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## A NEW NEOLITHIC SITE IN MOLISE, SOUTHERN ITALY

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Graeme BARKER - Sheffield

This paper concerns the first ever excavation of a neolithic site in the province of Molise in southern Italy (fig. 1a).

### *Introduction: the context of the excavation*

The discovery of the first neolithic site in this part of Italy is important in itself, but at the same time the excavation is part of a wider research programme into the settlement archaeology of Molise and a few words are necessary about the context of this report. There has been far less archaeological research in Molise than in the rest of Italy and until 1974 knowledge of the prehistoric period in the province was restricted to collections of sporadic artifacts, often poorly provenanced, housed in several national and local museums. In that year, however, an exploratory field survey in the Biferno valley, the principal valley of Molise, discovered over 400 new sites in three areas surveyed in some detail, dating to all major periods of prehistory and the classical period (Barker, 1976). The results of the survey were so encouraging that a five year programme of survey and excavation was planned, to establish the first archaeological framework for the history of settlement in Molise. The survey is continuing in each year and the results are being combined with the excavation of selected sites representing each major phase of occupation in the valley. The main purpose of excavation is the recovery of environmental and economic data, which are being integrated with a programme of geomorphological research on the history of soil development in the valley. The project is thus attempting to assess the relationship between man and his environment during prehistoric and classical times. The 1975 season concentrated on the classical or Samnite period of settlement and the 1976 season of fieldwork then con-

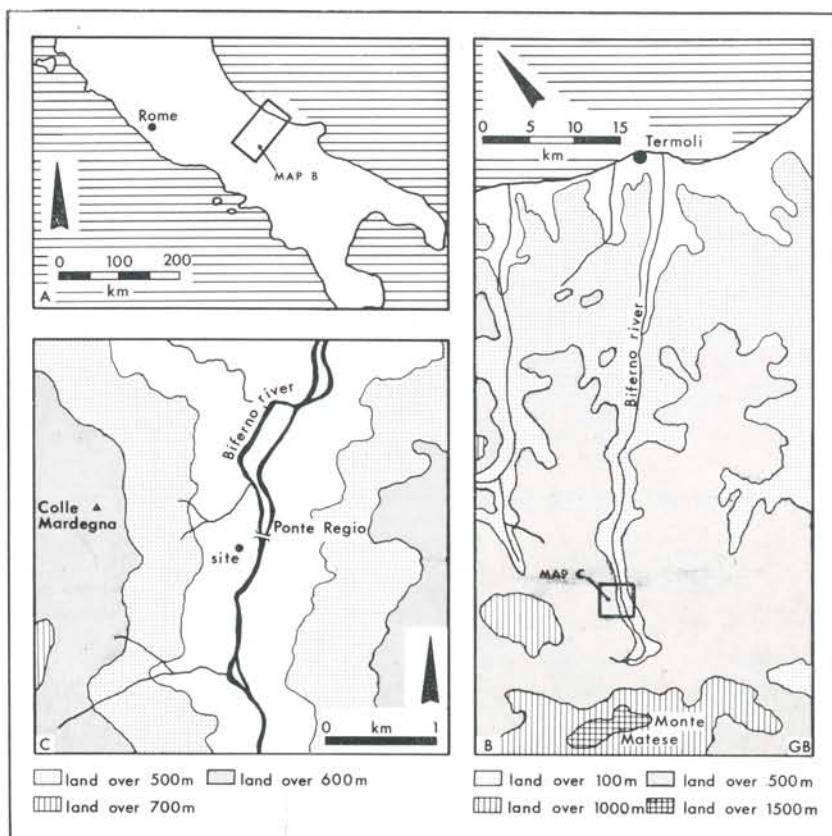


Fig. 1 - The location of the Ponte Regio shelter.

centrated on the Bronze Age. The excavation of the small neolithic site discussed in this paper was therefore subsidiary to the main interest of the 1975 season. However, since this report went to press we have excavated an early neolithic « Impressed Ware » open settlement in the lower part of the valley. The two sites, together with others we have tested and our survey data, will be integrated into a general model of neolithic settlement at the end of our investigations.

#### *Location and description*

The 1974 survey concentrated in three areas — at the head, mid-way down, and at the lower end of the Biferno valley (fig. 1b). The

first survey area stretched from the foot of the Matese massif, part of the main Apennine range, across the Boiano plain and down the first part of the Biferno valley proper. The neolithic site is situated on the left bank of the river in the northernmost part of this survey area, some two kilometres west of the village of Busso (fig. 1c). It was located in September 1974 and designated C63 in the survey catalogue.

The underlying geology of Molise is the limestone of the central Apennine chain, mostly formed in Miocene times, but in the Tertiary period conglomerates, sands and clays were laid down in a band to the east of the Apennines. These sands and clays have produced a landscape of steep and often unstable hills on either side of the Biferno. Protruding like islands in the sea of sand and clay are isolated limestone outcrops, especially in the middle and upper reaches of the valley. The larger outcrops often support the main villages of the valley. One of the smaller outcrops is situated 200 metres southwest of Ponte Regio, a bridge crossing the Biferno at the point where the road from Busso joins the main route down the valley; the outcrop is some 40 metres above the level of the river and about 450 metres above sea level (fig. 2). Below (to the east) of the outcrop, the ground



Fig. 2 - The Ponte Regio outcrop, looking across the Biferno valley from the east. The outcrop is at the centre of the picture.



slopes quite steeply down to the river, to the west the hills rise steadily up to the ridgetop at Colle Mardegna a kilometre away, 660 metres above sea level (fig. 1c). The outcrop inclines to the south east, but the shelter is on the northeastern side (fig. 3), facing the river and



Fig. 3 - The shelter on the edge of the outcrop, seen from the north; standing figure as scale. The Matese massif is in the distance.

with commanding views both up and down the valley (fig. 4). The nearest water supply is down by the river. Today the land around the site is practically all arable, although the steeper slopes on either side of the valley are forested. The actual surface area protected by the shelter is very small — some ten metres along the rock face by three metres out from the wall. The steep fall of the ground below the outcrop has prevented the formation of a significant talus outside the shelter. There was no surface evidence below the site to indicate that any occupation debris has been washed out of the shelter and down the slope. In fact the excavations probably recovered practically all the material left at the site in the past (and surviving to the present day) and the poverty of the finds must be the result of the nature of





Fig. 4 - Looking north down the Biferno valley from the shelter.

the shelter: it clearly afforded very little protection for any more than a handful of people and all the indications are that human utilisation of the site has always been infrequent and of short duration. One of the attractions of the site is that in the summer months the overhang is shaded from the sun from late morning until sunset.

### *The excavations*

The excavation was carried out by students from Sheffield University, supervised by Alan Turner. The deposits were mostly trowelled first by hand and the earth was then dry-sieved through a 5 mm mesh. A number of flotation samples was also taken, especially from the neolithic level.

Two separate soundings were unified as a single trench which extended seven metres along the shelter and just over two metres out from the shelter wall (fig. 5). This trench covered the greater part of the habitable or usable area below the overhang. Four main levels were discovered (fig. 6). The topsoil 1 consisted of a brown stoney

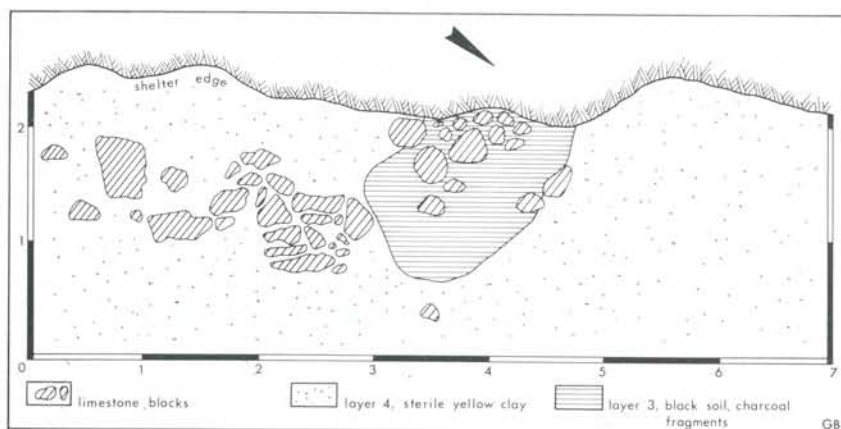


Fig. 5 - The area of the excavation, showing the extent of the neolithic deposit.

earth with fresh limestone chips. Over most of the shelter this overlaid layer 2, a dark greenish-yellow clay containing decayed limestone blocks, which in turn covered layer 4, the natural sterile soil of the site, a yellowish clay. Layer 3 was the neolithic level, a black soil full of small charcoal fragments. In fact layer 3 was an oval-shaped lens of occupation debris in the middle of the shelter, rather than a true layer, one and a half to two metres wide and extending one and a half metres out from the back wall of the shelter (fig. 5).

#### *The occupation: medieval and classical*

The upper layers of the site contained sporadic traces of occupation in the historic period. There were some forty sherds in layer 1, all wheelmade: seven of them were clearly medieval, including one painted in cream, green and yellow, and ten were classical or Samnite, including two blackglazed or «Campanian» sherds dating to the last three centuries B.C. The second layer, however, contained only classical material: there were thirty sherds, mostly coarse ware, but the sample included five Campanian and four «soft buff» sherds (Campanian ware with the black glaze either worn away or surviving as a trace). There were also two Campanian sherds found in the rock fall at the back of the shelter in proximity to layer 3, but which had probably slipped from above. In addition to the pottery in the upper

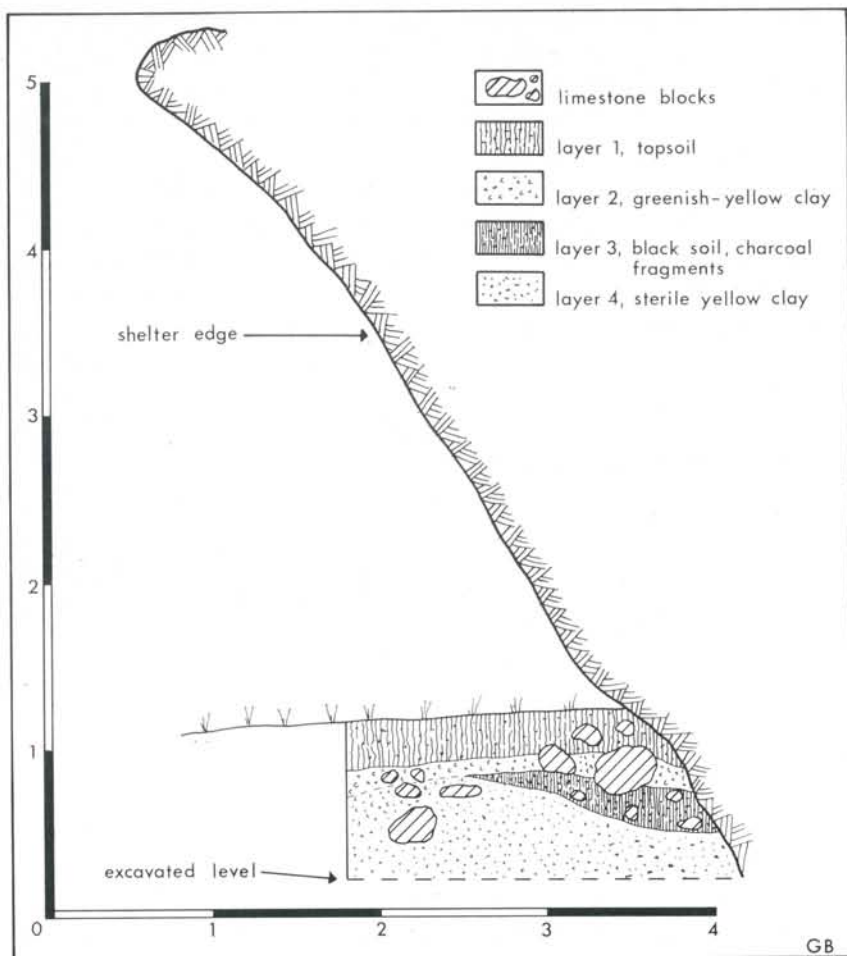


Fig. 6 - The main section through the Ponte Regio deposit, at the centre point of the trench shown in fig. 5.

part of the deposit there were also a few lumps of Roman brick in both layers and two fragments of iron nails in layer 1.

Thirty-four fragments of animal bone were recovered from these upper layers: one of pig, three of cow and thirty of caprine (sheep/goat). No cereals were found in the flotation samples taken from these upper layers — there were simply a few carbonised seeds of dock, *Rumex acetosa*, and several fragments of oak charcoal. The impression given by the finds in the upper deposit is that from time

to time in the classical and medieval period the site has provided overnight shelter for shepherds and herdsmen grazing their stock nearby. Organised transhumance in this part of Italy since the Roman period has been mainly between the winter pastures of Apulia in southern Italy and the summer pastures of the Abruzzi Apennines in central Italy (Barker, 1974: fig. 3), and the droveroads (*tratturi*) linking the two areas cross the Biferno valley running parallel to the coast. One crosses the head of the valley ten kilometres to the south of the neolithic site and runs through the ruins of the Roman town Saepinum, where a well known inscription on one of the gates of the town, records the use of the droveroad in the time of the emperor Marcus Aurelius in the second century A.D.; another crosses the valley seven kilometres downriver from the shelter. In addition to the long-distance transhumance, however, shorter transhumant system up and down the valley are probably of equal antiquity — just as today a few flocks are taken up the Biferno to summer on the Matese and are then wintered in the villages lower down the valley. Either or both types of shepherd may have used the site, but it is clear that utilisation of the shelter in any case has been extremely sparse and infrequent over the last two or three thousand years.

#### *The occupation: neolithic*

The principal importance of the site lies in the discovery of a comparatively large sample of neolithic material in a stratified context, layer 3. Neolithic flint artifacts were found on the surface of the site, particularly in the disturbed deposit at the back of the shelter, and also in this part of the shelter at the same depth as layers 1 and 2. Stratified in the lens of occupation debris comprising layer 3 were about fifty pieces of chipped stone. Half of the sample consisted of waste flakes and blades (fig. 7). There were also twenty plain blades (or fragments of these) without retouch (most of which are illustrated in fig. 8, 1-16), a core (fig. 8, 17), two scrapers (e.g. fig. 8, 18), a backed blade (fig. 8, 19), two retouched blades (e.g. fig. 8, 20) and two burins (e.g. fig. 8, 21). Most of the chipped stone consists of two kinds of flint, one varying in colour from a dark to a very light grey, the other a dark brown; the latter is of poorer quality than the former and the finer blades are practically all made of the grey flint. In addition to these two types of flint, a white chert was also used occasionally. The chert and the poor dark brown flint are found



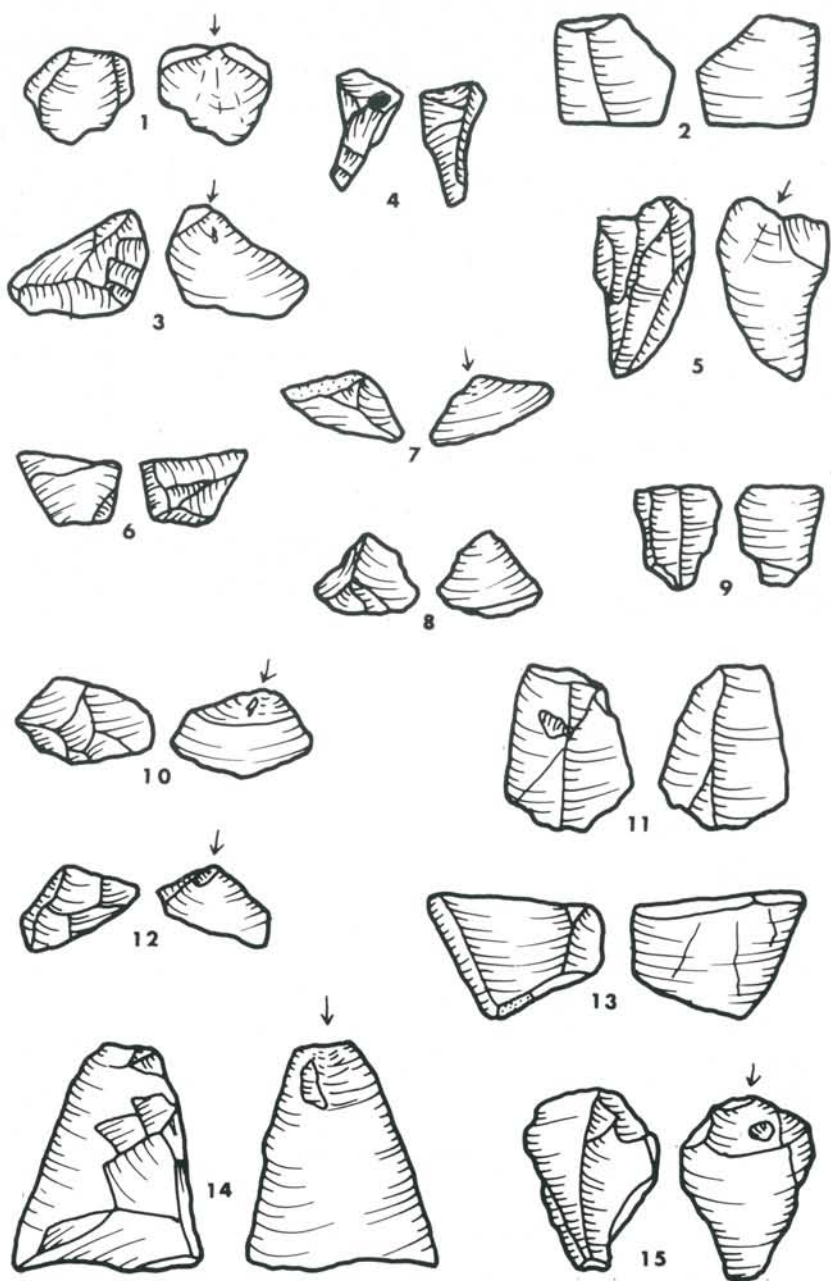


Fig. 7 - Lithic material from layer 3 (1 : 1).

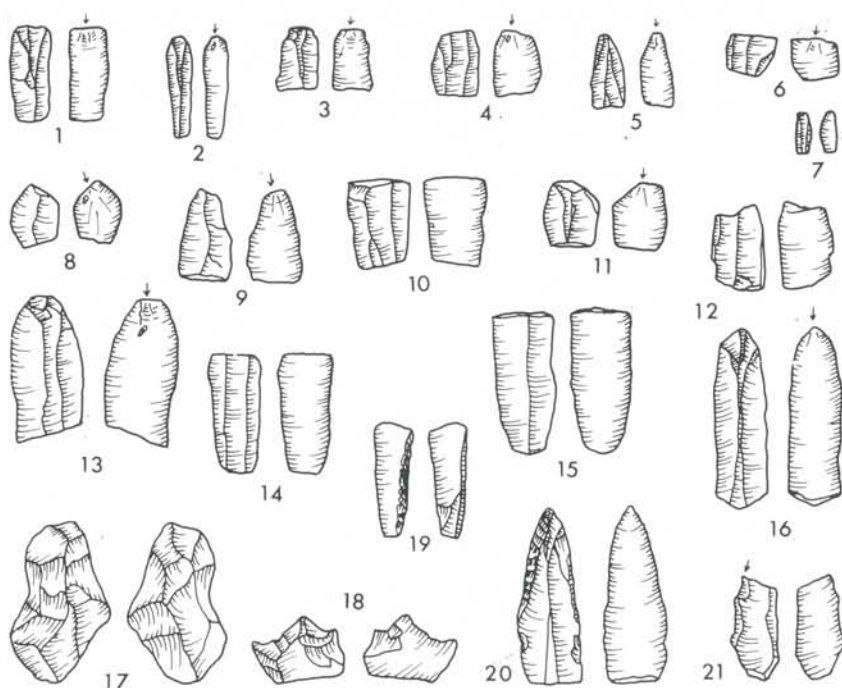


Fig. 8 - Lithic material from layer 3 (1:2).

locally, within a few kilometres of the shelter, but the finer quality flint is found some thirty kilometres away, downriver.

Associated with this lithic material were some forty very small lumps of crude hand-made pottery. All the sherds are between 5 and 10 mm in thickness, all are poorly fired with a blackish-grey core and reddish-brown inner and outer surface. The clay has a temper of very small gritty inclusions. Apart from one fragment of a tubular handle 14 mm in diameter, the sample consists entirely of small undecorated body sherds and it is impossible to reconstruct any of the shapes of the original vessels. This pottery, the first neolithic pottery recovered in Molise, is remarkable mainly for its simplicity and its coarseness; as such, it is very like the coarse ware which comprises the bulk of the pottery found on most neolithic sites in peninsular Italy. The gritty fill in particular is commonly found in the pottery of many neolithic sites on the eastern side of the Apennines further up the peninsula in Abruzzo and Marche. On the other hand, the



forty sherds stratified with the neolithic flint and chert assemblage in the shelter are very like the sherds of ordinary domestic pottery (both hand-made and wheel-made) found in our 1975 excavations of Italic Iron Age farmsteads and on the surface of scores of Italic Iron Age sites throughout the valley located in the 1974 survey. In other words, they are probably the basic coarse ware which can be produced with a simple technology, local clay and local tempering material anywhere in the Biferno valley.

The lithic industries associated with neolithic pottery in peninsular Italy vary considerably in content. Some of the differences are chronological, but functional variation is also apparent. In the earlier neolithic, for example (c. 5000-4000 b.c.), assemblages at some sites are dominated by backed blades, are thus remarkably similar to preceding epipalaeolithic industries, and are often associated with faunal samples consisting mostly of game. Other neolithic sites of this period, however, have lithic assemblages dominated by plain and retouched blades and these assemblages tend to be associated with faunal evidence for stock-keeping (and sometimes but not always with evidence for cereal cultivation). In the later neolithic (c. 4000-3000 b.c.), the latter « blade » industries prevail, but some differences can be seen in the types and frequencies of the artifacts. Generally the repertoire simplifies — scrapers, burins and backed blades, for example, become very rare; at the same time the number of retouched relative to unworked blades tend to increase. Finally, two new artifact types appear in the later neolithic assemblages — pressure-flaked arrowheads and trapeze-shaped geometrics (probably arrowheads too).

The lithic assemblage recovered from the Ponte Regio shelter clearly falls within the basic blade tradition described above. The same flint types were recovered in the 1974 survey at well over a hundred localities in different parts of the Biferno valley (Barker, 1976): the greater part of the total number of artifacts from these sites consisted of plain blades and flakes, but there were also a few cores, retouched blades, scrapers, very occasional backed blades and burins, and a few pressure-flaked arrowheads and trapezes. On the basis of the latter « non-blade » artifacts, at least according to the neolithic succession established for the rest of peninsular Italy, the Molise surface material seems to date to both the earlier and the later Neolithic. In the case of the Ponte Regio shelter, from the appearance of types like the backed blade, the absence of arrowheads and trapezes, and the high percentage of non-retouched blades, the assem-

blage seems to fall within the earlier period of neolithic settlement in the valley.

Comparisons with lithic material on either side of Molise are not hard to find. For example, the industry is very similar to the assemblage dating to the earlier neolithic period found in the Grotta delle Prazziche in the heel of the peninsula (Borzatti von Löwenstern, 1966), or, in Abruzzo, to material of the same period at Capo d'Acqua (Bonuccelli and Faedo, 1968), the Grotta dei Piccioni (Radmilli, 1963), or the Villaggio Leopardi (Cremonesi, 1966). It is much less like the later neolithic industries of Apulia such as that of the upper levels of the Grotta delle Prazziche, or those of Abruzzo such as that of the Grotta dei Piccioni, Ripoli (Cremonesi, 1965), or Paterno (Di Fraia, 1970).

In addition to the artifacts, animal bones and botanical remains were also recovered from layer 3. The botanical samples consisted mostly of fragments of charcoal (mainly oak), and there were also a few carbonised seeds of blackberry (*Rubus fruticosus* agg.). A small collection of animal bones was found, just under half of which was identifiable. The basic analysis is shown in Table 1, and Table 2 offers a guide to the minimum number of individuals represented by the sample, by listing the numbers of specimens of a sample of different anatomical elements.

The little mortality evidence that could be gleaned from the sample is listed in Table 3. Despite the small size of the faunal sample, it is apparent from the first two tables that sheep and goats (the caprines)

**Table 1 - Layer 3: numbers and percentages of identifiable fragments**

	Number of fragments	Percentage
caprine	40	65.6
cattle	7	11.4
pig	10	16.4
red deer	2	3.3
roe deer	2	3.3
<b>Total</b>	<b>61</b>	<b>100.0</b>

Table 2 - Layer 3: minimum number of individuals									
	Mandible	Tooth	Skull	Scapula	Radius	Femur	Tibia	Metapodial	Phalange
caprine	1	6	2	1	1	6	6	9	—
cattle	—	1	—	—	—	—	—	—	2
pig	—	4	—	—	—	—	1	—	4
red deer	—	1	—	—	—	—	—	—	1
roe deer	—	2	—	—	—	—	—	—	—

Table 3 - Mortality data (aged according to Silver, 1969)									
	tooth eruption (age in months)		tooth eruption (age in months)		long-bone fusion (age in months)		long-bone fusion (age in months)		
<i>Layer 1</i>									
caprine	21/24—	1			18/24+	1			
pig	12/16—	1							
<i>Layer 2</i>									
cattle	28/36+	1							
<i>Layer 3</i>									
caprine	21/24—	1	21/24+	1	13/16+	2	18/24+	1	
					18/28+	1	27/36+	1	
					36/42+	1			
pig	8/12—	1	8/12+	1	12—	2			
	12/16+	2							

were the main animals killed at the Ponte Regio shelter in the neolithic period. Table 3 suggests that the sheep and goats killed were usually mature animals: one fragment (a tooth) is from an animal under two

years old, but the other specimens are all from animals certainly older than one, two and three years at the time of death. Half the pig specimens are from animals under a year old, half from animals older than one year. The mature deaths of the caprines in layer 3 would correlate with the traditional transhumant economies of the Apennines, in which sheep are bred for their wool and their milk (which is made into cheese) rather than for their meat, so that the occasional animals killed by the shepherds tend to be mature beasts, especially old or lame animals which slow down the seasonal migrations.

### *Summary and conclusion*

The economic evidence recovered from layer 3 suggests that the Ponte Regio shelter was used in neolithic times by a pastoral group or groups. It might be argued that the site was used by an agricultural rather than a pastoral group, on the grounds that cereals have simply failed to survive, but this argument is probably negated by the fact that other carbonised plant remains *have* survived in the neolithic layer. At the same time the natural shelter afforded by the site is meagre and other, similar, outcrops are scattered along the Biferno valley. Therefore the evidence of the nature of the site, the size of the archaeological deposit and the nature of the faunal and botanical remains suggests that the Ponte Regio shelter was a temporary site used by neolithic pastoralists, principally shepherds. It was not large enough to warrant regular occupation by neolithic people year after year.

Although local flint and chert were used, it is clear that the better grey flint available further down the valley was preferred for most of the neolithic artifacts. Perhaps the artifacts were mainly brought complete to the site, but it is probably significant that the core found was of the finer type of flint, as were most of the waste flakes and chips, suggesting that the fine flint was brought to the site and that the artifacts were then manufactured as required. It is possible that the material arrived at the site by an exchange system with neolithic people living further down the valley by the flint sources, but it is more likely that transhumant shepherds using the site brought the flint with them. The cumulative evidence suggests a transitory neolithic occupation by shepherds, and the most likely grazing system used by them would have been the shortest — the summer pastures on the Matese and winter pastures in the lower region of the Biferno



valley (fig. 1b). In such a system, neolithic shepherds would have been moving along the valley below the Ponte Regio shelter in the spring and autumn. If the blackberry seeds indicate an autumn rather than a spring sojourn at the shelter, this would imply that the shepherds took their finer quality flint with them up the valley to the summer pastures on the Matese and still had some of it when they reached the shelter in the autumn en route for the lower valley. Certainly a few pieces of this type of flint were picked up on the Matese during the 1974 survey. Furthermore, the scraps of archaeological evidence found in the upper layers suggest that the very occasional visits to the shelter in historical times have also been by shepherds, either local shepherds travelling along the valley or those engaged in the long-distance transhumant systems documented since the classical period between the Abruzzi *Altipiani* and the great plains of Apulia.

It is equally possible that the shepherds who camped in the Ponte Regio shelter in neolithic times were wholly pastoral, and practised a mobile economy; or that they were part of a mobile-cum-sedentary system, and came from permanent villages elsewhere in the valley and were driving their animals from these villages to temporary shielings. It is impossible to decide, but in either case the utilisation of the shelter must be related to other base camps or settlements, either in the lower part of the valley or at the head, below the Matese *altipiano*. Survey in future years will test this hypothesis and it is hoped then to integrate the data recovered from this excavation with that of a larger neolithic settlement. As I stressed at the beginning of this paper, the Ponte Regio excavation is notable simply because the site is at present a unique neolithic site in Molise; but at the same time the excavation must be seen as but one part of a project which is attempting to investigate the relationship between prehistoric man and his environment over the past 50,000 years in the Biferno valley.

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## REFERENCES

- BARKER, G. W. W. (1974), *Prehistoric territories and economies in central Italy*. In E. S. Higgs (ed.) *Palaeoeconomy*: 111-175. Cambridge, University Press.
- (1976), *The Archaeology of Early Man in Molise*. (The report of the 1974 survey of the Biferno valley.) Rome, Superintendency of Antiquities of Molise.
- BONUCCELLI, G. and FAEDO, L. (1968), *Il villaggio a ceramica impressa di Capo d'Acqua*. Atti della Società Toscana di Scienze Naturali A, 75: 87-101.
- BORZATTI VON LÖWENSTERN, E. (1966), *Industrie romanelliane e neolitiche nella grotta delle Prazziche (Novaglie-Lecce)*. Rivista Scienze Preistoriche 21: 1-53.
- CREMONESI, G. (1965), *Il villaggio di Ripoli alla luce dei recenti scavi*. Rivista Scienze Preistoriche 20: 85-155.
- (1966), *Il villaggio Leopardi presso Penne in Abruzzo*. Bullettino Paletnologia Italiana n. s. 17, 75: 27-49.
- DI FRAIA, T. (1970), *Tracce di uno stanziamento neolitico all'aperto presso Paterno (L'Aquila)*. Atti della Società Toscana di Scienze Naturali A, 77: 289-307.
- RADMILLI, A. M. (1963), *La Preistoria d'Italia alla luce delle recenti Scoperte*. Florence, Sansoni.
- SILVER, I. A. (1969), *The ageing of domestic animals*. In D. Brothwell and E. S. Higgs (eds.) *Science in Archaeology*: 283-302. London, Thames and Hudson.

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## RIASSUNTO

Il lavoro illustra lo scavo di un piccolo riparo situato nella vallata del Biferno nel Molise, Italia meridionale. Il deposito archeologico più importante consisteva in un piccolo focolare neolitico contenente circa quaranta frammenti di ceramica di impasto e circa cinquanta pezzi di selce e *chert*, nella maggior parte lamette prive di ritocco e rifiuti scheggioidi e laminari. Il complesso può essere attribuito al più antico popolamento neolitico conosciuto nella vallata. I dati faunistici e botanici provenienti dal focolare suggeriscono che il riparo fu usato come accampamento temporaneo da allevatori neolitici, provenienti probabilmente dagli insediamenti situati più in basso nella vallata. Il riparo fu anche usato occasionalmente come rifugio per bestiame in tempi classici. Lo scavo del sito fa parte di un programma di ricerca sul terreno intrapreso nell'ambito di un progetto a lunga durata e multi-disciplinare tendente ad investigare la storia degli insediamenti, l'uso del territorio e la formazione dell'ambiente naturale nella vallata del Biferno.

## SUMMARY

The paper describes the excavation of a small rock shelter in the Biferno valley in Molise, southern Italy. The main archaeological deposit consisted of a small neolithic hearth containing about forty sherds of crude hand-made pottery and about fifty pieces of flint and chert — mainly plain blades without retouch and waste flakes and blades. The assemblage can be dated within the earlier neolithic period of settlement in the valley. The faunal and botanical data from the hearth suggest that the shelter was used as a temporary camp by neolithic shepherds, probably from settlements further down the valley. The shelter was also used occasionally as a shepherd refuge in classical times. The excavation of this site is part of a programme of fieldwork which is being carried out by a multi-period and multidisciplinary research project investigating the history of settlement, land use and landscape formation in the Biferno valley.