

# ARCHAEOLOGICAL SITES

## Threat of bracken

*The impact of bracken rhizomes on Dartmoor's archaeological landscape has been the subject of research which will inform future management strategies*

After a few years of preliminary work, a project began in 1999 to examine the impact of bracken on archaeological sites. Early results from the excavation of a prehistoric round house near Kestor on Dartmoor graphically illustrate the physical and chemical impact of bracken rhizomes on sensitive archaeological deposits. Much of Dartmoor's rich archaeological landscape is often perceived as being generally stable, with only occasional damage as a result of visitor or agricultural pressures. The picture is, however, much more complex; in particular, work carried out by botanists indicates that bracken is capable of causing both physical and chemical damage to the areas it colonises. Bracken establishes itself on relatively well-drained ground, and on Dartmoor this often coincides with archaeological remains. Given the nature of this threat to such an important archaeological resource, it is important that the scale of the problem be assessed and quantified.

Research indicates that bracken infestation within the study area is just over 20 years old, making it possible to examine the impact of the plant over a relatively short period of time. Immediately prior to the excavation, a detailed survey of the bracken plants growing within the building was carried out to record the position of each bracken stipe (stem) and the height and number of fronds. This information is being used to demonstrate the character of the correlation between the varying density of plants visible at the surface with the character of any underlying damage caused by the rhizomes.

Careful recording of the bracken rhizomes encountered during the excavation has highlighted the impact of this plant on archaeological deposits and structures. At worst, over 20% of the deposits had been displaced by rhizomes.

*Rhizome density is greatest adjacent to the house wall. The variable character of resulting damage could influence and distort archaeological interpretation*



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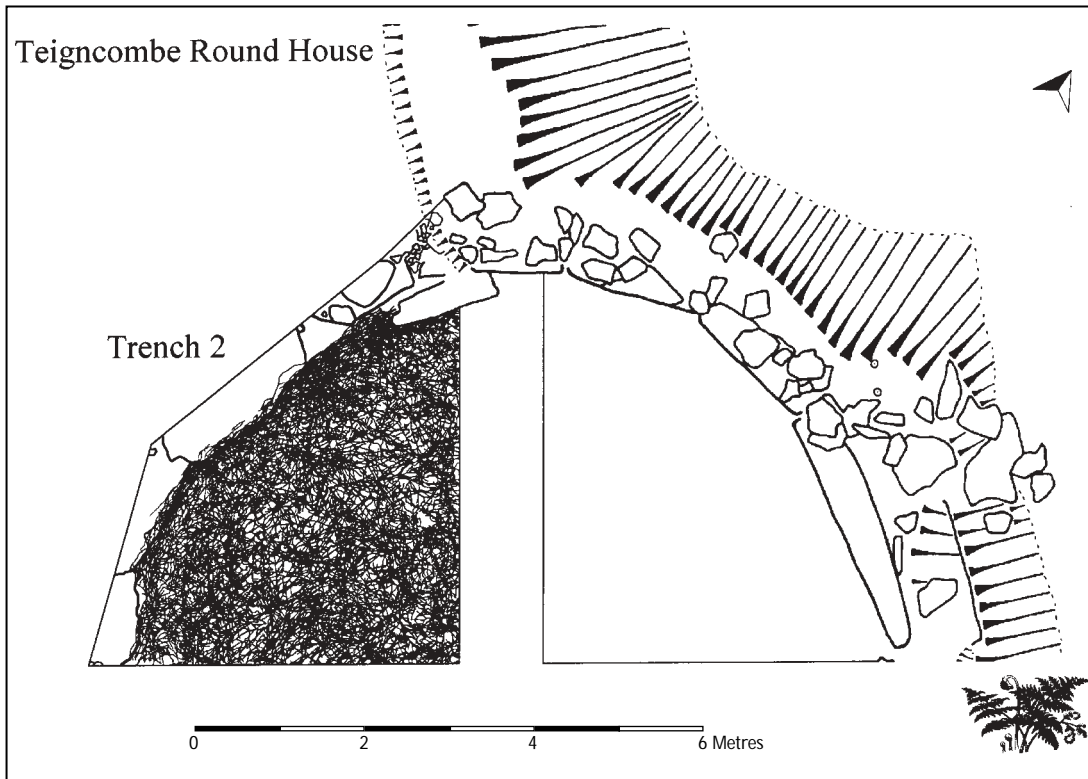


Diagram showing rhizomes so far encountered within Trench 2. The physical disturbance caused by this level of infestation is considerable

Current archaeological management strategies rightly favour the preservation of archaeological structures and deposits. Excavation is destructive and consequently many archaeologists consider it inappropriate to dig unthreatened sites. It is argued that the excavation and consequent destruction of sites should be left until our methods are as near perfect as possible. Until then, all our efforts should be extended to protecting sites for future generations, who will undoubtedly have a range of available techniques to make ours seem primitive. At the same time, we must be sure that sites are truly stable and that we are not merely overseeing the gradual destruction of important evidence that not even the most sophisticated of future techniques will be able to retrieve.

Our excavation has confirmed that bracken destroys archaeological information. Within the current bracken rhizome mat, considerable damage is being caused by 6.45km of rhizomes. Within lower parts of the stratigraphy, there is good evidence to suggest that a significant amount of information has been destroyed by

one or more previous infestations. While further work on the character and extent of damage remains to be done, we can be certain that bracken does destroy archaeology. □

**Sandy Gerrard**  
**Director**

**Dartmoor Archaeology and Bracken Project**

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