Résumé

Cet article traite de l'évolution du rôle des animaux dans les sociétés samnites du sud de l'Italie centrale au cours du premier millénaire avant notre ère. Le matériau ostéologique a été collecté dans une série de sites samnites dans le territoire de l'ancienne Samnium, actuellement la région de Molise, en particulier dans la haute vallée de la Biferno, lieu d'un programme de surveillance et de fouilles archéologiques ces dernières années. Les sites, datés soit d'avant soit d'après la conquête romaine, sont des établissements domestiques ou des sanctuaires (fig.1). L'ensemble de l'échantillon provenant de ces sites est extrêmement réduit -un peu plus de 4000 fragments-, mais les similitudes et les différences entre le matériel osseux de ces différents sites suggèrent d'intéressants changements dans le rôle des animaux avant et après la romanisation, changements en corrélation avec les autres données archéologiques.

Avant la romanisation, les sanctuaires, et les sacrifices animaux qui leur étaient associés, étaient le lieu pour l'exercice du pouvoir et de l'autorité religieuse par les familles samnites dirigeantes. Après la romanisation, ce foyer passe des sanctuaires aux villes nouvelles, et bien que les élites continuent à fournir des animaux pour les sacrifices dans les sanctuaires, le but principal pour l'élevage devient la production de viande et des produits secondaires pour les nouveaux marchés urbains, comme celui de Rome.

This paper considers the changing role of animals for the Samnite societies of south-central Italy during the first millennium B.C. The Samnites are known to us in the classical sources as a hardy mountain people who fiercely resisted the spread of Roman power in the three bitter Samnite Wars between 343 and 290 B.C., and again in the Hannibalic Wars. It was only after their defeat in the Social War of 91-82 B.C., when they sided disastrously against Rome for the last time, that the pax romana was finally imposed on a proud and independent people (SALMON, 1967). According to the written sources, Samnite society was divided into major tribal groups and within these into district pagi, a dominant form of settlement being the enclosed village, the oppidum or vicius. A few aristocratic families controlled political, military, and religious offices.

The faunal material discussed in this paper derives from a series of recent excavations of Samnite sites dating to before and after the Roman conquest (fig.1). They are situated in the modern region of Molise, the heartland of ancient Samnium. One of the sites is the major Samnite sanctuary of Pietrabondante in "Upper Molise", the mountainous northern sector of the region, but all the others lie further south in the Biferno valley in "Lower Molise". The Biferno valley is the principal valley system in Molise, with a catchment some 30 kilometres wide by 100 kilometres long. The feeder streams gather in an ancient lake basin which lies at the foot of the Matese Apennine range (which reaches to almost 2000 metres above sea level) by the modern town of Boiano, and the Biferno river then flows northeast for some 60 kilometres to the Adriatic sea at Termoli through an unstable landscape of sands, clays, and (towards the coast) alluvial terraces.

The Biferno valley has been the scene of intensive archaeological research for the past 15 years. During the 1970's I coordinated a multi-period and multi-disciplinary research project integrating survey and excavation in a study of the settlement archaeology and environmental history of the valley (BARKER, 1985, and in preparation). About a third of the valley was investigated by systematic field-walking, and a series of sites located by the survey was investigated by a combination of grid-sherding, auguring, geophysical survey, and excavation, including Samnite and Roman sites. Extensive geomorphological studies were undertaken to document the history of the river and the relationship between the changing environment and human land use.
One of the main Samnite sites excavated by the project was a small rural sanctuary on Colle Sparanise, a prominent hill overlooking the Boiano basin. Faunal material was also collected from the major Samnite sanctuary of Campochiaro on the other side of the Boiano basin on the wooded flanks of the Matese mountain, and from the Samnite oppidum of Monte Vairano, both sites being excavated by the Superintendency of Antiquities for Molise, and from the Roman town of Saepinum being excavated by the University of Perugia. The remaining faunal sample discussed in the paper has been collected in the extensive excavations since 1980 by Dr. John Lloyd of the University of Oxford of one of the sites located by the survey, a Samnite farm which developed into a Roman villa near the modern village of Matrice (LLOYD and RATHBONE, 1984). All these sites are situated in the upper Biferno valley, the centre of the territory of the Samnite tribe termed the Pentri. Except at Monte Vairano, where the faunal material was collected by workmen, all the faunal samples were collected by hand trowelling and then (except at Matrice) screening the excavated soil through 1cm and 2mm meshes.

The Biferno survey has shown that there was a huge rise of population in the third and second centuries B.C. following the Samnite Wars, with rural settlement filling out the countryside to a level unparalleled in the valley’s history at any time before the early modern period. The survey also found the range of Samnite settlement to have been far more complex than described by the written sources,
including huts, small and large farms, villages, and local cult centres (like Colle Sparanise), in addition to the fortified settlements and major sanctuaries described by Roman writers (LLOYD and BARKER, 1981).

With a total faunal sample from these sites of just over 4000 bones, and with most of the individual samples consisting of a few hundred bones only, it is impossible to make definitive statements about the role of animals in Samnite society. Nevertheless, there are a number of repeated associations and contrasts between the different samples that are worthy of attention and which may be significant. Firstly, it is clear that hunting played little part in providing the meat supply, which was drawn almost exclusively from cattle, pigs, sheep, and goats. Secondly, there is considerable variation in the frequencies and age structures of these stock at the different sites which is unlikely to reflect simply anomalies of sampling and survival (fig.2).

![Figure 2](image)

Figure 2
Histograms of relative frequencies of main domestic stock at samnite and roman sites.
Frequencies are in terms of numbers of identifiable fragments (the number above each histogram).

The best evidence for consumption patterns in the domestic context comes from the Matrice villa, where sheep and pigs were the principal stock (51% and 37% respectively) and cattle few (12%). The pigs were killed at one and two years old. Most faunal samples from Roman Italy indicate that two was the normal age for killing pigs—presumably this was the age when most pigs reached an optimal weight for slaughter—so the number of first year deaths at Matrice implies a rather intensive and well-established pig-rearing regime, with young animals regularly killed as a delicacy before reaching their optimum weight. The sheep, on the other hand, were killed as lambs, shearlings, and as mature animals, perhaps evidence for a husbandry system at the site maintaining a flock for milk (for cheese) and wool as well as for meat. Some surplus males could be eaten as lambs, but many would have been grown on as "wethers" for another year for their fleeces before being killed at the same age as the ewes culled from the breeding stock. The few old cattle are likely to have been plough cattle.
Monte Vairano represents a different facies of the domestic system of production and consumption at this time. The frequencies of cattle, sheep/goats, and pigs were roughly a third each, but given the lack of sieving in these excavations, there is a strong possibility that sheep/goat and perhaps pig bones are under-represented, perhaps considerably. The age structure of the cattle and sheep/goats was much as at Matrice, but the pigs eaten at the settlement were generally older than at the farm. Monte Vairano may have been an 'agro-village' drawing its meat from animals raised by the community in the countryside immediately beyond the walls; or it may have acted as a local centre for surplus produce from outlying farms. If the former, then the system of pig-rearing practised by the community was less intensive than at Matrice. If the latter, then the implication must be that farms like Matrice only supplied them with older animals, reserving the prime meat for themselves and -probably- for the sanctuaries, where the faunal refuse is strikingly different from that of the settlements.

It is clear that the sanctuaries received a deliberate selection of meat rather than a representative cross-section of the meat eaten in the domestic Samnite diet. At Campochiaro, for example, pigs formed 72% of the sample according to the number of identifiable fragments and 64% according to the minimum number of individuals, with the respective figures for sheep/goat being 28% and 32%. Male pigs were twice as common in the food refuse as female pigs according to the number of canine teeth. Both the pigs and the sheep were prime animals only a year old, but the few cattle eaten were old animals as on the domestic sites. The small rural sanctuary on Colle Sparanise had similar cattle and pigs to Campochiaro, but the sheep and goats were older, suggesting a typical cull from the local agricultural system on the evidence of Matrice and Monte Vairano.

At Pietrabbondante, whilst the pig, sheep, and goats killed were similar to those at the other sanctuaries, the site is unique in the presence in the faunal sample of prime beef cattle. If the meat consumed at each sanctuary was primarily drawn from the surrounding farms and villages, the Pietrabbondante cattle imply a very successful system of cattle breeding in High Molise, with the smaller stock being the mainstay of the husbandry system in the Biferno valley. It is apparent from the Roman agronomists that the lack of fodder crops was a crippling factor for most farmers, making it hard enough to keep a plough team let alone beef and dairy cattle. The diet for ploughing oxen recommended by Cato and Columella for the period between March and September consisted almost entirely of "whatever leaves are available", and the effort and sacrifice involved in keeping plough cattle alive are evident in their advice to reserve any spare grain not for the family but for the ox team, to get them into condition for the autumn ploughing. In this light, killing prime cattle as part of temple rituals was as conspicuous a form of consumption as any of the more permanent monuments of aristocratic display such as the increasingly elaborate defensive walls built round the oppida and sanctuaries.

There is no evidence in the faunal samples (nor in the botanical residues and other archaeological materials from these sites) for a developed system of rural agricultural production supplying foodstuffs for regional centres of population -markets- in the valley. The likelihood is rather of a primarily domestic mode of production which also supplied animals for the sanctuary rituals. Certainly the systems of butchery practised at the domestic and ritual sites also seem to have been the same, on the evidence of cut and chop marks on the material from Campochiaro, Monte Vairano, and Matrice: the limbs were removed at the shoulder and hip joints by cutting through the tendons, the extremity bones were chopped off, and the main limb bones were also chopped through sometimes for the extraction of the marrow.

Documentary evidence suggests that, whilst the Samnites worshipped universal gods such as Jupiter, Mars, and Apollo, the dominant framework of Samnite religion consisted of clusters of local deities in each pagus. The local dynastic family mediated between these deities and the ordinary people. The local deities were invariably symbols of the natural world, above all of the agricultural system. Our most detailed insight into how this local religion functioned has been provided by the Agnone tablet, a small bronze plaque found near the village of Agnone in Upper Molise in the last century and now in the British Museum. Inscribed in the local Oscan language and dating to about 250 B.C., it lists the divinities who had altars in the sanctuary or sacred grove where it was displayed. The grove was sacred to the cereal goddess Kerres, but the plaque also names over a dozen other minor deities associated with her, deities with influence over particular aspects of cereal husbandry such as rainfall, ripening, reaping, and threshing. The adjective pious linked on the tablet to the name of Jupiter, the dominating god of sky and weather, suggests that those in charge of the propitiating rites were in some kind of bargaining or quid pro quo relationship with the gods (SALMON, 1967, p.176-177). It seems likely that the Samnite elites used the sanctuary rituals to mediate between the potentially hostile deities of the natural world and the
ordinary people, to ensure success for the crops and animals (and human fertility too) on which life depended. The principal animal mentioned in the documents on Samnite sacrifices is the pig, so abundant in the faunal samples from the Campochoiaro and Pietrabbondante sanctuaries. Presumably the feeding rituals at the sacrifices served to articulate and maintain the social order by legitimating the authority of the Samnite aristocracies to treat with the divine world in the eyes of the peasant farmers who supplied the animals.

Romanisation was finally imposed on the valley in the wake of the widespread devastations which followed the Social War of 91-82 B.C. Latin swiftly replaced Oscan as the dominant language, the elites embraced Roman styles of dress and behaviour, and their surplus wealth was channelled increasingly away from the sanctuaries and fortified settlements and into prestige monuments at the major urban centres which were established on the Roman model in the upper, middle, and lower valley. With the political reorganisation of the emperor Augustus in the early first century A.D., central funds were pumped into the major urban centres to encourage their development as market, cult, and craft centres, and they flourished as the focus of the political and social ambitions of the rich. The number of Roman sites found by the survey was only a third that of the number of Samnite sites: here as elsewhere in Italy large estates expanded at the expense of peasant farmers. In the upper valley in particular, the Roman landscape consisted almost entirely of the new towns and major villas in their vicinity. The Biferno villas were less lavish than their counterparts in Campania and Euria, but inscriptions suggest that most of them were similar in organisation, run by bailiffs with a slave workforce for a wealthy aristocrat who lived most of the time in the town.

For the Roman period, the principal faunal remains are from the Matrice villa, the new town of Saepinum, and the Campochoiaro sanctuary. As in the Samnite period, there is little evidence that hunting contributed significantly to Roman diet in the valley, though hunting was certainly a popular sport for the leisured aristocracy of Roman Italy. As before, cattle, sheep, goats, and pigs were the principal sources of meat.

However, probably the most significant feature of the Roman period faunal samples, compared with those of the Samnite period, is the broad similarity between the domestic and ritual material. The huge dominance of young pigs in the Samnite deposits at Campochoiaro did not continue after Romanisation - sheep and goats were slaughtered there as often as pigs. One and two year old pigs, mainly male, were killed at the villa, the town, and the sanctuary, and old cattle that were presumably traction animals at the end of their working lives. The range of sheep/goat deaths at Matrice and Campochoiaro suggests that the animals were taken from flocks that were bred in an unspecialised way for dairy products, wool, and meat, the principal animals taken for meat probably being castrated males killed at about two years old. In general, the faunal material suggests that the animals selected for slaughter were now a fairly representative sample of the animals being raised in the surrounding farms.

In its mix of crops and animals, and local variations in these, Roman farming in the valley was much the same as Samnite farming. However, it differed fundamentally in that the villas and farms were now part of a market economy operating variously at a local, Italian, and imperial scale. Surplus production for the market place is clear in both the faunal and botanical residues. The locations of the villas suggest that the local urban markets were important, and it must be significant that new market facilities were built at towns like Saepinum. Beyond the valley, the towns of Campania and Rome itself must have been important markets. The Matrice villa, like other villas in southern Italy, was engaged in the intensive production of pigs for an outside market, and pigs dominate the faunal samples of Capua, Naples, Pompeii, Ostia, and Rome. These cities also provided huge markets for wine, oil, cheese, and wool. A number of inscriptions in Molise attests to the involvement of the leading families in long-distance sheep transhumance, the flocks being kept mainly for wool. Large scale fulling facilities were established at Saepinum, a town on one of the main drove roads from Apulia to the central Apennines. Shepherd camps with fine Roman pottery have been found on the Matese and in the mountains further north.

The faunal samples from the Biferno valley provide a clear indication of the changing nature of elite power amongst Samnite society before and after Romanisation (fig.3). Before Romanisation, the sanctuaries and the animal sacrifices associated with them were the critical arena for the display of political and religious authority by the leading families. The conspicuous consumption of animal products and (presumably) their distribution to the peasants in the sanctuary rituals both sustained and were sustained by the elite's command of the means of production in the countryside. This control became all the stronger with Romanisation, as the major Samnite farms like Matrice expanded at the expense of the local peasantry to meet the opportunities of the market economy. For the Samnite
aristocracies, the focus for displaying status and wealth moved from the sanctuary to the market-place, though they continued to provide the animals for slaughter at the sanctuary rituals that probably remained one of the few occasions each year when the Samnite peasant ate good quality meat. By the late first century A.D., at the time of the most prestigious urban building in the valley, the plight of the peasant farmers in Samnium had become so severe and so politically threatening that the emperor Hadrian had to initiate food relief schemes for the rural poor.

Figure 3
A simplified model of the changing role of animals in subsistence, economy, and ritual in ancient Samnium: surplus stock were primarily channelled to the sanctuaries for sacrifice in the Samnite period, whereas after the Roman occupation the Samnite elites were producing animals (and animal products) for local and external markets. The sanctuaries diminished in importance as the focus of wealth and power shifted to the city.

Proportions of different stock shown schematically only.

In this paper I have pointed to the clear dichotomy in the nature and role of animal husbandry in Samnium between, on the one hand, the tribal societies before the Roman conquest and, on the other, the urbanised societies afterwards. Interestingly, the same dichotomy cannot be detected in the pre-Roman Etruscan state which flourished in Etruria on the other side of the Apennines contemporary with the tribal societies of Samnium. There, the development of the state system coincided with major changes in rural settlement and agricultural production, the latter being characterised especially by the intensive production of wine, oil, meat, and wool (BARKER, 1988). The new system supported far higher populations than hitherto, and provided resources for the elites which enhanced their lifestyles and emphasised their separateness from the commoners, but which were also critical commodities for overseas trade. At the same time, however, they continued to demonstrate their wealth and prestige by animal sacrifices in the sanctuaries. There was no apparent disequilibrium between production for trade and production for sacrifice in the primitive market economy of the Etruscan state, whereas the savage imposition of Roman rule in Samnium projected a tribal society into the developed Roman market system within the space of less than a century, with the inevitable collapse of the old order.

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DISCUSSION

L. BODSON : Do you have any explanation for so little evidence for game in the faunal samples you have studied?

G. BARKER : The absence or low frequencies of game such as red deer, roe deer, boar and hare is certainly strange given the literary, epigraphic, and pictorial evidence in the Roman world for the importance of hunting as an elite activity; and at the other end of the social spectrum we would expect wild food to have been important for the poorest people. Yet the paucity of game in the Molise samples is by no means unusual for Iron Age and Roman Italy in general : if there was hunting, its contribution to the meat diet seems to have been uniformly small.

J.-D. VIGNE : Do you have any information on animal sacrifices in other parts of Italy in the Iron Age and Roman periods and, if so, are there similarities and differences?

G. BARKER : As far as I know there are no published accounts of animal sacrifices from Iron Age and Roman Italy based on archaeozoological evidence, though (as with hunting) the literary, epigraphic and pictorial record of course contains many references to animal sacrifice at religious festivals. This gives interest to the Molise faunal samples, despite their admittedly very small size, coming as they do from both ritual and domestic sites of the Samnite and Roman periods.

A. CAUBET : At the end of your paper you mentioned differences in the treatment of animals between Samnium and Etruria. What are the sources of information?

G. BARKER : Etruscan faunal samples are extremely rare, but the potential importance of this kind of material for Etruscan studies in general is now being realised. For example, in recent years faunal samples have been collected from domestic contexts at Populonia and Cerveteri, and from the sanctuary at Pyrgi. As I mention in my paper, they suggest that Etruscan animal husbandry was able to feed the local population, provide luxury resources for the elite and for trade, and animals for sacrifice at the sanctuaries, combining elements that were separate in Molise before and after the Roman conquest. The evidence is discussed in more detail in my paper "Archaeology and the Etruscan countryside" in Antiquity 62 (1988) : 772-85.