cleaned before being brought into the houses, some of the early cleaning processes having been carried out, the final cleaning being done within the houses as and when grain was required. Hillman (1981 and 1984) has described the stages of crop processing needed for a number of crops and the by products that can be expected from each stage. The presence of internodes shows that straw was present in the houses, this could have been used for roofing or cattle feed. Apart from the finding of the stem nodes themselves, the presence of twining weeds such as black bindweed and low-growing weeds such as the scarlet pimpernel suggests that the harvest was cut low on the straw.

Group 3 Pit fills within houses and ritual structures. (Table 4 and Figures 1 and 4A and B)
As Figure 1 shows, the contexts in this group were also rich in plant remains, particularly weed seeds. This is particularly noticeable in house 142 where pit fills 36 and 50 contained a large number of seeds of small arable weeds, including hedge mustard (*Sisymbrium officinale*) the possible use of which is discussed in section 2.1). The species characteristic of wet places are almost absent but a similar range of arable weeds is present with the addition of some of the larger weeds such as *Bromus sterilis and Bromus* subgenus *Eubromus*. This may be because the pits were deliberately filled with the waste from cereal cleaning, whereas the material which accumulated on the floors was a more 'accidental' accumulation. Occasional woodland or hedgerow resources such as sloe (P.spi*nosa*) *and* rose are also found in the pits inside the houses.

Group 4 Post and stake holes within houses and ritual structures. (Table 5 and Figures 1 and 5A and B)
These features often preserve surprisingly large amounts of plant remains and this is the case at Trethellan. Presumably they act as pit-fall traps after the posts had rotted or been removed and collect material which had accumulated on the floor relating to the latest phase of occupation of the building. It might be expected that the composition in terms of relative amounts of grain, chaff and weeds would be most similar to Group 2, the floor layers and, as Fig. 1 shows, while the quantities are smaller, the distribution is indeed similar.

Group 5 Contexts representing domestic activities taking place outside the houses. (Table 6 and Figure 1).
This small assemblage is dominated by weeds of cultivation, presumably the result of small scale crop cleaning.

Group 6 Intra-site environment immediately after the Bronze Age occupation. (Table 7 and Figure 1)
Naked barley dominates the plant remains in this group. The small amount of chaff includes a glume base of spelt wheat. At Brean Down the small traces of spelt were only found in the latest phase of Bronze Age occupation of the site, and at Potterne in Wiltshire the plentiful presence of spelt was also of late Bronze Age date. Possibly the western fringes did not start to grow spelt in quantity as early as central and southern England, but this will not become clear until more and accurately dated finds of spelt are made, particularly from the western part of the country.
Most of the weeds in this group could derive from crop cleaning activities. If these layers are from levelling layers and spreads, they may well include

redposited material from the latest phase of Bronze Age occupation.

Group 7 Environment during the Iron Age use of the site. (Table 8 and Figure 1)
The samples collected from the Iron Age graves and soil levels are very low in plant remains and contain small numbers of cereals and weed seeds. It is very likely that they derive from redeposited Bronze Age levels.

Group 8 Post-prehistoric contexts. (Table 9 and Figure 1)
Plant remains from the soil and colluvium layers covering the prehistoric features are scarce and consist of wheat and barley grains and occasional unidentifiable weed seeds. They may suggest continuation of crop cultivation in the vicinity, perhaps further up the slope. Some of the grains are contained within colluvium that has moved down hill.

3.2 The main structural features (houses and ritual hollows)
The data from Groups 2, 3 and 4, the contexts from within houses and ritual structures, have been amalgamated to see if any differences can be seen between them in the composition of the crop products or crops. The results are shown graphically in Figures 7A and 7B. In all the houses and ritual hollows chaff is the smallest component. This is not surprising as it is largely from hulled (emmer) wheat and this is consistently less important than barley in all samples (Fig. 7B). With the exception of house 1034, weeds are slightly more common than cereal grains. If it is accepted that the final stages of crop cleaning are taking place in and around the houses, it is not surprising that the small weed seeds (equivalent to Hillman's 'fine cleanings') are common. What we may be seeing is a mixture of accidentally burnt prime grain and waste which was disposed of in pits or even used as tinder to start fires. The picture is rather different in house 142 where weed seeds far out number other components and 1034 where a larger quantity of prime grain has become accidentally burnt. It is difficult to know whether house 142 did have a specialist function, in the light of the large amount of weed seeds or whether it is more likely that a greater quantity of waste from the final stages of crop processing was burnt deliberately as fuel and the ash scattered on the house floor. The only contexts that might have originally been connected with grain storage are the pits within houses (group 3), but these contain far more weeds than grain unlike the pit inside the house at Rowden where a very large quantity of clean naked barley with very few weeds was found (Carruthers Unpubl.). If the Trethellan pits were originally for short term storage of crops this function seems to have changed by the time the pits filled up. It seems unlikely that rubbish pits would have been dug intentionally within houses that were being lived in.

4.0 DISCUSSION
With the exception of the naked barley and possibly hedge mustard, the cultivated plans at Trethellan are typical of those from several Bronze Age sites that have been studied recently in Britain such as Potterne, Wiltshire (Straker unpublished); Black Patch, Sussex (Hinton 1984); Runneymede, Surrey (Greig unpublished), and a range of East Anglian sites including Fringringhoe; Springfield Lyons, Chelmsford and Lofts Farm, Heybridge (Murphy, pers. comm.). According to Helbaek (1952) naked 6-row barley was the main variety cultivated up to the middle Bronze Age. This was based on a study of cereal impressions in pottery and with the exception of Trethellan, and the very large caches found at Rowden in Dorset and Ness of Grouting in Shetland, there is very little evidence for this from the grain itself. Milles, when comparing the hulled barley from Scourd of Brouster with assemblages with predominantly naked barley from Skara

Brae on Orkney and Rosinish on Benbecula suggests that the use of hulled barley was in response to less fertile soils at Scourd of Brouster. This remains to be tested, but it is noticeable that on these islands with high rainfall and strong westerly winds, conditions possibly similar to west Cornwall, naked barley is more common than hulled.
Buurman (1988) recovered both hulled and naked barley from middle Bronze Age sites in West Friesland, but noted that in the late Bronze Age, only hulled barley was cultivated. She suggested that the regional shift from the cultivation of emmer and barley in the middle Bronze Age to hulled barley in the late Bronze Age could be a response to increasing wetness.

The density of plant remains from Trethellan is compared below with those from two other sites in central and south west England that have been studied recently (Straker unpublished and in Bell forthcoming). A maximum and minimum figure are given for each site per 10 litres of soil sieved by group or phase.

TRETHELLAN	POTTERNE	BREAN DOWN settlement
settlement and field system	midden and underlying features	
3.0,88	6, 37	.2, 5

It is interesting to see how different in terms of density of plant remains the two settlement sites are. At both Trethellan and Brean it could be argued that many of the plant remains are from primary contexts whereas at Potterne much of the assemblage is from dumped midden material. At Brean Down it seems that cereals did not play an important part in the economy of the settlement (Straker 1989). However, at all three sites, the number of different taxa identified is very similar, a minimum of about 60 recorded for each.
As the settlement at Trethellan was adjacent to a contemporary field system it is reasonable to assume that the crops were grown in these fields and not brought from some distance away. The present day ecology of the weeds associated with the crops found at Trethellan supports this assumption and many of the taxa are commonly found on light, sometimes sandy soils. The debris from the early stages of crop processing such as weed heads, straw nodes and rachis fragments (Hillman 1981, 1984) are largely missing suggesting that this could have been done away from the houses or at least did not come into contact with fires. It could have been used as fodder or even temper in pottery.
It is unfortunate that the soil conditions have not allowed the preservation of much animal bone as without this evidence it is easy to over emphasise the importance of the arable crops which most probably formed part of a mixed farming system. The principal cultivar was barley, mostly the naked form which is not common on prehistoric sites, though may be under represented owing to its crop processing requirements. The predominance of barley may be related to the fact that the settlement was coastal. Experiments have shown that in an unprotected salt marsh barley, flax, celtic bean and gold of pleasure (an oil plant) can give satisfactory yields, provided that no inundation with salt water takes place in the growing season (van Zeist 1974) Körber-Grohne (1967) had similar results and found that and barley and gold of pleasure were least sensitive to occasional flooding. Although flooding with brackish water is not envisaged for the fields around the settlement at Trethellan, it is not clear whether, for example occasional salt spray would have been a problem, despite the relatively sheltered position of the site.

It is theoretically possible that cultivation at Trethellan included some autumn sowing of wheat (emmer perhaps with smaller amounts of spelt and bread wheat) and spring sowing of flax and beans. Flax is a demanding crop and some form of fallowing or rotation is likely. Celtic beans are useful for restoring soil nitrogen levels and would have been important grown as part of a rotation system with flax and cereals. They are also a good source of dietary protein. It is usually suggested that barley is most likely to have been grown as a spring sown cereal, but Jones (1981, 105) refers to sources pointing out that barley can be grown successfully on both light and heavy soils whether sown in winter or spring. If the same is true of ancient varieties it could have been planted in the autumn or spring.

Many wild species could have been collected to supplement the diet or for use as medicines etc. Occasional fragments of hazel nutshell, sloe stones and hawthorn stones were preserved, but these were not common. The identity of the charcoal suggests that hazel was growing in the locality, but no sloe or hawthorn group (Pomoideae) charcoal was identified. These woodland edge, scrub or hedgerow resources although found in small amounts on Bronze Age sites are a markedly less important component of the diet than that of neolithic communities (Moffett, Robinson and Straker, 1989).

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Appendix 1

TRETHELLAN FARM, NEWQUAY

Group 1
Intra-site environment during the period of Bronze Age occupation. Samples were collected from areas around houses at the level of the Bronze Age ground surface.

Contexts

Inner house edge	2215, 2219
Occupation, soil/	1013, 1016, 1097, 1129
ground surface spread	1132
Plough soil	1006, 1090, 1112, 1113
Gully behind ritual structure	2456
Post holes aassociated with field system	1018
Cut for ritual hollow	2442
Number of items	83
Litres soil sieved	191
Items/litre soil	0.43

Group 2
Layers and spreads within Bronze Age houses and ritual hollows

Contexts	
House 142	57, 107
House 1034	1036, 1072, 1091, 1093, 1094, 1098
House 2001	2131, 2480, 2566, 2701
House 2222	2264, 2287, 2290, 2296, 2297
Hollow 136	138
Hollow 2021	2090
Hollow 2765	2161, 2163, 2175
Others	2171, 2276, 2354
Number of items	1673
Litres soil sieved	226
Items/litre	7.40

Group 3
Bronze Age pits and fills within houses.

Contexts	
House 142	36, 50, 60
House 1034	1133
House 2001	2026, 2303, 2310, 2316, 2352, 2451, 2518, 2520, 2522, 2528, 2533, 2540, 2551, 2573, 2579, 2581, 2583, 2587, 2589
House 2010	2485, 2493, 2535, 2544, 2555, 2595, 2707, 2718
House 2222	2601, 2612, 2618, 2649, 2651, 2658, 2663, 2664
Oven/hearth (House 2222)	2613
Cut/pit	1128, 2408
Pit 2409	2408

Pit 2446	2445
Other	2593
Number of items	1957
Litres soil sieved	222
Items/litre	8.81

Group 4
Post and stake holes within houses and ritual features.

Contexts	
House 1034	1065, 1066, 1117, 1124
House 2001	2346, 2348, 2379, 2380, 2394, 2412, 2440, 2524, 2548, 2585, 2729
House 2010	2399, 2401, 2463, 2515
House 2222	2232, 2246, 2250, 2256, 2260, 2274, 2280, 2621, 2623, 2624, 2626, 2643, 2645, 2653, 2656, 2660
House 3022	3098
Ritual hollow	2406
Number of items	621
Litre soil sieved	170
Items/litre	3.65

Group 5
Contexts representing domestic activities taking place outside the houses.

Contexts	
Hearth 1031	1028, 1031
1051	1027
Pit	1044
Number of items	69
Litres soil sieved	61
Items/litre	1.13

Group 6
Intra-site environment immediately post dating the Bronze Age occupation of the site. Samples are from spreads and levelling layers representing abandonment of the houses and ritual features.

Contexts	
House 2001	2084, 2116, 2453
House 2010	2081, 2499
House 2222	2212, 2221
House 3022	3046 (pit)
Ritual structure	2192, 2405
Other	2804
Number of items	289
Litres soil sieved	102
Items/litre	2.83

Group 7
Environment during Iron Age use of the site. Samples are from grave fills and Iron Age soil levels.

Contexts	
Grave	2110, 2132
Soil surface	2126, 2183
Number of items	12
Litres soil sieved	40
Items/litre	0.3

Group 8
Post-prehistoric contexts.

Contexts	
Colluvium	1003
Soil	1017
Number of items	32
Litres soil sieved	22
Items/litre	1.45

TRETHELLAN FARM

Groups 1-8: grain, chaff and weeds

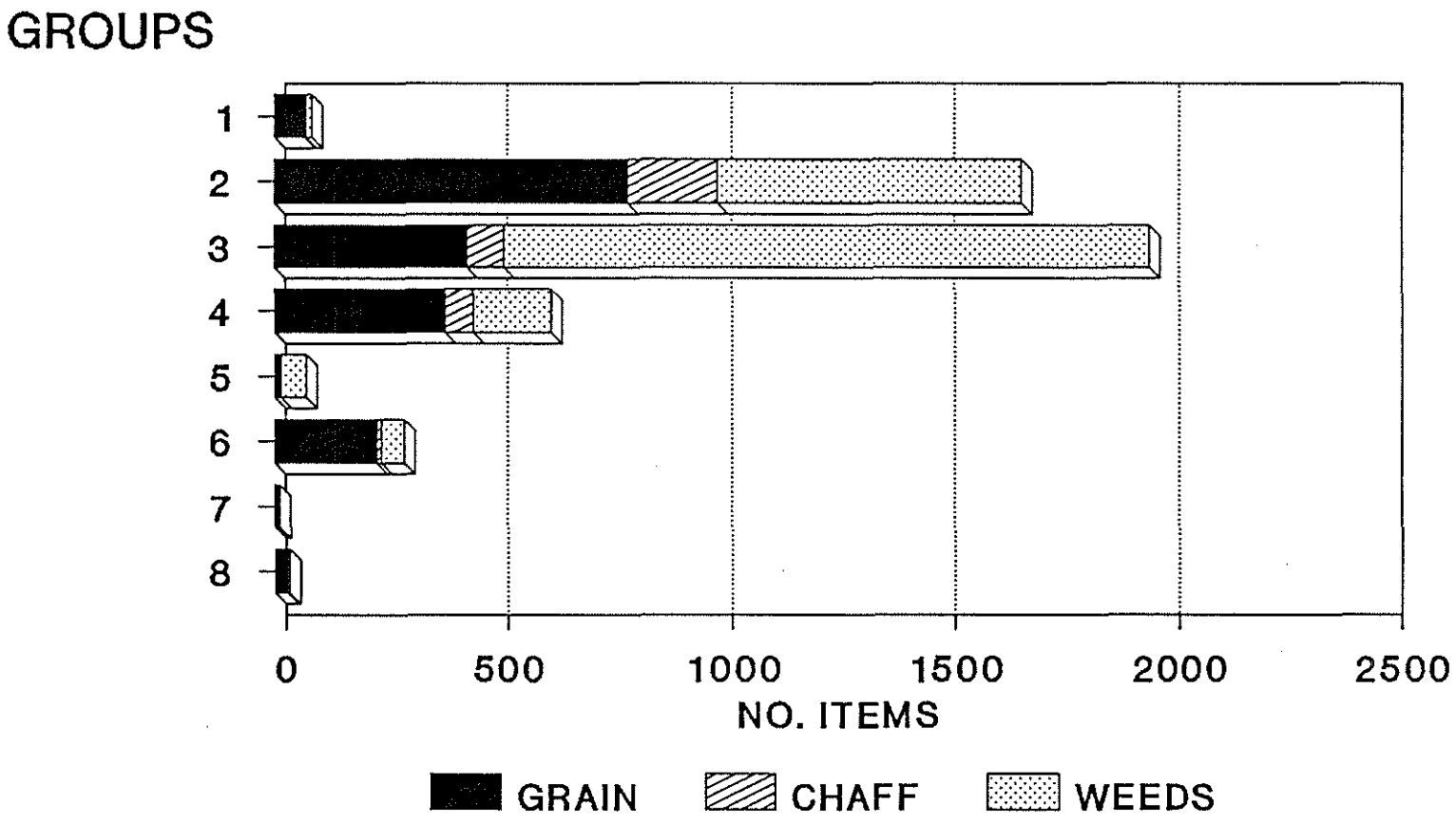

Fig. 1

TRETHELLAN FARM

Groups 1-8: % wheat and barley (grain)

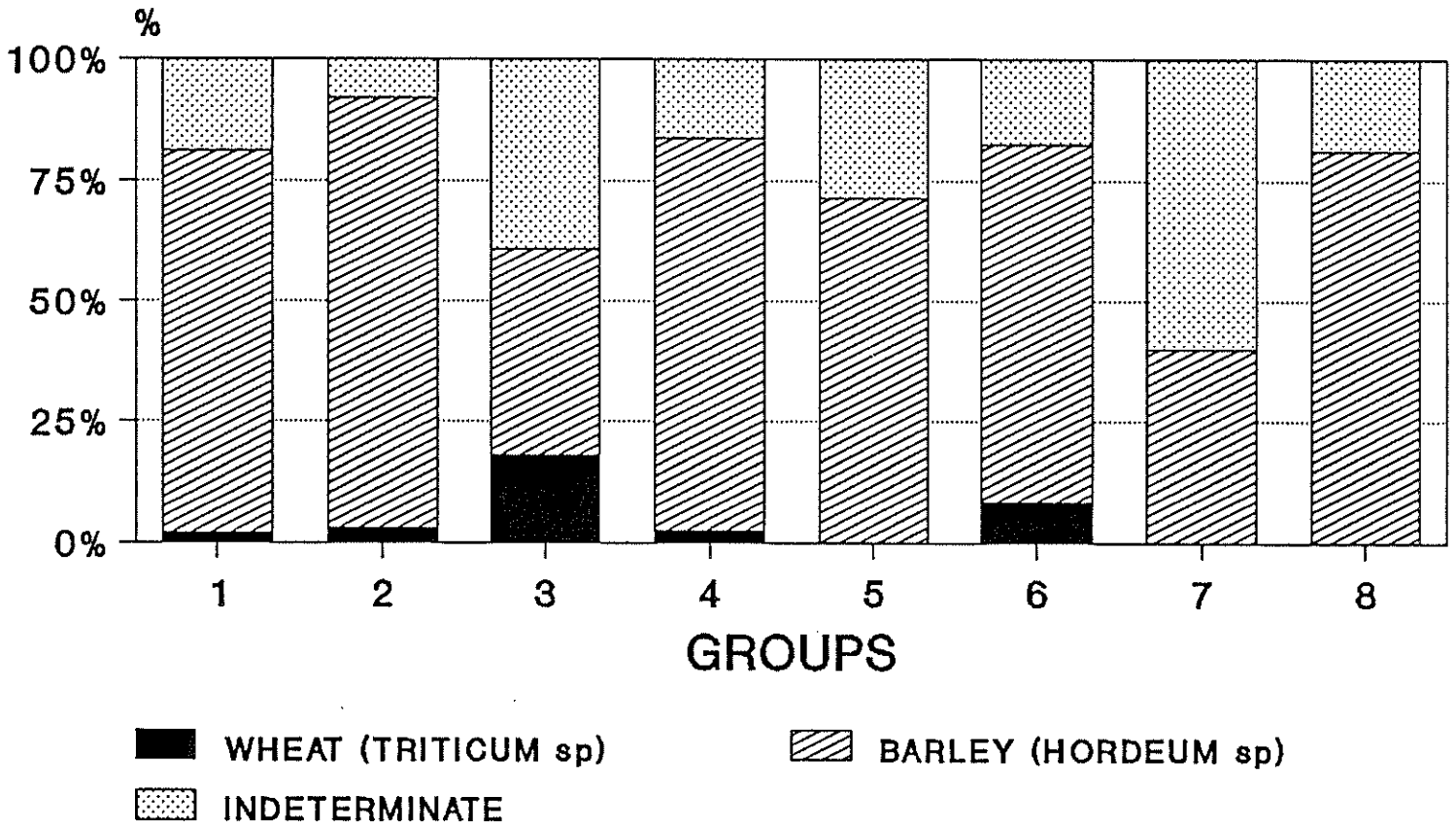

Fig. 2

TRETHELLAN FARM

Group 2

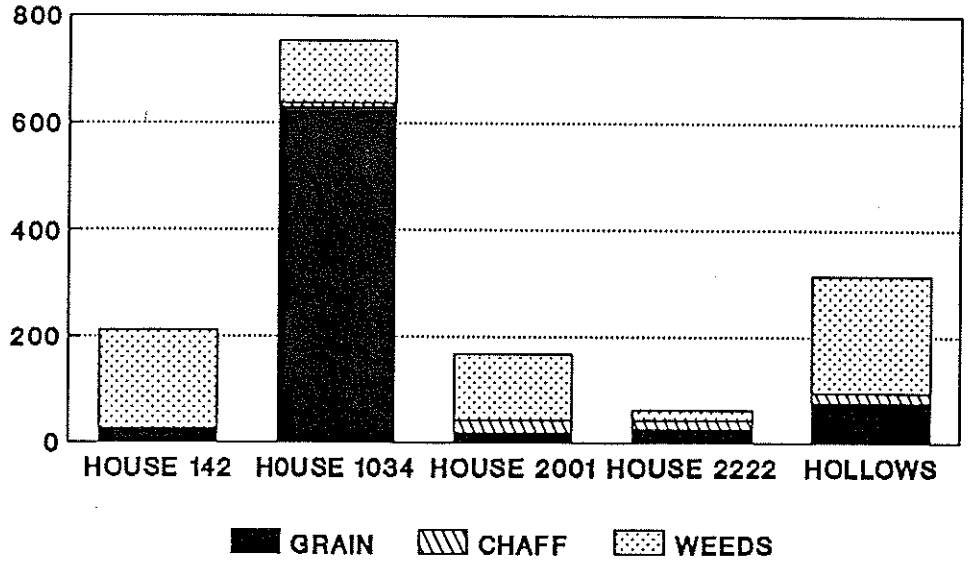

Fig. 3A

TRETHELLAN FARM

Group 2: proportions of wheat and barley

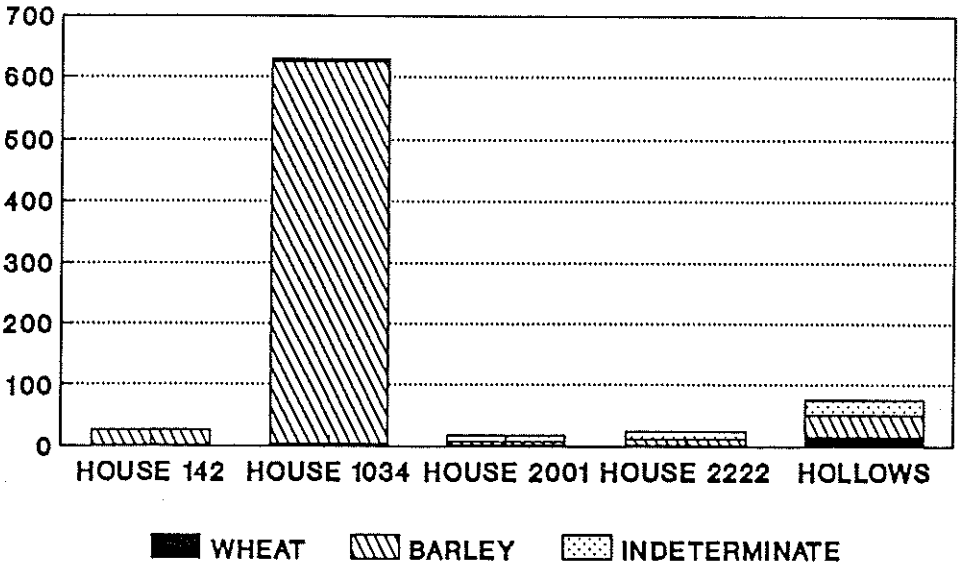

Fig. 3B

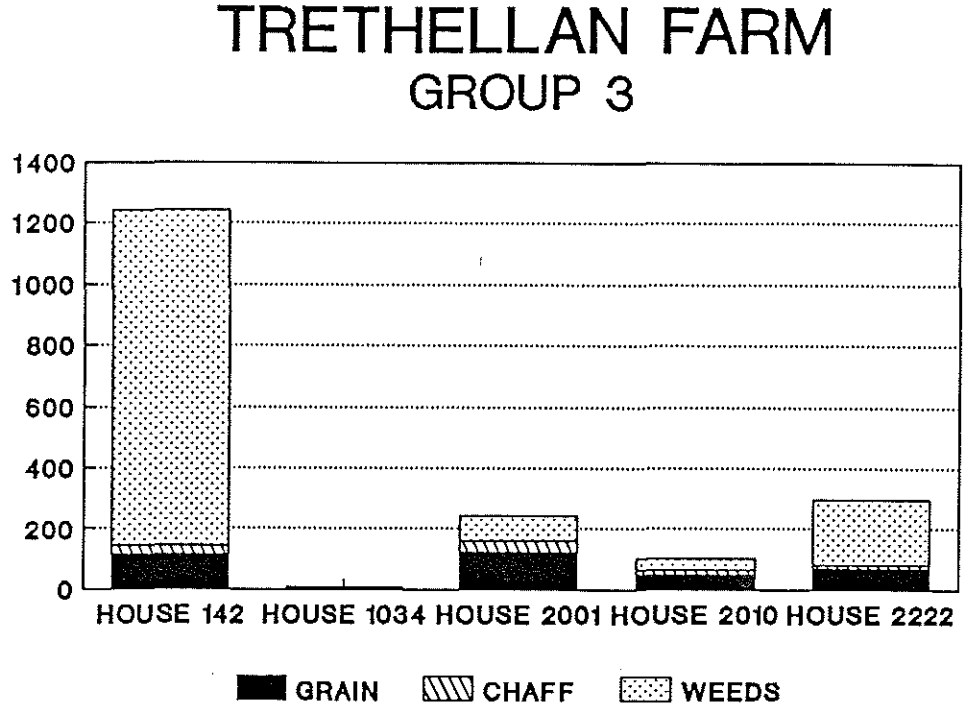
TRETHELLAN FARM
GROUP 3
1400
1200
1000
800
600
400
200
0
HOUSE 142
HOUSE 1034
HOUSE 2001
HOUSE 2010
HOUSE 2222
GRAIN
CHAFF
WEEDS

Fig. 4A

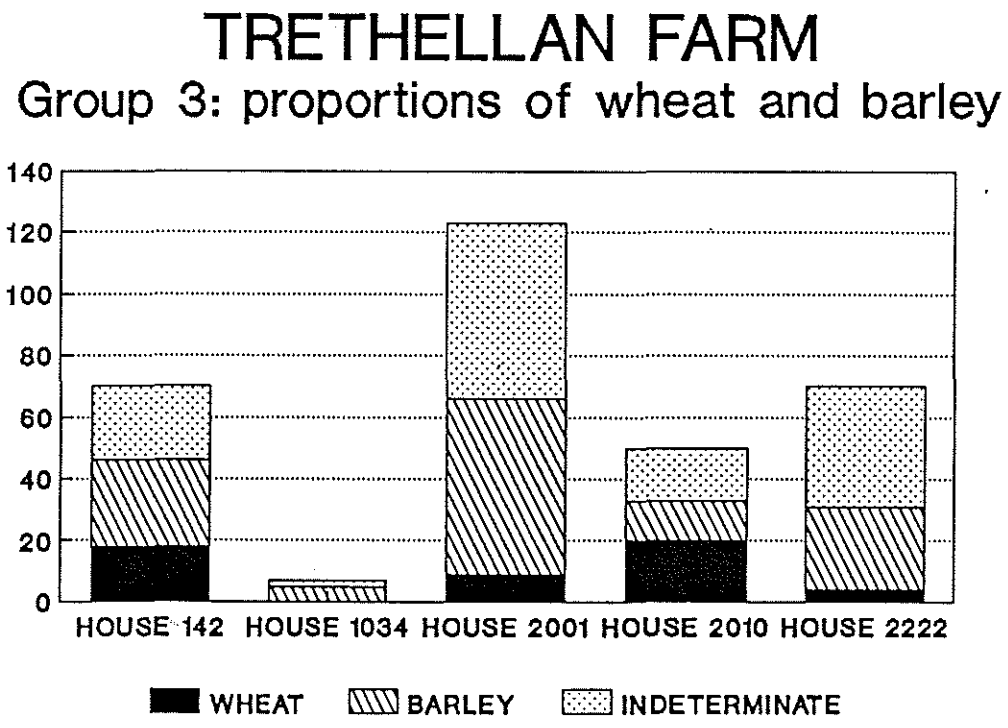
TRETHELLAN FARM
Group 3: proportions of wheat and barley
140
120
100
80
60
40
20
0
HOUSE 142
HOUSE 1034
HOUSE 2001
HOUSE 2010
HOUSE 2222
WHEAT
BARLEY
INDETERMINATE

Fig. 4B

TRETHELLAN FARM

Group 4

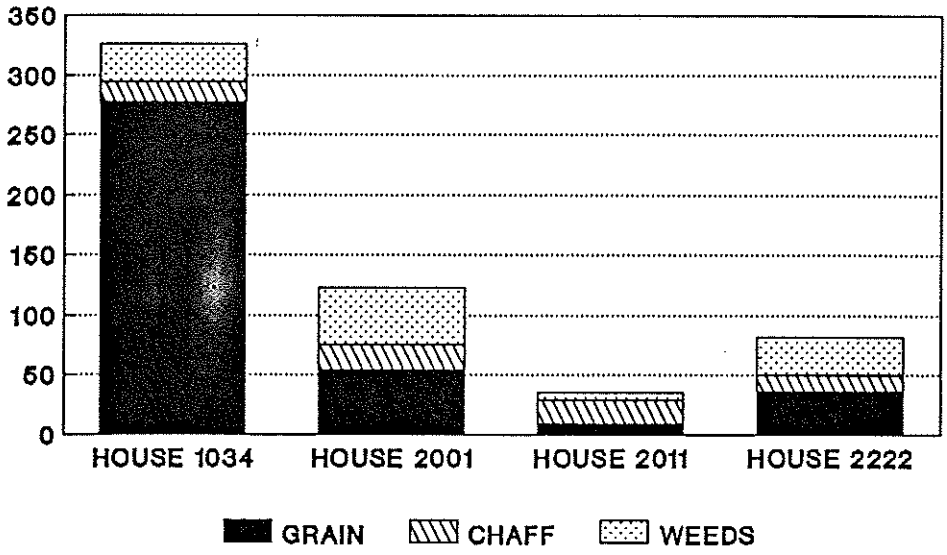

Fig. 5A

TRETHELLAN FARM

Group 4: proportions of wheat and barley

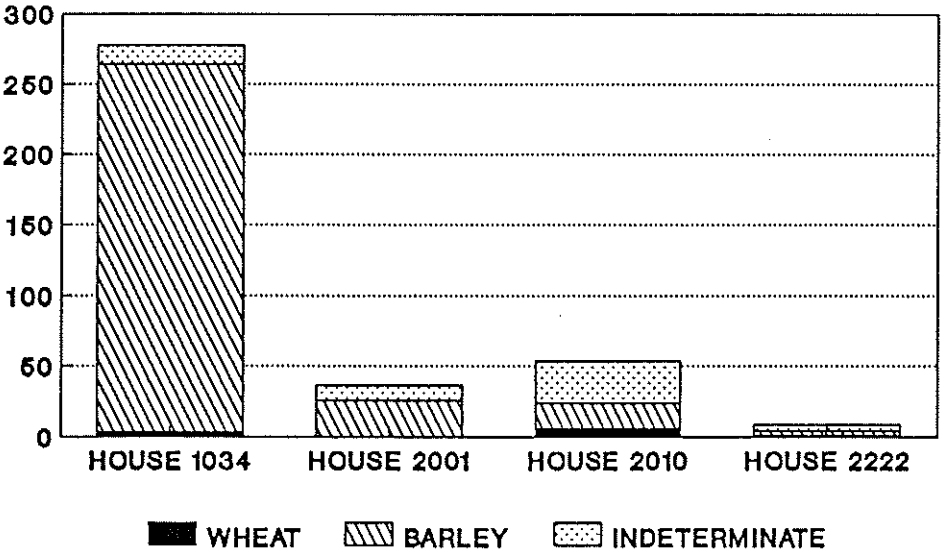

Fig 5B

TRETHELLAN FARM
GROUP 6

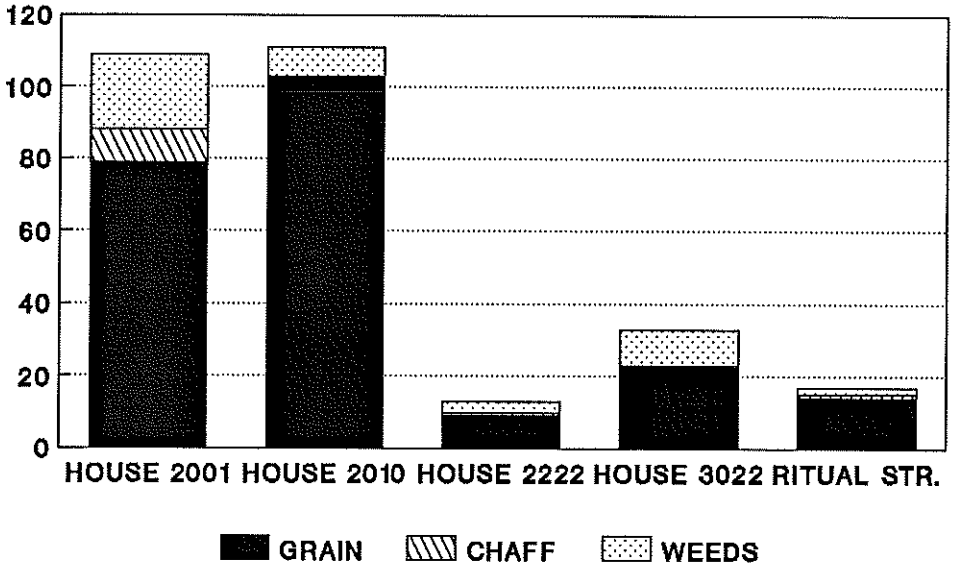

Fig. 6A

TRETHELLAN FARM

Group 6: proportions of wheat and barley

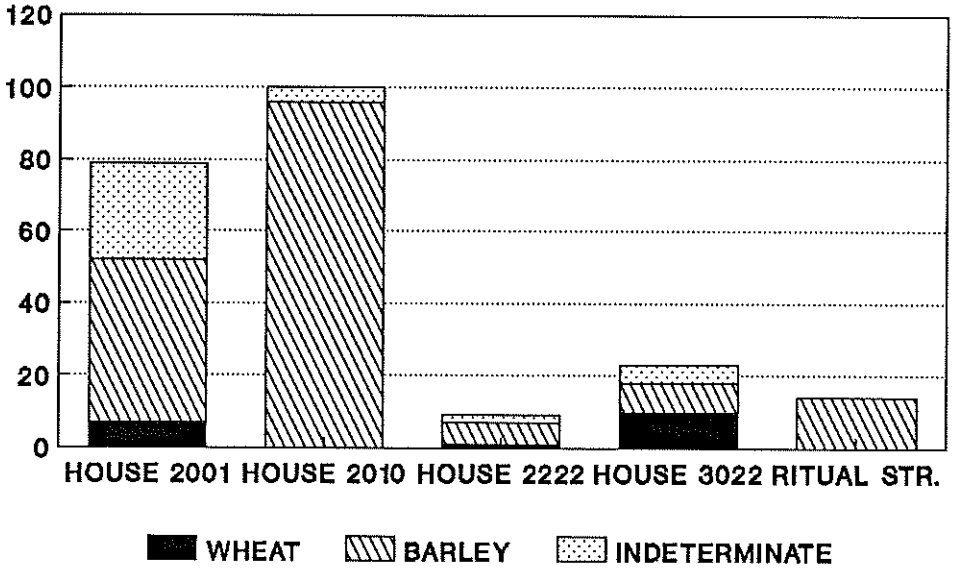

Fig. 6B

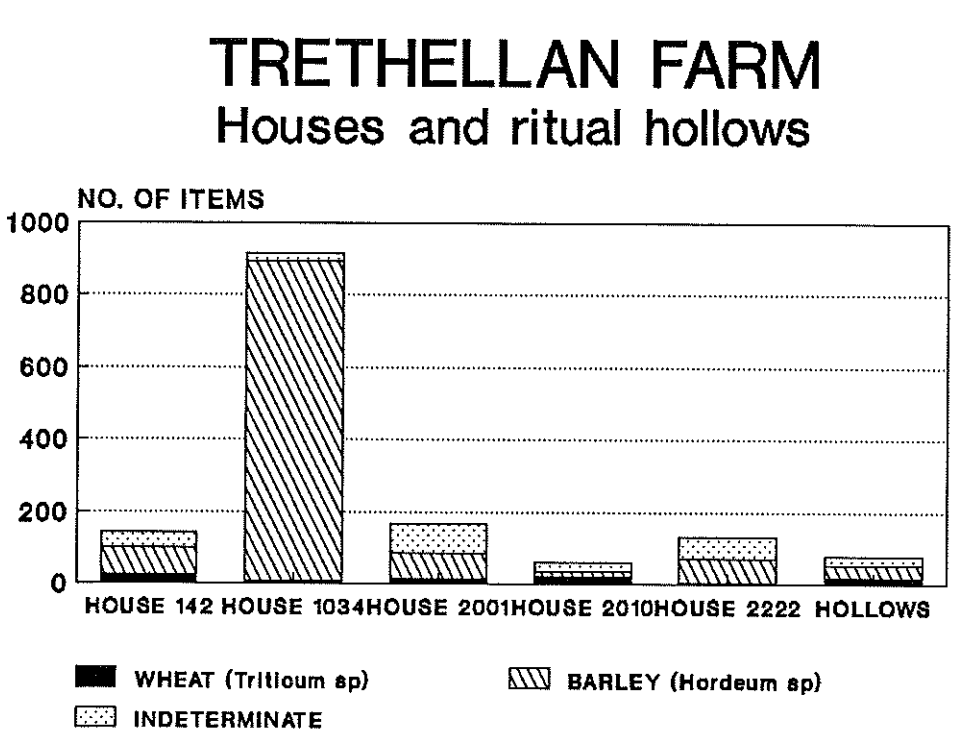

Fig. 7B Proportions of wheat and barley

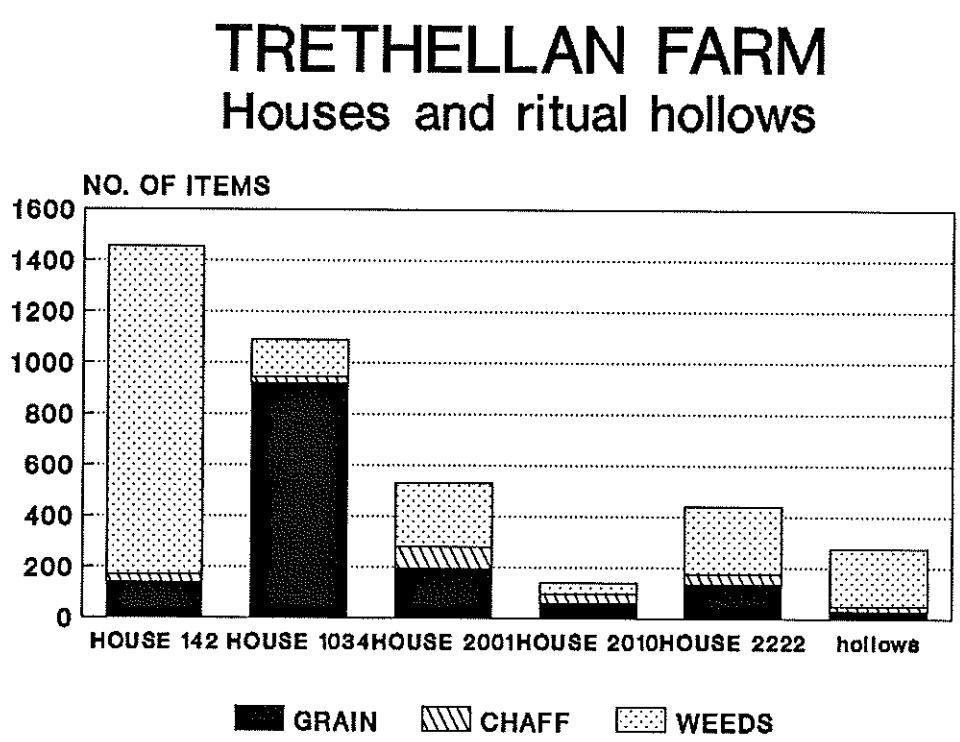
TRETHELLAN FARM
Houses and ritual hollows
NO. OF ITEMS
1600
1400
1200
1000
800
600
400
200
0
HOUSE 142
HOUSE 1034
HOUSE 2001
HOUSE 2010
HOUSE 2222
hollows
GRAIN
CHAFF
WEEDS

Fig. 7A

Trethellan Farm: Key to Tables

A	weeds of cultivated land
B	ruderals: weeds of waste places and disturbed ground
C	plants of woods, scrub and hedgerows
D	open environment (fairly undisturbed)
E	plants of damp/wet environment
F	edible plants
G	medicinal and poisonous plants
H	plants with a commercial/industrial use
I	cultivated plants
K	others (eg parasitic)
L	plants of heaths

gb	glume base
sf	spikelet fork
sfb	spikelet fork base
r	rachis internode
ti	tough internode
tg	tail grain
s	straight
t	twisted
n	naked
ns	naked, straight
nt	naked, twisted
hs	hulled, straight
h	hulled
cn	culm node
c	coleoptile

(cereal remains are of grain, unless otherwise stated)

Table 1.

TRETHELLAN FARM : CHARRED PLANT REMAINS

TAXON			GROUP 1	2	3	4	5	6	7	8
Triticum monococcum/dicoccum	einkorn/enmer glume base	FI	1	1	1					
Triticum/momococcum/dicoccum	einkorn/enmer, spikelet fork	FI		1						
Triticum cf. monococcum	einkorn, spikelet fork	FI			4					
Triticum dicoccum	enmer, spikelet fork	FI			3	2				
Triticum dicoccum	enmer, glume base	FI		11	24	9		1		
Triticum cf. dicoccum	enmer	FI		1	1					
Triticum cf. dicoccum	enmer, glume base	FI								
Triticum spelta	spelt, glume base	FI		2	2	1		1		
Triticum dicoccum/spelta	enmer/spelt	FI				2				
Triticum dicoccum/spelta	enmer/spelt, spikelet	FI				1				
Triticum dicoccum/spelta	enmer/spelt, glume base	FI		10	8	11				
cf. Triticum dicoccum/spelta	enmer/spelt	FI								
Triticum sp.	wheat	FI	1	25	77	8		19	3	
Triticum sp.	wheat, spikelet fork	FI		3	9	3		1		1
Triticum sp.	wheat, spikelet fork base	FI		2		5				
Triticum sp.	wheat, glume base	FI		167	24	29		6		
Triticum sp.	wheat, rachis	FI		2						
Triticum sp.	wheat, tough internode	FI			2					
Hordeum sativum	barley	FI	40	178	142	122	10	106	2	16
Hordeum sativum	barley tail grain	FI	1	5		2				
Hordeum sativum	barley straight	FI	5	10	17	9		12		6
Hordeum sativum	barley twisted	FI	1	11	9	1		15		
Hordeum sativum	barley naked	FI	4	113	1	38		13		
Hordeum sativum	barley naked, straight	FI	2	298	9	115		18		
Hordeum sativum	barley naked, twisted	FI		91	4	21		5		
Hordeum sativum	barley hulled straight	FI			1					
Hordeum sativum	barley, rachis internode	FI			1					
Hordeum sativum	barley hulled	FI				1				

TRETHELLAN FARM : CHARRED PLANT REMAINS (cont.)

			GROUP							
			1	2	3	4	5	6	7	8
cf. Hordeum sativum	barley	FI			2					
cf. Hordeum sativum	barley, rachis	FI			1					
Hordeum/Triticum sp.	barley or wheat	FI						32	1	
Avena sp.	oat	FI			11	1			2	
Avena sp.	oat, awn	FI				1				
cf. Avena sp.	oat	FI			1					
Cerealia	ind. cereal	FI	13	59	158	61	4	8		5
Cerealia	ind. cereal, culm node	FI	2		3					
Cerealia	ind, cereal, rachis	FI			1	1				
Cerealia	ind. cereal, coleoptile	FI				2		1		
Pteridium aquilinum (L.) Kuhn	bracken	CDGH			1					
Ranunuculus flammula L.	lesser spearwort	EG			1					
Ranunculus sp.	-	ABCDEG		3	8					
Fumaria sp.	fumitory	A		2	1					
Raphanus raphanistrum L.	wild radish/charlock pod segment	A			1				1	
Sisymbrium officinale (L.) Scop	hedge mustard	ABCG		1	141					
Cruciferae	-	ABCDEGFI				1				
Viola sp.	violet	ABCDG			1					
cf. Cerastium sp.	mouse-ear chickweed	ABD		1						
Myosoton aquaticum (L.) Moench	water chickweed	E			1					
cf. Mysoton aquaticum	water chickweed	E			2					
Stellaria media agg.	chickweed	AB		12	5	1				
Caryophyllaceae indet.	-	-		1		2				

TRETHELLAN FARM : CHARRED PLANT REMAINS (cont.)

			GROUP							
			1	2	3	4	5	6	7	8
Chenopodium album L.	fat hen	ABFH		21	10	15	2	2	1	
Chenopodium cf. album	fat hen	ABFH	1	24	135	5	6	4		
Chenopodium cf. rubrum/glaucum	red/glaucous goosefoot	AB				1				
Chenopodium sp.	goosefoot etc.	ABFH	1	53	40	13	6	2		
Chenopodium spp.	goosefoot etc.	ABFH	2	43			2			
Atriplex sp.	orache	ABFGH		3	94	1				
cf. Atriplex sp.	orache	ABFGH		7						
Chenopodium/Atriplex sp.	goosefoots/oraches	ABFGH		112	178		25			
Chenopodium/Atriplex spp.	goosefoots/oraches	ABFGH		74						
Chenopodiaceae indet.	-	-		1	238	48	1			
Malva sp.	mallow	BCDF		3	1					
Linum usitatissimum L.	cultivated flax	I		1	3					
Trifolium cf. dubium	lesser yellow trefoil	D			1	1				
Trifolium cf. pratense	red clover	D			2					
Trifolium sp.	clover	ABDI		6	8	3				
Trifolium sp(p)	clover	ABDI		9						
Trifolium spp.	clover	ABDI			8					
Medicago/Trifolium spp.	medick/clover	ABDI		3	6	12	2	1		
cf. Medicago /Trifolium sp.	medick/clover	ABDI				1				
Lotus corniculatus L.	bird's foot trefoil	D				1				
Vicia faba L.	Celtic bean	FI			10	1		3		
cf. Vicia sp.	vetch	CD			1					
Vicia/Lathyrus sp.	vetch/tare/vetchling	CD		32	53	4	2	2		2
cf. Vicia/Lathyrus sp.	vetch/tare/vetchling	CD		2		5				
cf. Vicia/Lathyrus spp.	vetch/tare/vetchling	CD								

TRETHELLAN FARM : CHARRED PLANT REMAINS (cont.)

			GROUP							
			1	2	3	4	5	6	7	8
Leguminosae indet.	-	-			1	2		2		
cf. Leguminosae	-	-				1				
Rosa sp.	rose	CGI			1					
Prunus spinosa L.	sloe/blackthorn	CFG		1	1					
Crataegus monogyna Jacq.	hawthorn	C				1				
Chaerophyllum temulentum L.	rough chervil	CD			2					
cf. Apium graveolens	celery	EI								
Umbelliferae indet.	-	-			1					
cf. Polygonum aviculare	knotgrass	ABG		3						
Polygonum aviculare agg.	knotgrass	ABG		18	9	1	1	1		
Bilderdykia convolvulus (L.) Dum.	black bindweed	ABF		51	80	12	1	4		
cf. Bilderdykia convolvulus (L.) Dum.	black bindweed	ABF		1						
Polygonum sp.	-	ABCDEFG			1	1				
Rumex acetosella agg.	sheep's sorrel	AD			51	1				
Rumex sp.	dock	ABCDEFGI		7	18	1	2	6		
cf. Rumex sp.	dock	ABCDEFGI		1						
Polygonaceae indet.	-	-		1	4	1		1		
cf. Polygonaceae indet.	-	-			1					
Urtica urens L.	small nettle	AB		1						
Urtica cf. dioica	stinging nettle	BCDEFG		3	2					
Corylus avellana L.	hazel	CF						2+		
Anagallis arvensis L.	scarlet pimpernel	AB		2	2					
cf. Veronica spp.	speedwell	ACDE			3					
Euphrasia/Odontites verna (Bell.) Dum.	eyebright/red bartsia	ABD				3				
Prunella vulgaris L.	self-heal	BCDG		8						
Labiatae indet.		ABCFE		1						

TRETHELLAN FARM : CHARRED PLANT REMAINS (CONT.)

			GROUP							
			1	2	3	4	5	6	7	8
cf. Labiatae indet.		ABCFEFI			1					
cf. Plantago major	great plantain	ABC			1					
Plantago lanceolata L.	ribwort plantain	D		11	28					
Sherardia arvensis L.	field madder	AB		3	10	1				
Galium cf. aparine	cleavers	BCG		1	2					
Galium sp.	bedstraw	ABCDE		1	2	1		3		
Galium spp.	bedstraw	ABCDE		9	7					
Galium sp(p)	bedstraw	ABCDE			6					
Compositae					1					
Juncus sp.	rush	DE		1						
Eleocharis palustris/uniglumis	spike rush	E		1		1				
Bromus sterilis L.		AB			1					
Bromus secalinus/mollis	rye-brome/lop-grass	ABD			1					
Bromus sp.	brome	ABD			6				1	
Avena/Bromus sp.	oat/brome grass	ABCDFI			1					
Gramineae indet.	-	ABCDEHIF		51	154	7		7		
cf. Gramineae indet.	-	ABCDEHIF			1					
Unidentified seeds			4	93	95	26	5	11	1	2
TOTAL			83	1673	1957	621	69	289	12	32
Items/litre soil			0.43	7.40	8.81	3.65	1.13	2.83	0.3	1.45

Table 2.

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 1

Taxon		1006	1013	1016	1018	1090	1097	1112	1113	1129	1132	2215	2219	2442	2456
Triticum dicoccum/spelta	(gb)														1
Triticum sp.															1
Hordeum sativum		1					16		2			13	1		7
Hordeum sativum	(tg)										1				
Hordeum sativum	(s)						2			2					1
Hordeum sativum	(t)						1								
Hordeum sativum	(n)									2		1	1		
Hordeum sativum	(ns)						2								
Cerealia		1		1		2		1	1		1		1	2	3
Cerealia	(cn)						1								1
Chenopodium cf. album												1			
Chenopodium sp.												1			
Chenopodium spp.									2						
Chenopodiaceae indet.															1
Unidentified seeds		1	1		1				1	2	1				1

Table 3.

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 2

Taxon		57	107	138	1036	1072	1091	1093	1094	1098	2090	2131	2161	2163	2171	2175
Triticum monococcum/dicoccum	(gb)															
Triticum monococcum/dicoccum	(sf)															
Triticum dicoccum	(gb)												3	1		
Triticum cf. dicoccum											1					
Triticum spelta	(gb)															
Triticum dicoccum/spelta	(gb)									1	4				1	
Triticum sp.			1		1	2					15		1			
Triticum sp.	(sf)								1		1					
Triticum sp.	(sfb)															
Triticum sp.	(gb)			1	1	2			1		7				2	
Triticum sp.	(r)															
Hordeum sativum		7	12	5	26				80	2	22		2		6	
Hordeum sativum	(tg)						1		4							
Hordeum sativum	(s)				8						2					
Hordeum sativum	(t)		5			3					1				2	
Hordeum sativum	(n)					110	3									
Hordeum sativum	(hs)		1			221	3		66	4			2		1	
Hordeum sativum	(nt)					90			10	1						
Cerealia				1	5						24	4			6	
Cerealia	(r)															
Ranunculus acris/repens/bulbosus			1			1					1					
Fumaria sp.						2										
Sisymbrium officinale (L.) Scop																
Cruciferae																
cf. Cerastium sp.																
Stellaria media agg.		2	1	7	1	1										
Caryophyllaceae indet.				1												
Chenopodium album L.			19								2					
Chenopodium cf. album		7		17												
Chenopodium sp.			5	37	3				1	4						
Chenopodium sp.		1							4					2		
Chenopodium spp.						43										

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 2 (CONT.)

	57	107	138	1036	1072	1091	1093	1094	1098	2090	2131	2161	2163	2171	2175
Atriplex sp.			3												
cf. Atriplex sp.		7													
Chenopodium/Atriplex sp.	45	32	29		5										1
Chenopodium/Atriplex spp.															
Chenopodiaceae indet.						1									
Malva sp.															
Trifolium sp.	1		5												
Trifolium sp(p)			1	2											
Medicago/Trifolium spp.															
Vicia/Lathyrus sp.		5	16	1	1				1						1
cf. Vicia/Lathyrus sp.									1						1
cf. Vicia/Lathyrus spp.															
Prunus spinosa L.															
cf. Apium graveolens															
cf. Polygonum aviculare			3												
Polygonum aviculare agg.	6	6			4										
Bilderdykia convolvulus (L.) Dum.	3	16	6	4	15			1		1	1				1
cf. Bilderdykia convolvulus (L.) Dum.		1													
Rumex sp.	1		2	1					1	1					
cf. Rumex sp.															
Polygonaceae indet.			1												
Urtica urens L.		1													
Anagallis arvensis L.		1			1										
Prunella vulgaris L.		2	6												
Labiatae indet.			1												
Plantago lanceolata L.	1		8	1											
Sherardia arvensis L.			1	1											
Galium cf. aparine															
Galium sp.			1			1									
Galium spp.		2		2	2					2					
Juncus sp.															
Eleocharis palustris/uniglumis		1													
Gramineae indet.	3	4	29		2			2							
Unidentified seed	2	11	42	5	5	1	2			2			2		1

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 2

Taxon		2264	2276	2287	2290	2296	2297	2354	2480	2566	2701
Triticum monococcum/dicoccum	(gb)									2	
Triticum monococcum/dicoccum	(sf)										1
Triticum dicoccum	(gb)										1
Triticum cf. dicoccum											1
Triticum spelta	(gb)					6			2		
Triticum dicoccum/spelta	(gb)	1							1		2
Triticum sp.					1	2			1		1
Triticum sp.	(sf)			1							
Triticum sp.	(sfb)					2					
Triticum sp.	(gb)					2			2	2	5
Triticum sp.	(br)					2					
Hordeum sativum		2			1	9			2	1	2
Hordeum sativum	(tg)										
Hordeum sativum	(s)										
Hordeum sativum	(t)										
Hordeum sativum	(n)										
Hordeum sativum	(ns)										
Hordeum sativum	(nt)										
Cerealia		2			2	7	1		1	3	3
Cerealia	(r)										1
Fumaria sp.											
Sisymbrium officinale (L.) Scop											1
Cruciferae											
cf. Cerastium sp.						1					
Stellaria media agg.											
Caryophyllaceae indet.											
Chenopodium album L.											
Chenopodium cf. album											
Chenopodium sp.		1								2	
Chenopodium sp.											
Chenopodium spp.											

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 2 (CONT.)

	2264	2276	2287	2290	2296	2297	2354	2480	2566	2701
Atriplex sp.										
cf. Atriplex sp.										
Chenopodium/Atriplex sp.										
Chenopodium/Atriplex spp.										74
Chenopodiaceae indet.										
Malva sp.										3
Linum usitatissimum L.							1			
Trifolium sp.										
Trifolium sp(p)										9
Medicago/Trifolium spp.		2			1					
Vicia/Lathyrus sp.								1		7
cf. Vicia/Lathyrus sp.										
cf. Vicia/Lathyrus spp.										
Prunus spinosa L.					1					
cf. Apium graveolens										
cf. Polygonum aviculare										
Polygonum aviculare agg.										2
Bilderdykia convolvulus (L.) Dum.								1	1	2
cf. Bilderdykia convolvulus (L.) Dum.										
Rumex sp.	1									
cf. Rumex sp.										1
Polygonaceae indet.										
Urtica dioica L.										3
Anagallis arvensis L.										
Prunella vulgaris L.										
Labiatae indet.										
Plantago lanceolata L.										
Sherardia arvensis L.										
Galium cf. aparine			1							
Galium spp.										
Juncus sp.					1					
Eleocharis palustris/uniglumis										
Gramineae indet.	3			1	1		1		1	
Unidentified seed	2	1		6					3	

Table 4.

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3

TAXON		36	50	60	1128	1133	2026	2303	2310	2316	2352	2408	2445	2451	2485	2493	
Triticum monococcum/dicoccum	(gb)										1						
Triticum/momococcum/dicoccum	(sf)																
Triticum cf. monococcum	(sf)																
Triticum dicoccum	(sf)		1														
Triticum dicoccum	(gb)		11	1							1			1		1	
Triticum cf. dicoccum																	
Triticum cf. dicoccum	(gb)																
Triticum spelta	(gb)																
Triticum dicoccum/spelta																	
Triticum dicoccum/spelta	(sf)																
Triticum dicoccum/spelta	(gb)																
cf. Triticum dicoccum/spelta																	
Triticum sp.		5	15	3				1				1		2		1	
Triticum sp.	(sf)		5														
Triticum sp.	(sfb)																
Triticum sp.	(gb)		1	3	1												1
Triticum sp.	(r)																
Triticum sp.	(ti)	1															
Hordeum sativum		18	29	12	1	3		2	3			1	1	1			
Hordeum sativum	(tg)																
Hordeum sativum	(s)	5	3	1		2										1	
Hordeum sativum	(t)		6														
Hordeum sativum	(n)																
Hordeum sativum	(ns)																
Hordeum sativum	(nt)																
Hordeum sativum	(hs)					1											
Hordeum sativum	(r)																
Hordeum sativum	(h)																

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (CONT.)

	36	50	60	1128	1133	2026	2303	2310	2316	2352	2408	2445	2451	2485	2493
cf. Hordeum sativum		2													
cf. Hordeum sativum (r)		1													
Hordeum/Triticum sp.															
Avena sp.	2	9													
Avena sp. (a)															
cf. Avena sp.															
Cerealia	13	13	10		2	1	1	1		1	2	1	3	2	
Cerealia (cn)			1												
Cerealia (r)															
Cerealia (c)															
Pteridium aquilinum (L.) Kuhn		1													
Ranunculus flammula L.															
Ranunculus sp.		8													
Fumaria sp.															
Raphanus raphanistrum L.			1												
Sisymbrium officinale (L.) Scop		141													
Cruciferae															
Viola sp.		1													
cf. Cerastium sp.															
Myosoton aquaticum (L.) Moench	1														
cf. Mysoton aquaticum	2														
Stellaria media agg.		5													
Caryophyllaceae indet.															

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (cont.)

	36	50	60	1128	1133	2026	2303	2310	2316	2352	2408	2445	2451	2485	2493
Chenopodium album L.							5		2						
Chenopodium cf. album	1	102	21												
Chenopodium cf. rubrum/glaucum															
Chenopodium sp.	3	20	9			1		3							1
Chenopodium spp.															
Atriplex sp.	94														
cf. Atriplex sp.															
Chenopodium/Atriplex sp.	46														
Chenopodium/Atriplex spp.															
Chenopodiaceae indet.	239														
Malva sp.															
Linum usitatissimum L.															
Trifolium cf. dubium	1														
Trifolium cf. pratense	2														
Trifolium sp.															1
Trifolium sp(p)															
Trifolium spp.		8													
Medicago/Trifolium spp.			1					1							
cf. Medicago /Trifolium sp.															
Lotus corniculatus L.															
Vicia faba L.		5	1												
cf. Vicia sp.	1														
Vicia/Lathyrus sp.	4	7	1												
cf. Vicia/Lathyrus sp.															
cf. Vicia/Lathyrus spp.															

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (cont.)

	36	50	60	1128	1133	2026	2303	2310	2316	2351	2408	2445	2451	2483	2493
Leguminosae indet.															
cf. Leguminosae															
Rosa sp.															
Prunus spinosa L.															
Crataegus monogyna Jacq.															
Chaerophyllum temulentum L.		2													
cf. Apium graveolens															
Umbelliferae indet.		1													
cf. Polygonum aviculare															
Polygonum aviculare agg.	1	3	2												
Bilderdykia convolvulus (L.) Dum.	26	37	3			1		1	1						1
cf. Bilderdykia convolvulus (L.) Dum															
Polygonum sp.															
Rumex acetosella agg.	5	46													
Rumex sp.		6	7					1							
cf. Rumex sp.															
Polygonaceae indet.	4														
cf. Polygonaceae indet.							1								
Urtica urens L.															
Urtica cf. dioica															
Corylus avellana L.															
Anagallis arvensis L.		2													
cf. Veronica spp.		3													
Euphrasia/Odontites verna (Bell.) Dum.															
Prunella vulgaris L.															
Labiatae indet.															

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (CONT.)

	36	50	60	1128	1133	2026	2303	2310	2316	2352	2408	2445	2451	2485	2493
cf. Labiatae indet.															
cf. Plantago major	1														
Plantago lanceolata L.	6	18	1												
Sherardia arvensis L.	4	4													
Galium cf. aparine	1	1													
Galium sp.														1	
Galium spp.	7														
Galium sp(p)		6													
Compositae		1													
Juncus sp.															
Eleocharis palustris/uniglumis															
Bromus sterilis L.		1													
Bromus secalinus/mollis															
Bromus sp.					1										
Avena/Bromus sp.															
Gramineae indet.	8	118	2					1				1			2
cf. Gramineae indet.			1												
Unidentified seeds	20	11	14		1	2	1	1	2			1	1		

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3

TAXON		2518	2520	2522	2529	2533	2535	2540	2544	2551	2555	2573	2579	2581	2583	2587
Triticum monococcum/dicoccum	(gb)															
Triticum/momococcum/dicoccum	(sf)															
Triticum cf. monococcum	(sf)															4
Triticum dicoccum	(sf)															
Triticum dicoccum	(gb)														2	2
Triticum cf. dicoccum																
Triticum cf. dicoccum	(gb)										1					
Triticum spelta	(gb)										2					
Triticum dicoccum/spelta																
Triticum dicoccum/spelta	(sf)															
Triticum dicoccum/spelta	(sfb)										4			1	2	
cf. Triticum dicoccum/spelta	(gb)															
Triticum sp.		1	2						1		13			4	2	2
Triticum sp.	(sf)														2	
Triticum sp.	(sfb)															
Triticum sp.	(gb)	1	1		1				4		3			1	3	
Triticum sp.	(r)															
Triticum sp.	(ti)															1
Hordeum sativum			1				1		3		3		2	16	14	3
Hordeum sativum	(tg)															
Hordeum sativum	(s)														1	2
Hordeum sativum	(t)														1	
Hordeum sativum	(n)															
Hordeum sativum	(ns)													9		
Hordeum sativum	(nt)													4		
Hordeum sativum	(hs)															
Hordeum sativum	(ri)	1														
Hordeum sativum	(h)															

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (CONT.)

	2518	2520	2522	2529	2533	2535	2540	2544	2551	2555	2573	2579	2581	2583	2587
cf. Hordeum sativum															
cf. Hordeum sativum (r)															
Hordeum/Triticum sp.															
Avena sp.															
Avena sp. (a)															
cf. Avena sp.														1	
Cerealia	3	7	1			2	1		1	11	2		12	16	12
Cerealia (cn)											1				
Cerealia (r)															1
Cerealia (c)															
Pteridium aquilinum (L.) Kuhn															
Ranunuculus flammula L.															
Ranunculus sp.															
Fumaria sp.	1														
Raphanus raphanistrum L.															
Sisymbrium officinale (L.) Scop															
Cruciferae															
Viola sp.															
cf. Cerastium sp.															
Myosoton aquaticum (L.) Moench															
cf. Mysoton aquaticum															
Stellaria media agg.															
Caryophyllaceae indet.															

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (cont.)

	2518	2520	2522	2529	2533	2535	2540	2544	2551	2555	2573	2579	2581	2583	2587
Chenopodium album L.							1						3		
Chenopodium cf. album										3				8	
Chenopodium cf. rubrum/glaucum															
Chenopodium sp.							1					3			1
Chenopodium spp.															
Atriplex sp.															
cf. Atriplex sp.															
Chenopodium/Atriplex sp.															
Chenopodium/Atriplex spp.															
Chenopodiaceae indet.															
Malva sp.															
Linum usitatissimum L.							1								
Trifolium cf. dubium															
Trifolium cf. pratense															
Trifolium sp.															
Trifolium sp(p)															
Trifolium spp.															
Medicago/Trifolium spp.												1			
cf. Medicago /Trifolium sp.															
Lotus corniculatus L.															
Vicia faba L.										1			2		1
cf. Vicia sp.															
Vicia/Lathyrus sp.	1				1					10					3
cf. Vicia/Lathyrus sp.															
cf. Vicia/Lathyrus spp.															

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (cont.)

	2518	2520	2522	2529	2533	2535	2540	2544	2551	2555	2573	2579	2581	2583	2587
Leguminosae indet.									1						
cf. Leguminosae															
Rosa sp.	1														
Prunus spinosa L.															
Crataegus monogyna Jacq.															
Chaerophyllum temulentum L.															
cf. Apium graveolens															
Umbelliferae indet.															
cf. Polygonum aviculare															
Polygonum aviculare agg.														1	
Bilderdykia convolvulus (L.) Dum.							1			1		2	1	1	1
cf. Bilderdykia convolvulus (L.) Dum															
Polygonum sp.												1			
Rumex acetosella agg.															
Rumex sp.														1	
cf. Rumex sp.															
Polygonaceae indet.															
cf. Polygonaceae indet.															
Urtica urens L.															
Urtica cf. dioica															
Corylus avellana L.															
Anagallis arvensis L.															
cf. Veronica spp.															
Euphrasia/Odontites verna (Bell.) Dum.															
Prunella vulgaris L.															
Labiatae indet.															

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (CONT.)

	2518	2520	2522	2529	2533	2535	2540	2544	2551	2555	2573	2579	2581	2583	2587
cf. Labiatae indet.															
cf. Plantago major															
Plantago lanceolata L.										1					1
Sherardia arvensis L.	1													1	
Galium cf. aparine															
Galium sp.															
Galium spp.															
Galium sp(p)															
Compositae															
Juncus sp.															
Eleocharis palustris/uniglumis															
Bromus sterilis L.															
Bromus secalinus/mollis													1		
Bromus sp.										3					1
Avena/Bromus sp.															
Gramineae indet.										1			1	3	1
cf. Gramineae indet.															
Unidentified seeds						1	2		1	5		3	5		4

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3

TAXON		2589	2593	2595	2601	2612	2613	2618	2649	2651	2658	2663	2664	2707	2718
Triticum monococcum/dicoccum	(gb)														
Triticum/momococcum/dicoccum	(sf)														
Triticum cf. monococcum	(sf)														
Triticum dicoccum	(sf)														
Triticum dicoccum	(gb)						1		1			1	1		
Triticum cf. dicoccum															
Triticum cf. dicoccum	(gb)														
Triticum spelta	(gb)														
Triticum dicoccum/spelta															
Triticum dicoccum/spelta	(sf)														
Triticum dicoccum/spelta	(sfb)						1								
cf. Triticum dicoccum/spelta	(gb)														
Triticum sp.					3							1			2
Triticum sp.	(sf)			1	1										
Triticum sp.	(sfb)														
Triticum sp.	(gb)				2					1				1	
Triticum sp.	(r)														
Triticum sp.	(ti)														
Hordeum sativum				1	13		8					1	2		3
Hordeum sativum	(tg)														
Hordeum sativum	(s)										2				
Hordeum sativum	(t)				1										1
Hordeum sativum	(n)				1										
Hordeum sativum	(ns)														
Hordeum sativum	(nt)														
Hordeum sativum	(hs)														
Hordeum sativum	(ri)														
Hordeum sativum	(h)														

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (CONT.)

	2589	2593	2595	2601	2612	2613	2618	2649	2651	2658	2663	2664	2707	2718
cf. Hordeum sativum														
cf. Hordeum sativum (r)														
Hordeum/Triticum sp.														
Avena sp.														
Avena sp. (a)														
cf. Avena sp.														
Cerealia				28		6	1	1		3				1
Cerealia (cn)				1										
Cerealia (r)														
Cerealia (c)														
Pteridium aquilinum (L.) Kuhn														
Ranunculus flammula L.						1								
Ranunculus sp.														
Fumaria sp.														
Raphanus raphanistrum L.														
Sisymbrium officinale (L.) Scop														
Cruciferae														
Viola sp.														
cf. Cerastium sp.														
Myosoton aquaticum (L.) Moench														
cf. Mysoton aquaticum														
Stellaria media agg.														
Caryophyllaceae indet.														

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (cont.)

	2589	2593	2595	2601	2612	2613	2618	2649	2651	2658	2663	2664	2707	2718
Chenopodium album L.														
Chenopodium cf. album														
Chenopodium cf. rubrum/glaucum														
Chenopodium sp.	1													
Chenopodium spp.														
Atriplex sp.														
cf. Atriplex sp.														
Chenopodium/Atriplex sp.														
Chenopodium/Atriplex spp.				13										
Chenopodiaceae indet.														
Malva sp.				1										
Linum usitatissimum L.	2													
Trifolium cf. dubium														
Trifolium cf. pratense														
Trifolium sp.				7										
Trifolium sp(p)														
Trifolium spp.														
Medicago/Trifolium spp.				2								1		
cf. Medicago /Trifolium sp.														
Lotus corniculatus L.														
Vicia faba L.														
cf. Vicia sp.														
Vicia/Lathyrus sp.				26										
cf. Vicia/Lathyrus sp.														
cf. Vicia/Lathyrus spp.														

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (cont.)

	2589	2593	2595	2601	2612	2613	2618	2649	2651	2658	2663	2664	2707	2718
Leguminosae indet.														
cf. Leguminosae														
Rosa sp.														
Prunus spinosa L.					1									
Crataegus monogyna Jacq.														
Chaerophyllum temulentum L.														
cf. Apium graveolens														
Umbelliferae indet.														
cf. Polygonum aviculare														
Polygonum aviculare agg.				2										
Bilderdykia convolvulus (L.) Dum.				2	1									
cf. Bilderdykia convolvulus (L.) Dum														
Polygonum sp.														
Rumex acetosella agg.														
Rumex sp.				3										
cf. Rumex sp.														
Polygonaceae indet.														
cf. Polygonaceae indet.														
Urtica urens L.														
Urtica cf. dioica				2										
Corylus avellana L.														
Anagallis arvensis L.														
cf. Veronica spp.														
Euphrasia/Odontites verna (Bell.) Dum.														
Prunella vulgaris L.														
Labiatae indet.														

TRETHELLAN FARM : CHARRED PLANT MACROFOSSILS, GROUP 3 (CONT.)

	2589	2593	2595	2601	2612	2613	2618	2649	2651	2658	2663	2664	2707	2718
Labiatae indet.														
cf. Plantago major														
Plantago lanceolata L.				1										
Sherardia arvensis L.														
Galium cf. aparine														
Galium sp.				1										
Galium spp.														
Galium sp(p)														
Compositae														
Juncus sp.														
Eleocharis palustris/uniglumis														
Bromus sterilis L.														
Bromus secalinus/mollis														
Bromus sp.				1										
Avena/Bromus sp.					1									
Gramineae indet.				12		1					1			
cf. Gramineae indet.														
Unidentified seeds	4			15		1								

Table 5.

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 4

Taxon		1066	1117	1124	2232	2246	2250	2256	2260	2274	2280	2346	2348	2379	2380	2394
Triticum dicoccum	(sf)												1			
Triticum dicoccum	(gb)			2												
Triticum cf. dicoccum	(gb)															
Triticum spelta	(gb)			1												
Triticum dicoccum/spelta																
Triticum dicoccum/spelta	(sf)															
Triicum dicoccum/spelta	(gb)			2												
Triticum cf. dicoccum spelta				1												
Triticum sp.				2										1		
Triticum sp.	(sf)												1			
Triticum sp.	(sfb)			3												
Triticum sp.	(gb)	2		7				1						1		2
Hordeum sativum		3	74	8					1	10	1	2				
Hordeum sativum	(tg)	2														
Hordeum sativum	(s)															
Hordeum sativum	(t)															
Hordeum sativum	(n)	7		31												
Hordeum sativum	(ns)	8	82	25												
Hordeum sativum	(nt)	2	16	1					1							
Hordeum sativum	(h)		1													
Avena sp.				1												
Avena sp.	(a)															
Cerealia		2		12	1			1	1	4	2		1	2	1	
Cerealia	(r)															
Cerealia	(c)															
Cruciferae				1												
Stellaria media agg.		1														
Caryophyllaceae indet.										1						
Caryophyllaceae/Chenopodiaceae																
Chenopodium album L.		3	4					1						1		
Chenopodium cf. album				5												
Chenopodium cf. rubrum/glaucum																
Chenopodium sp.		1							4					2		

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 4 (CONT.)

	1066	1117	1124	2232	2246	2250	2256	2260	2274	2280	2346	2348	2379	2380	2394
Atriplex sp.								1							
Chenopodiaceae indet.															
Trifolium cf. dubium													1		
Trifolium sp.			1	2											
Medicago/Trifolium spp.				3		1			1						
cf. Medicago/Trifolium sp.															
Lotus corniculatus L.													1		
Vicia faba L.															
Vicia/Lathyrus sp.		1	5										1		
Leguminosae indet.															
cf. Leguminosae															
Crataegus monogyna Jacq.															
Polygonum aviculare agg.				1											
Bilderdykia convolvulus (L.) Dum	1												3		
Polygonum sp.													1		
Rumex acetosella agg															
Rumex sp															
Polygonaceae indet.													1		
Euphrasia/Odontites verna															
Sherardia arvensis L.			1												
Galium sp.			1												
Eleocharis palustris/uniglumis															
Gramineae indet.		1	1										2		
Unidentified seeds	2	3		1	1										

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 4 (cont.)

Taxon		2399	2401	2406	2412	2440	2463	2515	2524	2548	2585	2621	2623	2624	2626	2643
Triticum dicoccum	(sf)															
Triticum dicoccum	(gb)															
Triticum cf. dicoccum	(gb)				5						1					
Triticum spelta	(gb)															
Triticum dicoccum/spelta								1								
Triticum dicoccum/spelta	(sf)				1											
Triicum dicoccum/spelta	(gb)							1								
Triticum cf. dicoccum spelta																
Triticum sp.					2											
Triticum sp.	(sf)															1
Triticum sp.	(sfb)										1			1		
Triticum sp.	(gb)							11			3		1			1
Hordeum sativum		1		1	4				1		7				1	2
Hordeum sativum	(tg)															
Hordeum sativum	(s)	1		1	1	1					1	1	2			
Hordeum sativum	(t)															1
Hordeum sativum	(n)															
Hordeum sativum	(ns)															
Hordeum sativum	(nt)						1									
Hordeum sativum	(h)															
Avena sp.																
Avena sp.	(a)										1					
Cerealia			1		13		1	3			13		1			
Cerealia	(r)															
Cerealia	(c)										2					
Cruciferae																
Stellaria media agg.																
Caryophyllaceae indet.											1					
Caryophyllaceae/Chenopodiaceae																1
Chenopodium album L.							1			4	1					
Chenopodium cf. album																
Chenopodium cf. rubrum/glaucum							1									
Chenopodium sp.								1		1	1					2

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 4 (CONT.)

	2399	2401	2406	2412	2440	2463	2515	2524	2548	2585	2621	2623	2624	2626	2643
Atriplex sp.															
Chenopodiaceae indet.															
Trifolium cf. dubium															
Trifolium sp.															
Medicago /Trifolium spp.										3			2		1
cf. Medicago/Trifolium sp.										1					
Lotus corniculatus L.															
Vicia faba L.												1			
Vicia/Lathyrus sp.						1									
Leguminosae indet.				1						1			1		
cf. Leguminosae															
Crataegus monogyna Jacq.				1											
Polygonum aviculare agg.															
Bilderdykia convolvulus (L.) Dum				2			1								
Polygonum sp.															
Rumex acetosella agg														1	
Rumex sp				1											
Polygonaceae indet.													1		
Euphrasia/Odontites verna															
Sherardia arvensis L.			1												
Galium sp.			1												
Eleocharis palustris/uniglumis															
Gramineae indet.															1
Unidentified seeds				2		2		2	3	3		3	3		

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 4

Taxon		2645	2653	2656	2660	2729	3098
Triticum dicoccum	(sf)	1					
Triticum dicoccum	(gb)			1			
Triticum cf. dicoccum							
Triticum spelta	(gb)						
Triticum dicoccum/spelta							
Triticum dicoccum/spelta	(sf)						
Triicum dicoccum/spelta	(gb)						
Triticum cf. dicoccum spelta							
Triticum sp.							
Triticum sp.	(sf)	1					
Triticum sp.	(sfb)						
Triticum sp.	(gb)						
Hordeum sativum					5	1	
Hordeum sativum	(tg)						
Hordeum sativum	(s)				1		
Hordeum sativum	(t)						
Hordeum sativum	(n)						
Hordeum sativum	(ns)						
Hordeum sativum	(nt)						
Hordeum sativum	(h)						
Avena sp.							
Avena sp.	(a)						
Cerealia		1					2
Cerealia	(r)	1					
Cerealia	(c)						
Cruciferae							
Stellaria media agg.							
Caryophyllaceae indet.							
Caryophyllaceae/Chenopodiaceae							
Chenopodium album L.							
Chenopodium cf. album							
Chenopodium cf. rubrum/glaucum							
Chenopodium sp.							1

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 4 (CONT.)

	2645	2653	2656	2660	2729	3098
Atriplex sp.						
Chenopodiaceae indet.					48	
Trifolium cf. dubium						
Trifolium sp.						
Medicago/Trifolium spp.	1					
cf. Medicago/Trifolium sp.						
Lotus corniculatus L.						
Vicia faba L.						
Vicia/Lathyrus sp.					1	
Leguminosae indet.						
cf. Leguminosae						
Crataegus monogyna Jacq.						
Polygonum aviculare agg.			1			
Bilderdykia convolvulus (L.) Dum					5	
Polygonum sp.						
Rumex acetosella agg						
Rumex sp						
Polygonaceae indet.						
Euphrasia/Odontites verna					3	
Sherardia arvensis L.						
Galium sp.		1				
Eleocharis palustris/uniglumis					1	
Gramineae indet.				3		
Unidentified seeds				3		

Table 6.

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 5

Taxon	1027	1028	1031	1044
Hordeum sativum	7	1		
Hordeum sativum				2
Cerealia	1			3
Chenopodium album L.		1	1	
Chenopodium cf. album	6			1
Chenopodium sp.	5			
Chenopodium spp.	2			
Chenopodium/Atriplex sp.	23			2
Chenopodium indet.	1			
Medicago/TRifolium spp.				2
Vicia/Lathyrus sp.	1		1	
Polygonus aviculare agg.	1			
Bilderdykia convolvulus (L.) Dum	1			
Rumex sp.		2		
Unidentified seeds	2		2	1

Table 7.

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 6

Taxon		2081	2084	2116	2192	2212	2221	2405	2453	2499	2804	3046
Triticum dicoccum	(gb)									1		
Triticum spelta	(gb)									1		
Triticum sp.						1				7		10
Triticum sp.	(sf)									1		
Triticum sp.						1		1		5		
Hordeum sativum			39	2	4	1	4		8	40		8
Hordeum sativum	(s)		9		1		1			2		
Hordeum sativum	(t)		12		1					2		
Hordeum sativum	(n)		12							1		
Hordeum sativum	(ns)		19									
Hordeum sativum	(nt)		5									
Hordeum/Triticum sp.										27		5
Cerealia			6				2					
Cerealia	(c)								1			
Chenopodium album L.											2	
Chenopodium cf. album										3		1
Chenopodium sp.				1							1	
Medicago/Trifolium spp.			1									
Vicia faba L.			1						1	1		
Vicia/Lathyrus sp.										2		
Leguminosae indet							1					
cf. Leguminosae											9	
Polygonum aviculare L.										1		
Bilderdykia convolvulus (L) Dum				1			1			2		
Rumex sp.										1		5
Polygonaceae indet			1									
Corylus avellana L.		+(2)										
Galium sp.										3		
Gramineae indet.			1	1						3		2
Unidentified seeds				2	1		1			3		4

Table 8.

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 7

Taxon		2110	2126	2132	2183
Triticum sp.	(gb)		3		
Hordeum sativum		1			1
Hordeum/Triticum sp.			1		
Avena sp.			2		
Raphanus raphanistrum L.			1		
Chenopodium album L.			1		
Bromus sp.			1		
Unidentified seeds				1	

Table 9.

TRETHELLAN FARM CHARRED PLANT MACROFOSSILS, GROUP 8

Taxon		1003	1017	1033	2008	2122
Triticum sp.	(sf)					1
Hordeum sativum		2	1	6	3	2
Hordeum sativum	(s)	1		5		
Hordeum sativum	(t)					2
Cerealia			2	1	2	
Vicia/Lathyrus					2	
Unidentified seeds		1	1			