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MOLLUSC SAMPLE FROM THE CROMLECH, STOKE BISHOP, BRISTOL

By

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In January 1983 George Smith of the Central Excavation Unit, dug two small exploratory trenches in a garden around this megalithic chambered tomb. Partly because of recent landscaping the trenches revealed little of archaeological significance but one trench showed the following stratigraphy (Fig.1): recent garden soil underlain by 15cm of limestone rubble and soil below which were 13cm of largely stone-free soil overlying weathered bedrock. It was thought possible that the limestone rubble was the remains of a cairn, if so the underlying soil might represent an old land surface. Some molluscs were spotted in the latter layer so the writer took a sample of 2778 gms specifically to see if the molluscs gave any indication whether the layer was ancient as opposed to the product of recent landscaping. Analysis followed methods described by Evans (1972), nomenclature follows the list of Walden (1976) and the results are given in Table 1 in the form of output from the MOLCALC microcomputer program (Maguire and Bell, 1982).

By limestone standards this is a reasonably rich assemblage, 166 apices of 19 taxa, and this offers some support for interpretation of this as a palaeosol or subsoil feature in which molluscs lived. Helicellids introduced to Britain in Roman and later times are generally abundant in gardens but are absent in this sample which is therefore unlikely to be recent. Support for this comes from the weathered nature of the shells and the fact that they are noticeably stained by iron and manganese.

In terms of Evans' (1972, p.194) ecological groups, 60% are shade-loving, 14% open country and 26% have catholic ecological preferences. Discus rotundatus is the most abundant species and many, together with the presence of Vitrea contracta and Oxychilus cellarius, hint at a rock-rubble element (Evans and Jones, 1973). However, these species are associated with a good range of others (e.g. Carychium, Aegopinella and the catholic species) which are rare or absent in rock-rubble so

the assemblage is much more in keeping with limestone woodland. Only future excavations at The Cromlech will determine for certain whether this is indeed a Neolithic palaeosol and if so whether the Mollusca examined represent conditions immediately prior to burial or whether the soil has been truncated.

References

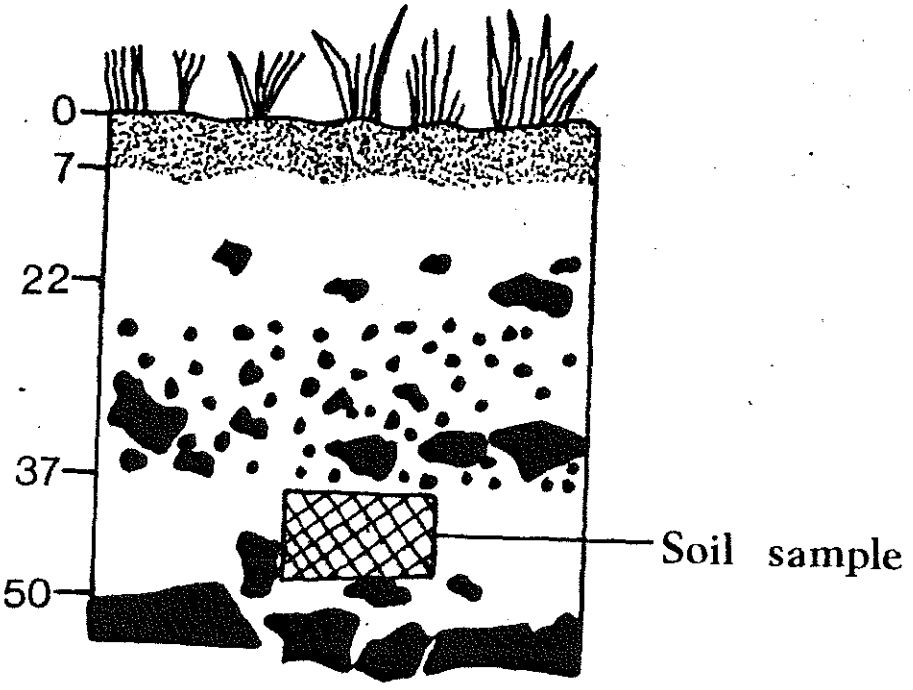
Evans, J.G. (1972) : Land Snails in Archaeology, (London: Seminar Press).

Evans, J.G. and Jones, H. (1973) : ' Subfossil and modern land-snail faunas from rock-rubble habitats', Journal of Conchology 28, pp.103-129.

Maguire, D. and Bell, M. (1982) : 'MOLCALC: a PET microcomputer program for use in mollusc analysis'. Unpublished Ancient Monuments Laboratory Report.

Walden, H.W. (1976) : 'A nomenclatural list of the land Mollusca of the British Isles'. Journal of Conchology, 29, pp.21-25.

Stoke Bishop



MOLCALC. <DJM OCT. 81>

SAMPLE CODE STOKE BISHOP

NAME	COUNT	PROP	%	XPI
POMATIAS ELEGANS	20	0.1204	12.04	.254
CARYCHIUM TRIDENTATUM	5	0.0301	3.01	.105
COCHLICOPA SPP.	1	0.0060	.60	.030
VERTIGO PYGMAEA	3	0.0180	1.80	.072
PUPILLA MUSCORUM	3	0.0180	1.80	.072
VALLONIA COSTATA	5	0.0301	3.01	.105
VALLONIA EXCENTRICA	12	0.0722	7.22	.189
ENA OBSCURA	1	0.0060	.60	.030
DISCUS ROTUNDATUS	53	0.3192	31.92	.364
VITREA CONTRACTA	12	0.0722	7.22	.189
AEGOPINELLA NITIDULA	9	0.0542	5.42	.158
OXYCHILUS CELLARIUS	13	0.0783	7.83	.199
LIMACIDAE	3	0.0180	1.80	.072
COCHLODINA LAMINATA	1	0.0060	.60	.030
CLAUSILIA BIDENTATA	3	0.0180	1.80	.072
TRICHIA HISPIDA	10	0.0602	6.02	.169
HELICIGONA LAPICIDA	2	0.0120	1.20	.053
CEPAEA NEMORALIS	2	0.0120	1.20	.053
CEPAEA SPP.	8	0.0481	4.81	.146

% C. ACICULA= 29.661017 COUNT= 70

SUM MOLLUSC COUNTS= 166 NO. TAXA= 19
SUM MOLLUSC PROPORTIONS= 101
SUM MOLLUSC PERCENTAGES= 101

SHANNON-WIENER FUNCTION= 2.37217491

% WOODLAND= 59.63
% INTERMEDIATE= 26.50
% OPEN COUNTRY= 13.85