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The Museum has extensive exhibits of stone implements, obtained for the most part from the Massachusetts area. They are arranged in culture periods identified in the Northeast, and cover a time extension of some 10,000 years.
EDITORIAL GREETING

Barbara E. Luedtke

As I begin my term as editor of the Bulletin of the Massachusetts Archaeological Society, I find myself giving considerable thought to the directions this journal might take in the coming years. High standards have been set by the previous editors, and it is an honor to follow in their footsteps. There will be changes in the Bulletin, as the MAS membership and the climate of archaeology in this state change, but my first priority must be to continue the Bulletin's proud tradition as a primary source for information about Massachusetts archaeology.

Such thoughts lead inevitably to consideration of the relationship between professional and amateur archaeologists, since the Bulletin has always included contributions from both. Like other long-term friends, professionals and amateurs have had an occasional falling out, and they do not always approve of each other's actions. However, they are bound together by a common interest in discovering and preserving evidence of the past, and they are also bound together by a meshing of talents and experience that makes them necessary to each other.

This became especially clear to me recently when I conducted an archaeological survey in an area where amateurs had apparently never worked. I quickly discovered how much I missed the informed background information on site locations, the environment, and land use patterns that I had come to count on from amateurs on previous surveys. With such help, I feel I could have spent my time better and learned much more.

On the other hand, I think most amateurs will admit that they have also benefited from the professionals in the MAS, who have specialized expertise and also access to equipment, laboratories, libraries, funding sources, and other resources that can add a great deal to the interpretation of archaeological sites and artifacts.

Amateurs and professionals have many strengths that are complementary. For example, amateurs often know their own district in great detail, and may be familiar with virtually every inch of certain sites. Professionals, on the other hand, are often familiar with materials from a wider variety of sites and can draw comparisons and synthesize information for entire regions.

Similarly, amateurs often are able to observe sites over long time periods and in all seasons, and can give early warning if a site is endangered by development or erosion. I recently calculated that Guy Mellgren visited the Atlantic Ledges site 151 time in 12 years, thus salvaging hundreds of artifacts that would have been lost as that site was destroyed by the sea. Professionals can rarely give that kind of loving attention to any single site, but they do have the facilities and institutional backing to launch intensive excavations and research programs that can produce a great deal of information in a short time.

The results of both the amateur's and the professional's endeavors are valuable and publishable. I would like to repeat here Dena's* exhortation, and to encourage all of you to contribute to the Bulletin. Each of you has information that other MAS members would like to know about; why not put your information into words, or draw it, or photograph it, and send it in!

*Dr. Dena F. Dincauze
In conclusion, let me stress that together, amateur and professional archaeologists make a terrific team, capable of adding a great deal to our knowledge of the past and of becoming a powerful lobby to protect archaeological resources. We may still argue about the best way to achieve these goals, but we must never stop talking to each other. Either of us would be greatly diminished if we turned our back on the other, and the ultimate loser would be that part of our heritage that still lies beneath the ground, waiting to be discovered and understood.

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EDITORIAL NOTE

This is the second part of a three-part article written for the Bulletin by Mr. Strauss. Part I, which discussed the effects of vegetation on archaeological sites, appeared in Volume 39, No. 2 in 1978. The third part, to appear in a later issue, will deal with rodent and other mammal activities.

NATURE'S TRANSFORMATIONS AND OTHER PITFALLS:
TOWARD A BETTER UNDERSTANDING OF POST-OCCUPATIONAL CHANGES IN ARCHAEOLOGICAL SITE MORPHOLOGY IN THE NORTHEAST

PART II: INVERTEBRATES

Alan E. Strauss

FAUNAL PEDIOTURBATION

In general, faunal pedoturbation refers to the mixing of soil by animals such as ants, earthworms, moles, rodents, and man himself (Buol, Hole, McCracken 1973:94). The effects of this mixing are varied. One author wrote:

"Faunal pedoturbation refers to the mixing of soils by animals; animals may for example, churn together organic and mineral horizons in such a way as to form a mull or Al horizon that may be either shallow or as deep as the soil solum." (Hole 1960:374.)

At first, one may think that these alterations of the soil are minor, but the following section will indicate the need for careful examination of these processes when trying to interpret stratigraphy. One soil scientist noted, "During many years of field work I have been repeatedly impressed by the extent and magnitude of modifications of the soil profiles accomplished by animals that live in the soil." (Thorpe 1949:180.)

EARTHWORM HABITAT AND ACTIVITY

Earthworms may be found commonly in two main habitats. These are in areas with basic or lime soils and in areas where plants such as the European Anemone nemerosa grow (Troedsson and Lyford 1973:14). Since worms prefer lime soils, they...
would also occur in cultivated fields. This would be true in the Northeast, where the soils are treated with basic chemicals to neutralize acidity. One study indicated:

"In a formerly cultivated field on a nearby abandoned farm (Hasslen) earthworms were also active. They are numerous in the 20-25 cm. thick former plow layer and their vertical tunnels filled with dark brown Ap soil material are conspicuous in the underlying reddish B2 horizon." (Troedsson and Lyford 1973:16.)

Worm activity in general results in a mixing of organic matter with the lower mineral horizons.

"In forested and cultivated soils, especially in soils of medium to heavy texture and where vegetation is of a type that is appetizing to them, earthworms are very active in converting raw vegetable matter to humus and in mixing the humus with the mineral portion of the soil." (Thorpe 1949:180.)

This soil and organic matter exchange is accomplished by burrowing and tunneling (see Figures 1 and 2). One may ask at this point, "How much work do these worms actually do?" One study indicated:

"In forested soils of some areas, especially in those of medium to clayey textures, it is conservatively estimated that 500-2,500 tons per acre of soil have been modified in structure and organic content by earthworms alone." (Thorpe 1949:180.)

A second result of worm action is the formation of soil casts, the tubular byproducts of worm digestion.

"Evidence of the presence of worms is given by aggregations of casts lying directly on the surface of the A horizon. When the living carpet of moss, grass and other plants is removed recent earthworm casts are readily visible because the carpet pulls away cleanly from the local areas of recent casts." (Troedsson and Lyford 1973:15.)

Figure 1. Cross section diagram of burrows and middens of earthworms (After Nielsen, Hole 1959).
The accumulation of worm castings results in the burial of objects that lie on the soil surface. The worms also sort the soil, forming basically two types of layers: one of fine soil and one of larger fragments. One study discovered the following:

"One effect of the bringing by worms of their castings to the surface is to sink into the soil, and eventually bury, any body lying on it which is too large to be swallowed by them. This sinking is assisted by the collapse, below, of old worm tunnels and the falling in of subsoil which has been penetrated by them. The resultant rate of sinking of stones and other bodies is commensurate with the surface accumulation and may amount to 0.2 ins. annually." (Cornwall 1958:32.)

A final study indicates a similar description of this casting process:

"The process (worm casting) forms the 'worm sorted layer' of a soil: all material larger than about 2 mm is too big to be ingested by the worms and is left behind, and the finer material forms a layer whose thickness depends on the time which has elapsed since it began to form. Anything dropped on the surface moves down through the worm sorted layer until it rests on the coarse material below." (Limbrey 1975:32.)

In the next section I will present actual examples from sites where worms have affected the stratigraphic locations of artifacts.

THE EFFECT OF WORM ACTIVITY ON ARCHAEOLOGICAL SITES

One archaeologist felt that the relationship of worm casting to archaeology was common knowledge. She wrote:

"The activity of surface casters in taking soil from below and depositing it on the surface is familiar to archaeologists as an effective means by which artifacts, from potsherds to floors and the remains of walls, are buried." (Limbrey 1975:32.)

Although Limbrey believes that archaeologists are familiar with worm disturbance, I have found very few reports from sites indicating this knowledge. One archaeologist wrote in *Soils for the Archaeologist*:

"This phenomenon (worm casting) is of greatest interest to the archaeologists. Evidently the rate of sinking decreases with depth, in accordance with the frequency of penetration by worms below the actual humic layer, in which they normally feed but it explains how loose objects lying on the surface sink, in a few years, below the turf and eventually become buried to a depth of a foot or two." (Cornwall 1953:32.)

Another archaeologist wrote a detailed account of how artifacts become buried. Limbrey wrote in *Soil Science and Archaeology*:

"In a mull soil, artifacts are lowered through the worm sorted layer and accumulate at its base. Any artifact below the base of the worm sorting is likely to have been introduced during an earlier phase of disturbance. Any at the surface or within the turf line may have been quite recently dropped; it has to be remembered that small items can be pushed quite a
long way down into the soil by a foot or a hoof, and the local poking around with a stick or tootling with a snout or the digging of holes by a dog, can disturb the worm sorted layer enough to introduce things into it, and the damage will very soon be obliterated by worm activity, so artifacts might get well down into the worm sorted layer soon after arriving on the surface, and older material may come to the surface." (Limbrey 1975:315.)

The following are examples from sites of how worms affected the distribution of artifacts:

"Immediately below the grassroots was exposed an area thickly covered with splinters of broken glass, evidently the product of a bomb-blast on the conservatory. Only seven years had passed since the last possible date in 1945 when the damage could have occurred (but in fact it was known to have happened two or three years before that). The turves removed were about 1-1/2 ins. thick, so that within ten years or so the glass scattered on the surface had sunk to that depth—entirely through the activity of worms... Family parties picnic there on summer afternoons unaware of the layer of broken glass on which they are sitting, so obligingly and tidily buried by the assiduous earthworms." (Cornwall 1953:32.)

A second report comes from Powissett Rockshelter, excavated in Massachusetts in 1971 (Dincauze and Gramly 1973). The excavation notes read as follows:

"Excavation unit #9: Sod base to 10 cm below local datum. This shallow level was established in order to define more precisely the depth to which glass and nails were found. Glass was plentiful in this level. The 10 cm floor was observed to correspond fairly well with the greatest depth to which earthworm casts extended.

"Excavation unit #10: 10 and 20 cm below datum. This level produced no glass, nails, or other relics of historical age. No indication of an intrusive pit was observed, but the negative evidence was not considered conclusive because of the extreme dryness of the soil, which resulted in an ashy, friable soil matrix in the midden, in which intrusions would be very hard to perceive. The absence of worm casts in this level, except on the extreme western edge, was taken as confirmation that the historical materials in the upper level were introduced by worm churning of the soil, and not by artificial disturbance."
It should be noted here that Walter Lyford, a soil scientist, suggested that animals preying on the worms at this site may have been the major cause of soil disturbance. This latter problem will be considered in Part III.

As mentioned earlier, worms are found in great quantities in plowed fields, especially if the field has been treated with lime. At the Wilson Pond Site in Keene, New Hampshire, I had the opportunity to observe this phenomenon and its effect on the site's stratigraphy. I excavated two small squares and found what looked like a plow zone. However, it was quite deep, extending to about 30 cm. Besides being unusually deep for a plow zone, the interface of the Ap and B horizons was not a straight, sharply defined line as one would expect to find. The interface was mottled and streaked. Upon closer investigation I noticed many small dark circles at the interface. One day while excavating I noticed many worms in the pit. Evidently, here was the force that obliterated the once straight plow zone boundary.

SUMMARY OF EARTHWORM DISTURBANCE

Earthworms move artifacts around within the soil horizons. They also act as agencies for burying artifacts. Since worms like basic soils, they may be attracted to prehistoric pits that contain burned bone and other organic matter. Worms may also disrupt shell midden sites if the shell is mixed with a good deal of soil to keep it moist. We should be aware of these effects when interpreting and reconstructing all sites that may be changed by worm activity. Worms are only one of the invertebrates that affect soil formation. Ants also contribute to the build-up of soils and they also have an effect upon artifacts in the soil of archaeological sites. The next section will present data on the activity of ants and how they influence site reconstruction and interpretation.

Figure 3. Diagram of the relation of a small ant mound to the forest floor (after Lyford 1963).
ANT HABITAT AND ACTIVITIES

This section will present information on one general type of ant activity. This type of activity is produced by small mound builder ants such as the European species Aphaenogaster rudis and Formica neogagates, and related American forms.

One of the best studies on the relationship of ants to the soil was done by Walter Lyford in 1963. In Lyford's study he notes that the small ants (1-2 mm long) build nests that are concealed by litter on the forest floor. The mounds are found overlying the thin O2 horizon. Figure 3 presents a diagram of one of these mounds.

As to the occurrence of ant mounds on the forest floor, Lyford notes:

"Pattern of occurrences of the mounds easily exposed by raking is shown in Figure 4-A. Based on counts from 22 square-yard samples, there is an average of about 5 ant mounds per square yard overlying the thin black finely divided material of the forest floor, or a total of about 25,000 per acre." (Lyford 1963:8.)

Figure 4. A and B are two ant mounds exposed after raking away leaf litter. C is a profile along line A-A' of diagram B showing mounds not exposed by raking (after Lyford 1963).
Another study done using similar techniques discovered an interesting fact. This study determined that the majority of ant mounds at the location in Garenberg, Sweden, were on tree throw mounds.

"Locations of the concealed ant mounds are shown in Figure 5. There are about 2-5 mounds per square meter and more are on tree-throw mounds than elsewhere." (Troedsson and Lyford 1973:17.)

The mounds that are exposed by raking are not the only ones to be found in the forest.

"In addition to the mounds easily exposed by raking and lying completely within the forest floor there are many older mounds that are now in the Al horizon and covered by the O2 layer. Some idea as to the number of ant mounds that may be missed by raking is shown in Figures 4-B and C. The lower diagram (C) is a scale drawing of a vertical section along a straight line (A'-A) of the central diagram (B) where there is only one ant mound in the forest floor. Six additional mounds occur within the Al horizon along this straight line." (Lyford 1963:10.)

THE EFFECT OF MOUND BUILDING ON SOIL

The main effect of ants on soil genesis is that they bring up soil from the B horizon and deposit it on the O2 layer. This transportation is generally constant during the season. One study explained:

"Newly made ant mounds are composed mostly of brown or reddish-brown B horizon material brought from the soil below and originally deposited, for the most part, between the O1 and O2 horizons. This B horizon material is moved upward into the forest floor more or less constantly during the season as ants build and repair their tunnels and chambers in their underground nests." (Troedsson and Lyford 1973:17.)

This effect is important to soil formation. One author writes in reference to Lyford's work:

Figure 5. Small black dots indicate locations of concealed ant mounds in the forest floor at Garpenberg, Sweden. Dashed lines indicate tree throw mounds (after Troedsson, Lyford).
"Lyford's study (1963) of ants that make small (1 cm high and 7 cm wide) surficial deposits of soil revealed that the upper 35 cm of the Acid Brown Forest soils (Dystochaerets) of the Harvard Forest have been completely churned by these insects." (Butel, Hole, McCracken 1973:150.)

Since mound building is somewhat constant and regular, estimates as to the amount of soil that ants bring to the surface have been made. Again, Lyford's study indicates:

"No accurate assessment has been made as yet of the rate at which ant mounds accumulate at the surface. The best estimate at the present time is based on the number of new mounds on the surface. If two new mounds per square yard are constructed each year (and this is a conservative estimate), an amount of about 50 grams per square yard each year is returned to the surface. Adjusting for bulk density this amounts to about an inch every 250 years. Considering the intense activity of the ants, this figure at first seems small. Yet the effects of plowing in this same type of soil persist for at least 2-300 years, so the rate of an inch per 250 years may not be far off." (Lyford 1963:14.)

The amount of soil returned to the surface was also estimated in the study at Garpenberg:

"The size range of particles determined for six individually sampled ant mounds is essentially the same as for the soil as a whole. Ants carry particles much larger than their own size but there is of course an upper limit. For this reason there is a tendency for particle size segregation near the surface of the soil in stony and gravelly soils. This effect becomes appreciable over hundreds of years. If for example each of the small ant mounds contains a volume of 30 cc and there are two new mounds per year on each square meter there would be build-up of about 6 cm of soil material on the surface in a period of 1000 years. Ants then may play an appreciable role in the burial of archaeological materials and stones and pebbles." (Troedsson and Lyford 1973:18.)

THE EFFECT OF ANTS ON ARCHAEOLOGICAL SITES

Lyford mentions the practical implications of his study. He writes:

"Fine material returned to the surface of coarse-textured soils provides increased cation exchange capacity and the available moisture over that in the coarser-textured horizons below and may be important in the burial of seeds, roots and charcoal. It also promotes localization of the fine materials in the B horizon because the fine materials on the surface when mixed into the B horizon by tree throw or frost action will be preserved, at least to some extent, as discontinuous strata, lenses, or as isolated small bodies of material. In any case, this is one more possible explanation for the inch-to-inch variability common in the B horizons of many soils." (Lyford 1963:16-17.)

He also explicitly addresses archaeological implications:

"There may be some archaeological as well as ecological importance. Studies made in 1960 at an archaeological site on Cape Cod first drew the writer's attention to the potential importance of ants because calculations showed
they could have built up the 16 of so inches of material covering the site if they worked for 4,000 years at the same rate at which they are now working." (Lyford 1963: 16-17.)

Unfortunately, I could not obtain field notes from the site mentioned above. However, at the Debert site, ant activity implications were investigated by Lyford. The following quote is a detailed explanation of how ants affect the soils of an archaeological site. In the following paragraph, MacDonald applies general "ant action on soil" information to a specific site:

"Turning to a related factor, which at first glance appears insignificant, the burrowing of insects, particularly ants, must be taken into account where the time factor is so great. Lyford (pers. comm.), while analysing the soils at Debert, calculated that ants were at present moving soil material to the surface at a rate sufficient to cover the entire surface to a depth of one inch every two hundred years. The zone of removal was seen to extend fourteen inches from the surface. Lyford believes that ants and other insects have been present in the area for the entire post-placial period and could account for the reworking of the upper one to two feet of the deposit numerous times since site occupation. The effect of this action on the alteration of artifact locations and attitudes has never been studied, but it can be considered analogous to frost action on soil particles, which has been demonstrated to move cobbles vertically as much as two feet by particle replacement." (MacDonald 1969:19.)

**SUMMARY OF PART II**

Although many types of insects disturb the soil, including bees, grasshoppers and beetles, the invertebrates with the greatest effect on archaeological sites are earthworms and ants. Earthworms tend to mix organic vegetation with the mineral zones and they also bring fine sediment worm casts to the surface. These casts cause a burial of larger particles that lie on the surface. Therefore this may explain why certain artifacts have been found only to a depth that corresponds with the worm sorted layer.

The ants studied in this paper were of one type: small mound-builders. The small mound-builders affect the subsurface horizons. They bring up B zone material and deposit it near the surface at a rate of about one inch every 250 years. These ants may therefore be a factor in the burial of archaeological remains. Their activity of bringing certain soils to the surface also buries seeds and other organic materials and may help to preserve these items to some degree.

Although we can understand some of these processes, the actual displacement of artifacts by ants has not yet been determined. We can therefore only take into account at this point the effects of soil accumulation when we try to reconstruct and interpret sites in the Northeast. Further investigation of invertebrates and their relationship to artifact movement is an exciting goal for future archaeological research.

Providence, R.I.
November, 1980

**REFERENCES CITED**

BUOL, S.W., HOLE, F.D., and McCracken, R.J.

CORNWALL, I.W.
INTRODUCTION

Fragmentary information salvaged from a site which has been almost entirely destroyed is not, at first glance, very impressive. Such limited information becomes important, however, when combined with reports from other sites. Only by recording and reporting what we can learn of every site, no matter how unexciting or fragmentary, can we hope to reconstruct the overall pattern of site location and settlement system for a given time period. A case in point is the shell midden at Peace Haven 2.

THE SITE

Peace Haven 2, M39-74, is located at latitude 41° 46'13.3" N, longitude 71° 6'35.2" W, in the town of Freetown, Massachusetts. Situated on property belonging to the Algonquin Synthetic Natural Gas Company, the site is a gravel peninsula lying N-S along the east bank of the Taunton River between the river and Barnaby's Cove.

In the summer of 1972 the Massachusetts Archaeological Society was given permission to conduct archaeological survey and salvage on this property. Major efforts were concentrated on areas of Middle and Late Archaic occupation, and these are more fully described elsewhere (Athearn, Staples, Barnes 1980). During surface survey, however, shell was noticed eroding from the riverbank about one-fourth of the way down the peninsula.

The Taunton River at this point has eroded its banks eastward into the peninsula,
cutting a sharp bank. Below this bank the river edge is a gravelly shingle covered
with flotsam and water grass. The shell-producing segment of bank is about 3 meters
high and is covered with low-hanging hawthorns. Inland, a narrow thicket of hawthorn,
cherry and poison ivy fringes the access road which runs down this western side of
the peninsula. East of the road a hay field slopes gently upward to the crest
of a gravel knoll; the top of this knoll and its steeper eastern slope are wooded.
South of our midden the river bank falls very slightly, then rises to a high bluff
crowned by oak trees before tapering off into mudflats. Not far north of the site
the bank curves inland toward the neck of the peninsula, leaving an extensive salt-
marsh between bank and river.

THE EXCAVATIONS

Clearing and testing of the shell-producing area disclosed the inland remnant
of a shell midden, most of which had already been washed away. In all, five two-
meter squares were wholly or partly excavated along the bank; midden deposits tapered
off well before excavation reached a full two meters inland. Excavation of this
midden remnant yielded one feature, ten artifacts, and two cases of poison ivy.
This small inventory, however, gave interesting clues about the site's occupants
and their identity.

Cleaning and straightening of the wave-cut bank showed a relatively simple
stratigraphy. Below the grass roots were 25-30 cm of chocolate-brown loam, underlain
by and grading into a 5-6 cm midden of mixed shell and dark soil. Below the midden
was yellow sandy subsoil, somewhat mottled with staining from the midden above,
grading rapidly downward into white sand. Shell and artifacts were largely confined
to the midden layer except for the single feature and its extensions; the subsoil
appeared to be mostly undisturbed.

The feature began in the midden layer and continued downward to a depth of
36 cm below the junction of midden and subsoil. Its central area, an east-west oval
90 cm by 80 cm in extent, contained a mixture of dark midden soil, broken deer bone
and shell. At its northwest edge, near the top, were two large, rounded, waterworn
cobbles. Stretching some 39 cm south of this central pit was a tongue-shaped
concentration of shells in yellow subsoil. Shells in the pit, like those in the
midden, were mostly oyster; many were unbroken. Eight randomly selected specimens
ranged from 7 to 9.8 cm in length, averaging 8.2 cm. The pit also contained a few
snail shells and two periwinkles.

Found in the feature were three pieces of pottery, artifacts 6, 7 and 8. All.
are apparently from the same pot, and all are much-eroded body sherds. Tempering
apparently included both crushed granite, which remains, and shell, which has eroded
and left holes in the paste, Red outer surfaces and a light grey interior suggest
incomplete oxidation due to low firing temperatures, short time of firing, or poor
draft (Shepard 1965). Surfaces, though much eroded, appear to have been stick-wiped
smooth inside and out. No decoration is apparent, perhaps because no rim or collar
sherds were found. Typology is thus very dubious, though shell temper is sometimes
considered a Middle/Late Woodland characteristic.

More diagnostic are the five points and point fragments recovered. Two,
specimens 1 and 2, are Corner-notched points of flint, which fall within the
description of Ritchie's Jacks Reef Corner-notched type. Number 1, found just
below the junction of midden and subsoil, is a thin, finely-made base of honey-
colored flint. Chips of this material, which looks precisely like that from
eastern Pennsylvania, were found on the knoll at Peace Haven 2. A possible source
of such material closer than Pennsylvania has been reported from Limerock, R.I., (Arthur Lord, personal communication). Number 2, from the junction of midden and subsoil, is a reworked point of black flint. At present, the nearest recorded source of similar flint is in the Helderberg Mountains of eastern New York. The point is thin but irregular, with broken facets at the base and a blade which has been broken and reworked to a circular shape. According to Ritchie, this point type in New York spans later Middle Woodland and early Late Woodland times:

"Its principal period of use in New York encompassed Point Peninsula 2 and 3 complexes and the early Owasco Carpenter Brook complex. One site of the latter complex (White site, Norwich, N.Y.) has been radiocarbon dated at AD 905 ± 250 years (M-176, Crane, 1956, p. 668)." (Ritchie 1971:26.)

Two other specimens, 3 and 10, are fragments of Large Triangular quartz points. Their size, thinness, straight edges, sharp corners, and fine workmanship suggest that they are the local equivalent of Ritchie's Levanna points. Number 3, found just above the junction of shell midden and subsoil, is well finished but has a broken corner. Number 10, eroded from the bank and hence without depth measurement, is a basal corner, broken before finishing. The corner itself, below the break, is thin, sharp, and finely chipped. According to Ritchie, this type also spans the period from late Middle Woodland, about AD 700, to Late Woodland. It became common in New York around AD 900 and became the dominant Late Woodland point type in that area until it was replaced by another type after AD 1350. "The Levanna point is associated as a minor type with the middle and late Point Peninsula complexes." (Ritchie 1971:31.)

The other three artifacts found in this area seem less likely to be part of Middle/Late Woodland complex, though it is impossible to be certain. Numbers 4 and 5 were found well up in the loam; typologically they resemble material from other, higher areas of the site. They could have been eroded from these areas and washed down on top of the shell midden as a result of plowing since Colonial times. Alternatively, they could be older specimens from the knoll, surface-collected and brought to the midden area by Middle/Late Woodland collectors. Finally, they could actually be part of the midden complex.

Number 4 is a white quartz Small Triangular #4 point, crude and irregular, with the convex edges, gently-curving concave base, and rounded corners of typical late Archaic specimens. Number 5 is an unfinished hole stone like those that predominate on the knoll; it is a waterworn green shale pebble, pecked slightly on both faces. Finally, Number 9, eroded from the bank, is a rubbing stone of gritty grey schist. It is thin and flat, with one edge heavily rubbed. It could, of course, be of any age, but the large number of rubbing stones associated with hole stones on the knoll suggests that it belongs to that complex.

COMPARISON AND CONCLUSION

At the Cunningham site (M50M5-5) on Martha's Vineyard, Ritchie found a similar association of potsherds containing both grit and shell temper with Large Triangular and Corner-notched points in all three strata of a stratified shell midden. He received carbon dates of AD 1000 ±80 yrs. (Y-1533) for the lowest stratum and AD 1150 ±80 yrs. (Y-1652) for the middle stratum at this site; no carbon was available from the top stratum. Comparing the total artifact assemblages with those from New York, however, he preferred a date between AD 900 and AD 1000 for the middle stratum, and AD 1070 to 1100 for the top stratum. Our site is similar to the top stratum at Cunningham in yielding an abrading stone, and to the middle stratum in yielding
TABLE 1: Summary Data on Artifacts

<table>
<thead>
<tr>
<th>No.</th>
<th>TYPE</th>
<th>STRATUM</th>
<th>LENGTH IN CM</th>
<th>WIDTH IN CM</th>
<th>THICKNESS IN CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Point, Corner-notched</td>
<td>Subsoil brkn. brkn.</td>
<td>0.34 max.</td>
<td>brkn. brkn.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Point, Corner-notched</td>
<td>Junction</td>
<td>2.80</td>
<td>2.29</td>
<td>0.58</td>
</tr>
<tr>
<td>3</td>
<td>Point, Large Triangular</td>
<td>Loam/midden</td>
<td>3.84</td>
<td>brkn. brkn.</td>
<td>0.69</td>
</tr>
<tr>
<td>4</td>
<td>Point, Small Triangular</td>
<td>Loam/midden (+8 cm)</td>
<td>brkn. brkn.</td>
<td>2.03</td>
<td>0.56</td>
</tr>
<tr>
<td>5</td>
<td>Unfinished holestone</td>
<td>Loam/midden (+14 cm)</td>
<td>5.36</td>
<td>3.6</td>
<td>2.59</td>
</tr>
<tr>
<td>6</td>
<td>Potsherd</td>
<td>Feature</td>
<td>3.69</td>
<td>3.59</td>
<td>1.11</td>
</tr>
<tr>
<td>7</td>
<td>Potsherd</td>
<td>Feature</td>
<td>2.91</td>
<td>2.19</td>
<td>1.06</td>
</tr>
<tr>
<td>8</td>
<td>Potsherd</td>
<td>Feature</td>
<td>brkn. brkn.</td>
<td>brkn. brkn.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Rubbing stone</td>
<td>Eroded</td>
<td>brkn. brkn.</td>
<td>brkn. brkn.</td>
<td>0.5 max.</td>
</tr>
<tr>
<td>10</td>
<td>Point, Large Triangular</td>
<td>Eroded</td>
<td>brkn. brkn.</td>
<td>brkn. brkn.</td>
<td>0.86 max.</td>
</tr>
</tbody>
</table>

In conclusion, the presence of pottery with mixed shell and grit temper and of two point types with overlapping time ranges dates the Peace Haven 2 shell midden to the period between terminal Middle Woodland and early Late Woodland. Both typology and the use of black flint as a raw material suggest ties to eastern New York State. The honey-colored flint may have come from either eastern Pennsylvania or Rhode Island; an artifact of similar material was also found in stratum 2 at the Cunningham site on Martha's Vineyard (Ritchie 1969:105). Further comparisons of our site with Cunningham yield enough similarities to suggest that the two may represent different seasonal camps of a single cultural group, though probably not of the same individuals. The presence of oyster and periwinkle shells at Peace Haven 2 suggest a sea orientation, but animal bone and projectile points suggest (Peace Haven) 1 and hunting as well. Future tests on the fill of our single feature may yield more information on seasonality and subsistence. Meanwhile, the Peace Haven 2 shell midden serves as another minor piece in the jigsaw puzzle that, when completed, will show the yearly activities of the Middle/Late Woodland people of Southeastern Massachusetts.

Providence, R.I.
January, 1981
THE MATTEQUECHAM WIGWAM MURDER

Elizabeth A. Little

Murder, and punishment for murder, are issues which every society must confront. In 1704 on the island of Nantucket, it appeared that Sabo, an Indian, had murdered his wife. Nantucket was then populated by about 27 English fishermen and farmers with their families, along with about 500 Indians, and was very far away from Superior Court justices and the Crown's authority. Who had the authority to investigate and assign punishment for this crime? What was the evidence, and why did he murder her? The answers to these questions as well as other lively details are given in the transcript of Sabo's trial at Nantucket in 1704.

JURISDICTION

Originally, of course, Nantucket was under the jurisdiction of the Sachems. How did they handle murder in their society? Edward Winslow (1624) reported: "If any man kill another, he must likewise die for the same. The sachim not only passeth sentence upon malefactors, but executeth the same with his own hands." Roger Williams (1643) added: "The most usual Custome amongst them in executing punishments, is for the Sachim either to beat, or whip or put to death with his owne hand... though sometimes the sachim sends a secret Executioner...."

Sabo's was not the first case of murder on the island after English settlement. Gookin (1674) mentions the murder of Joel Hiacoomes in 1664/5 for which some Indians were hanged on Nantucket (Nickanoose 1668), and Nickanoose tells of a murder committed by Spotso's father and Harry's father "a longe time agoe" (Wanachimamak 1678). We have been unable to find transcript records of these trials, and are therefore uncertain as to whether the jurisdiction was Mount Hope, Boston, Plymouth, New York, or Nantucket.

Between 1670 and 1692, Nantucket was under the jurisdiction of New York. Among other resolutions of a council at Fort James in 1671 we find:
"It is left to themselves to Ord'r those Affayres about ye Indyans, and to Act therein according to their best discretions, see farr as Life is not concerned: Wherein they are also to have Recourse to New Yorke, but that they bee carefull
to use such moderacon amongst them, That they bee not exasperated, but by Degrees may be brought to be conformable to ye Lawes...." (Starbuck 1924:31.)

By 1672, if not before, the Indians on Nantucket held their own courts (Starbuck 1924:36). According to Zacheus Macy (1763), "They had justices, constables, grand jurymen, and carried on for a great many years, some of them very well and precisely...." He mentions especially Corduda, a "justice of the peace, and very sharp with them if they did not behave well...." Appeal could be had from the Indian court to the general court at Nantucket or Martha's Vineyard, and for capital cases, as we have seen above, the venue was New York.

In 1692 Nantucket was transferred to the jurisdiction of the Province of the Massachusetts Bay. By 1694 an act was passed in Boston that Nantucket was to be allowed to send certain cases to the Superior Court in Boston, because, according to John Gardner and James Coffin, "we are not capable of" being judges of a superior court (Starbuck 1924:88-90). In 1736, the General Court at Boston passed another law, requiring that capital cases be tried on Nantucket, because of the hardships and expense of trial at Barnstable (Starbuck 1924:103). Why then was Sabo's trial not held at Boston or Barnstable? Probably because the hardships and expense to transport all the participants, in addition to a special commission through the governor from the Queen of England to her "trustly and well beloved John Gardner..." (see transcript), were sufficient to persuade John Gardner and James Coffin that they were, in fact, capable of it.

Sabo's trial is the first, and only, Indian murder trial recorded on Nantucket. Records of later trials are at Suffolk County Court (Macy 1880:74; Guba 1967, and personal communication).

LEGAL FRAMEWORK

Since Sabo's trial occurred 276 years ago in an isolated fishing community, when American law was in its infancy, one would expect to find that English common law was adapting to the customs of the island and the colony, as common law is defined. Insight into the changes in English common law as it adapted to conditions in the New World could be obtained by making comparisons between the transcript of Sabo's trial and examples of other very early New England trial transcripts. In general, modern lawyers, as well as detective story readers, will find in Sabo's trial familiar roles: the Queen, the sheriff, witnesses, a jury; and familiar procedures: the inquest, indictment, trial, and sentencing. Recognizable is evidence about the scene of the crime, the motive for the crime, the wounds on the body of the victim, the murder weapons, and the action of the defendant after the crime.

TESTIMONIAL DETAILS

I would like to call attention to the content of the transcript insofar as it helps us understand Nantucket when most of the population was Indian. Indians served as Grand Jurors, witnesses, and as constable. This document gives us the only known documented record of an Indian wigwam on Nantucket. Another bit of data worth noting is the simply amazing (to us, today) amount of foot travel around Nantucket undertaken by the defendant and others. Archaeologically, this mobility is of considerable interest; any study of settlement patterns would need to include the whole island.
The trial transcript even gives us a trace of evidence about changes caused by erosion of the land by the sea. Sabo waded from Nantucket to Tuckernuck, a feat that would today be impossible.

John Gardner, Aged 80, of the first generation of settlers, and James Coffin, aged 64, of the second, one of whom at least was to be a justice, were veterans of the grass contest with the Nantucket Indians about the time of King Philip's War (Little 1976). Gardner had taken the Indians' side, and had been a leader of the half-shares men in their revolt against the English whole-shares men led by James Coffin's father. Both Gardner and James Coffin had contributed to the resolution of that conflict with the Indians.

Figure 6. Scene of Murder of Sabo's Squa and Subsequent Events on Nantucket in May 1704.
MAP

As an aid in following the trial transcript, the places named can be found on Figure 6, which shows Sabo's route after the murder. The gaol and gallows sites are guesses, based on the eighteenth century location of these features, and on the seventeenth century site of the English settlement of Sherborn at or about Capaum Harbor (now Capaum Pond).

TRANSCRIPT OF TRIAL

Anne by the Grace of God of England, Scotland, France and Ireland, Queen Defender of the Faith &c: To our trusty and well beloved John Gardner, James Coffin, Thomas Mayhew, Benjamin Skiffe & William Gare - Esqrs

Greeting Know ye that we have assigned you or any three of you (whereof either of you the before named John Gardner & James Coffin we will to be one) our Justices for this time, to Inquire by the oathes of good and lawful men, Inhabitants of our Island of Nantucket, with in our Province of the Massachusetts Bay in newengland, and by other ways, means and methods, by which the Truth of the matter may be the better Known, of a certain felony and murder committed by a certain Indian named Sawbo, or howe'er otherwise named, now in custody within our Goal on the Island aforesd, on whom, where, how and in what manner done and perpetrated and of other articles and circumstances in any wise concerning the premisses, and the same felony and murder to have and determine according to Law.

And therefore we command you that at Nantucket aforesd at a certain day on or before the thirty first day of July next coming which you or any three of you (whereof either of you the before named John Gardner & James Coffin we will to be one) Shall appoint for that purpose you diligently make Inquiry upon the premisses, and all & s(i)ngulen the premisses heare and determine and do and accomplish those things in forme aforesd thereupon which to Justice pertaineth to be done according to Law and such order, procase, Judgment and Execution to be used, had, done and made against the sd Indian so being convicted of the offence above mentioned, as by Law is accustomed. Saving to us our amerciaments, and other things to us thereupon belonging. Also we Command our Sheriffe of our sd Island that at the day and place aforesd which you or three of you (whereof either of you the before named John Gardner & James Coffin we will to be one) shall make known to him to cause to come before you or three of you (whereof either of you the before named John Gardner & James Coffin we will to be one) Such and somany good and Lawful men of his Balywick, by whome the truth of the matter may be the better known & Inquired. In Testimony whereof we have caused the publick Seal of the Province of the massachusetts Bay to be hereunto affixed witness Joseph Dudley Esqr Captain General and Governour in chief in and over our sd Province at Boston the twenty first day of June in the third year of our Reign annoq Domini 1704 -

J Dudley

Att a Court of oyer and Terminer and of Generall goal Delivery helden by her Majesties Spesiall commission at the 21st day of June 1704 - present att sd Court John Gardner Esqr James Coffin Esqr Thomas Mayhew Esqr Benjamine Skiff Esqr and William Gayer Esqr -
Sabo Indian native of Nantuckett Island was Indited for wilfully Comitting and perpetrating of a murder on the body of margerett his Late wife on the 14th or 15th day of may last past the procedings were as followeth

Abigail Gardner of full age Testifyeth and Saith that on munday the 15th day of may Last past being att the Wigwam of Sabo Indian in the forenoon She there Saw the body of Margerett and Sd Sabos Squa Lay dead upon the Ground and had sundry blows and Chops given her upon the fore part and back part of her head and neck by which blows and wounds She Supposed to be the Caus of the Death of the sd Margerett

Sworn In Court July 14: 1704 attest Wm Bassett Clerk

Daniel Spotso Joh Hoyt Great Joseph David Towcopie Indians being Charged by the Court to speake the truth as in the presence of God they testify and Say that they with Eight more Indians being ordered by authority as a Jury of Inquest to view the body of Margerett Indian woman Soon after She was found dead that they all agreed that She was murdered by the hand of man, and that she had Sundry blows and Chops on the fore Side and back part of her head or neck, and further saith not Taken from their own mowthes by on Interpreter before the Cort July 14: 1704 attest Wm Bassett Clerk

Joel Indian being first Charged by the Court to speake the truth testifyth and Saith that sume time before margeret Sabos Squa was found dead he the Sd Sabo desired him the Sd Joel to help him att an Indian Court to make Complaint against sd margerett for keeping Company with one John an Indian man and that he persevered Sd Sabo was Jellous of his Sd Squa, and that he heard sd Sabo had once or twice attempted to take away the Sd Johns Life, and that he Supposed his Jellosye was the Grounds or Cause of the Differance between them Sd Sabo and his Sd Squa Taken from his own mouth July the 14: 1704 by on interpreter attest Wm Bassett Clerk

Long Joseph and David Towcopie after they were Charged as in the presence of God to Speake the truth Testifyeth and Saith that some time the week before Margerett Indian Squa was found dead She was att an Indian Court with Sabo her husband and She Complained that She was in feare (of her) that the Sd Sabo would kill her he haveing threatned her Sundry times, and as She thought did once attempt to doe it and the Sd Court of Sum of them Enquiring of Sabo whether it was true that he had threatned to Kill her the Sd Margerett he att first put it off and was not free to ownit but afterwards, it being urged upon him, the Sd Sabo owned that he had threatned to Kill her the Sd Margerrett, and that he did not Intend to doe it nor had not done it yet. Taken from their mouth by on Interpreter July 14: 1704 att Wm Bassett Clerk

Jsiah and Betty Indians being Charged by the Court that as they were in the presence of God to Speake the truth testyfieth and saith that they being att the wigwam of Sabo in the Evening before Margerett the Sd Sabos Squa was found dead they heard Sd Sabo say to his Squaw that he would have her to forgive him and She Replied that She could not doe it because she was afraid of her Life to Live with him because he had threatened to take away her Life. And that they went away that Evening and left Sd Sabo and Margerett in the wigwam and no other person with them, and yt the nex morning about about one houre and halfe after the Sun Rose they hearing that Sd Margerett was dead
went againe to Sd Wigwam and there Saw her lye dead and supposed by the wounds in her head that she was murdered by some person

Taken from their own mouthes July 14: 1704
by on Interpreter Attest Wm Bassett Clerk

Edward Coffin aged about 33 years Testifyeth and saith that on tuesday next after Margerett Indian Squa was found dead he Saw Sabo down upon Great neck at the westerly end of Nantucket In a hole that was there dug in the Ground, being there buried in sd hole Levill with or Lower then the Ground, and sd Sabo had then with him a hachett and two padles and this Deponent spoke to sd Sabo and Enquired whither he was going, but he made Little or no Reply seeming not to be willing to Speake, and after he was Gone some distance from that place he Saw an Indian Going down toward the harbour which he Supposed to be the sd Sabo and further saith not

Sworen In Court July 14: 1704
attest Wm Bassett Clerk

Ephrim als wenowes Indian after he was Charged by the Court as he was in the presence of God to Speake the truth Testifyeth and Saith that about three or four dayes after Margerett Indian Squa was found dead he the sd Ephrim found Sabo on tuckenuck, and that sd Sabo owned he had waded over the water to Com to that Island and desired him to Cary him over to Meskeket where sd Ephrim was going to Catch bas which he did and brought him back again to Tuckenuck and from thence to Nantucket, and then Mark Indian constable mett with him and tooke the sd Sabo

Taken from his own mouth by on Interpreter July 14: 1704
attest Wm Bassett Clerk

Mark Indian Constable Testifyeth after he was Charged by the Court as he was in the presence of God to speake the truth that after Margerett was found dead he had a warrant from the honered John Gardner Esqr to Serch after Such pson or psons as might be Suspected to murder the sd Margerett he mett with Sabo Indian at Capame being then brought from tuckenuck and he thought by what he had heard of sd Sabos flying and other actions that he was the person that had done sd murder and then he brought him before sd John Gardner accordingly

Taken from his own mouth by on Interpreter July 14: 1704
attest Wm Bassett Clerk

To the Honabl Justises of the Court oyer and Terminer and of Generall Goal Delivery holden for our Sovegne Lady Queen Anne by Speiall Comission att the Island of Nantucket the 14th day of June 1704

The Jurors for our Sovergne Lady the Queen do present that Sabo Indian native of Sd Nantucket Island In the Province of the Massachusets Bay in new England not having the fear of God before his eyes but being Seduced by the Instigation of the Divell on the fourteenth or fifteenth day of may in the year of our Lord 1704 and In the third year of the Reign of our Sov'nyne Lady Queen Anne over England & By force and armes and out of malice before thought of did make on assault on his wife being on Indian woman Caled Margerett in the house or Wigwam of him the Sd Sabo at a Certain place coled Mattequesham. She then and there being in the peace of God and of the Queene and the aforesaid Sabo with some tool or other thing did the Sd Margerett unlawfully and felloniously Strike Sundry blows upon the head whereby the forepart of her head was much brock and afterwards with an ax or Some other Iron tool Gave the sd Margerett sundry Chops or blows on her neck or back part of the head of which blows and wounds She the sd Margerett soon?
died and so the aforesd Jurors Say that the before named Sabo att the time
and place aforesd her the Sd Margerett of his Malice before thought of
voluntarily and felloniously did Kill and murder, against her Majties peace
her Crown and Dignity and Conterary to the Good and Wholsome Lawes of this
province In that Case made and provided

This bill being found by the Grand jury and the prisoner Caled and asked
whether he was Gilty or not guilty he pleaded not Gilty and put him Selfe
upon tryall accordingly

Upon which the Jury of tryals being Sworen according to Law and after the
hearing the Evidences and allegations the Jury was Sent out who afterwards
upon there Return Gave in yr vardict that they found Guilty and the Court
Gave Judgment persuant to Sd verdict upon which the Sentence of Death was
pronounced accordingly viz that he the Sd Sabo should be Caryed from to the
prison from whence he Came and from thence to the place of Execution and there
to be hanged by the neck untill he be Ded.

Grand Jurors
Stephen Coffin
Richerd Swaine
John Trott
John Colman Junr
John Buck
John Swaine Junr
Joseph Swaine

Indians
Daniel Spotso
Joh Hoyt
David tocopie
Great Joseph

Jurors of tryals
Wm Buncker
Robert Evens
Thomas Clarke

Bill: uara
Steven Coffin forman

Wm Bassett Clerk

Grand Jurors Sworen

Joseph Marshall
Steven Coffin Junr
Anthony Oder
An interesting behind-the-scenes view of the trial is provided by notes from the journal of a visiting English Quaker, Thomas Story:

...we proposed to them...to have a Meeting that Day; but there being a Court to sit then by special Commission upon an Indian, accused for murdering his Wife, we found it improper at that Time:.... On the Second Morning came Captain William Basset, of Sandwich, ...being a discreet Man, affable, of a good natural Temper and Understanding; who, with Justice Sift and some others...were commissioned to try the Indian aforesaid, to advice with me what to do in his Case, it being difficult to them; for they inclined to save the Man's Life for some Reasons, though the Evidence was full against him; but they had not yet given Judgment in form. I told them, "That seeing the Evidence was so full as they related, and the Crime heinous and mortal, if they gave Sentence, they were obliged, by the Law, to do it according to Evidence and Verdict of the Jury, and could not dispense with it as Judges; but if, for any good Cause, they inclined to Mercy, they might suspend Sentence, if the Nature of their Commission would admit of Delay, till they could procure a Pardon for him; or, they might give a Sentence according to Evidence, and suspend the Execution by a Reprieve, until a Pardon could be had from the Governor;...". They thanked me for my Advice, and took the former Method (Thomas Story 1757).

If Story is correct about the procedure followed, then we have no evidence that Sabo was actually hanged.

EVALUATION

Aside from providing the drama of a murder trial, the document presented here has considerable value for its many details about life on Nantucket in 1704. In addition, the transcript of the trial of Sabo for the murder of Margerett in their wigwam at Mattequescham provides data for a balanced discussion of Indian-English social interactions at a specific time and place. The English were indeed imposing their social and judicial system upon the Nantucket Indians (See Jennings 1975).
There were no Indians on the trial jury. However, from the venerable John Gardner to Ephrim, the Indian bass fisherman, the Nantucket English and the Nantucket Indians of 1704, with the support of Queen Anne, were sincerely and effectively trying to make their social and judicial system work, with mercy.

Lincoln, Massachusetts
January, 1980

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REFERENCES CITED

BASSETT, WILLIAM (clerk)
1704 Transcript of Trial of Sabo. Nantucket Registry of Deeds, 3:117-121

GOOKIN, DANIEL
1674 Historical Collections of the Indians in New England.
Massachusetts Historical Society Collections, Series 1, 1:141-227.

GUBA, EMIL FREDERICK

JENNINGS, FRANCIS

LITTLE, ELIZABETH A.

MACY, OBED

MACY, ZACHEUS
1763 Account of the names of the old Sachems....In The History of Nantucket, by Obed Macy, 2nd edition, 1880.

NICKANOOSE
1668 Deed to Quaquachwinet, Nantucket Registry of Deeds, 2:70.

STARBUCK, ALEXANDER
1924 The History of Nantucket. Goodspeed, Boston.

STORY, THOMAS

WANACHMAMAK
1678 Record for gift of land to Spotso's father, etc. Nantucket Registry of Deeds, 2:1,2.

WILLIAMS, ROGER

WINSLow, EDWARD

**********
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NOTES TO CONTRIBUTORS

AUTHORS of articles submitted to the M.A.S. Bulletin are requested to conform to the following regulations.

Manuscripts must be typed as originals with two carbons (or photocopies). Margins must be 1¾ inches (38mm) on both sides. Corrasable paper should NOT be used. Originals and copies are to be sent to the Editor for evaluation and comment. Typing is to be on one side of paper only with at least double spacing. Proper heading and bibliographic material must be included.

Manuscript headings should be prepared as follows:

THE PONKAPOAG SITE: M-35-7

Robert A. Martin

Bibliographic references are to be presented as follows:

GOOKIN, D.

They should be listed alphabetically by author; several references by the same author should be listed chronologically by year.

Intratextual reference citations are to include the author's name, date of publication, and the page, plate, or figure number, all enclosed in parentheses. as follows:

(Bowman & Zeoli 1973:27) or (Ritchie 1965: Fig 12)

Illustrations must be submitted to the Editor as originals and must conform to the following set of standards:

1. All illustrations must be planned with the page size in mind, either full page, half page or quarter page. Allowance must be made for caption. Special cases must be discussed with the Editor before illustrations are made.

Drawings should be made for same size reproduction, and must be sent as originals executed in India ink. NO WASH DRAWINGS OR PENCIL RENDERINGS ARE ACCEPTABLE.

Photographs must be glossy prints with HIGH CONTRAST. Standard 5"x 7" or 7"x 9" work out very well. Special problems, as with the drawings, must be referred to the Editor before preparation.

2. All illustrations are called Figures (including maps). They are to be numbered on the back in order of reference from the text. Every item in drawings or photographs must be properly identified either by number or letter. All lettering must be clear print and legible. All persons in photographs must be identified. Captions should not be considered part of the illustration.

Captions for figures should be typed on a separate sheet in order, numbered to correspond to the figures. Scales should be included with all figures for which they are appropriate, and they must be LINEAR (no "full size" notations).

Dimensions and distances should be given in English and metric units, or metric alone. The two systems should not be mixed within a text. If feet and inches are used, they are to be spelled out (no ' for feet nor " for inches).

THE EDITOR is receptive to archaeologically serious contributions of any reasonable length. Long pieces can usually be condensed effectively if they exceed the limits of our publication. The Editor welcomes short pieces and encourages contributors to write them.

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