# Bulletin of the Massachusetts Archaeological Society

**Vol. 26 No. 1**

October, 1964

## Contents

<table>
<thead>
<tr>
<th>Article Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Hill Marsh: A Closed Ceramic Site</td>
<td>Donald G. Scothorne</td>
<td>1</td>
</tr>
<tr>
<td>The Leaf Knife Complex</td>
<td>William S. Fowler</td>
<td>10</td>
</tr>
<tr>
<td>Indian Medicine: Fact or Fiction?</td>
<td>Nicholas N. Smith</td>
<td>13</td>
</tr>
</tbody>
</table>

**Published by the Massachusetts Archaeological Society, Inc.**

Society Office, Bronson Museum, 8 No. Main Street, Attleboro, Mass.
MASSACHUSETTS ARCHAEOLOGICAL SOCIETY

OFFICERS

President
Arthur C. Lord .................................. 38 Worcester Street, Bridgewater, Mass.

First Vice President
Harold F. Nye .................................. Marion, Mass.

Second Vice President
Donald C. Wilder .................................. 86 Brewster Avenue, South Braintree 85, Mass.

Secretary

Financial Secretary
Mabel A. Robbins ................................. 23 Steere Street, Attleboro, Mass.

Treasurer

Editor

Trustees
Society Officers and 2 Last Past Presidents
Douglas F. Jordan ................................ Walter Thomas, Jr. .............................. William B. Brierly
Col. E. C. Clark, Jr. ............................... Frank Kremp .................................. Robert E. Valyou

MASSACHUSETTS ARCHAEOLOGICAL SOCIETY BULLETIN published in four Numbers of one Volume each year, commencing in October.

Price this issue: $.75
(Subscription by membership in the Society: $3.00)

Note: Address all requests concerning membership to the Secretary; all orders for back Bulletin numbers (4 for $1.00 to members) to the Editor; and mail Society dues to the Financial Secretary.

BRONSON MUSEUM
Tel. 222-5470

This is the Society's museum, 5th Floor of the 8 North Main Street Building, Attleboro, Mass. — Museum hours are from 9:30 to 4:30, Mondays, Tuesdays, and Thursdays. For special arrangements to visit on other days, contact the Director, Maurice Robbins, or the Curator, William S. Fowler by mail at the Society Office, Bronson Museum, Attleboro, Mass.

The Museum includes exhibits of artifacts and seven dioramas portraying man's prehistoric occupation of New England. The displays are arranged so as to show man's development through four culture stages, from early post glacial times.

The most recent diorama extends 15 feet across the front of the museum. It depicts an Archaic village of seven large and unique wigwams as indicated by their foundations, excavated at Assowampsett Lake by the Cohannet Chapter. Human figures to scale make the scene come alive and help create what unquestionably is an outstanding addition to our ever growing museum displays.
After making a survey of the Duxbury area for evidences of aboriginal occupation in September of 1961, the writer located what appeared from test pit digging to be concentrated evidence in a large cedar marsh. This lies in a westerly direction from the town of Duxbury, Massachusetts, and takes its name from an elevation nearby called North Hill. A wood road leads to the site, which covers most of a flat, low elevation or peninsula-like tongue of land that juts out into an extensive cedar marsh partly surrounded from northwest to southeast by an abrupt forty foot hill (Fig. 1). This lies about one mile distant from the ocean, with no connecting navigable water course.

Grateful acknowledgement is due Roy Parks of Duxbury, who granted the writer permission to excavate the site by controlled digging, and to retain all recovered artifacts for study. Also, the writer is indebted to Charles Rinehart, who assisted in the work of excavation on many occasions. This co-operation has contributed greatly toward accumulation of evidence, as presented in this paper. Also, my thanks go to the Society Editor for useful suggestions received and for the illustrations, which accompany this report. These provide the means for a more complete understanding of what the recovered artifacts look like, which often is next to impossible from a written description.

Excavation was confined to that part of the peninsula lying south of the wood road, as shown on the map by dash lines, and covered about 4,500 sq. ft. The camp has weather protection partly from the previously mentioned hill, and from the wooded marsh surrounding it on three sides. Access to the site must have been overland, as there is no navigable water course nearby, which could have...
been used for canoe travel. A spring exists at the easterly end in the marsh, which evidently provided an adequate water supply to make this a favorite retreat, as suggested by the relatively large quantity of recovered artifacts. Camp litter was strewn about intermixed with firestones, potsherds, chips and broken stone material. The work of excavation was carefully conducted by scraping with a trowel or a sawed-off hoe, and the area was completely dug. As the work progressed, important occupational features were noted, as recorded on the site map. Two open hearths were found, located within and to one side of two oval areas of blackened occupational accumulation. These are presumed to represent the remains of two wigwam lodges, although post molds were indistinguishable, probably on account of the mass of thick lodge floor blackened deposit. Nearby, two more oval blackened areas may have marked the position of other wigwams, although they contained no hearth like the others. The occupants were shellfish eaters, as two shell middens appeared among the wigwam implacements. Evidently, they preferred to dispose of shell refuse in these middens and in refuse pits, rather than let it accumulate around them; shell evidence in the camp litter was negligible. If the four wigwams were the only ones in the area, the site seems to indicate occupation by a small group over an extended period of time. One important asset, which is a big help in learning the truth about site activities, is that the plot has never been plowed, or disturbed by the whites, except by intrusion of the wood road. This has offered no disturbance to the excavated area that lies to one side of it. Consequently, recovered artifacts and features should represent undisturbed remains in position as left by the aboriginal occupants.

SOIL FORMATION

Humus has collected over the area from vegetative and occupational organic remains to a depth of 4-6". This comparatively shallow layer of top soil contained all recovered artifacts. Directly below extends a foot or more of yellow sandy subsoil, underlain by white sand. Although excavation was repeatedly carried down to the white sand, artifacts, chips, and other evidence of man’s presence were absent below humus. Consequently, it soon became apparent from artifact types found in the humus that cultural differentiation was not going to be a problem, as will be shown by study of the type assemblage recorded in a following section.

OCCUPATIONAL EVIDENCE

The four wigwam enclosures and two shell middens have already been mentioned, as indicating a small group of shellfish eaters, who must have used the camp for a long period of time, to judge from the relatively large number of artifacts they left behind.

Among those occupational features of foremost importance are 143 refuse pits, concentration of which has been indicated on the map. They had their level of origin in the black humus top soil and extended into the yellow subsoil. It was noted that they all tended to have enlarged bottoms with relatively smaller openings at the top. Nearly everyone contained artifacts of one kind or another, and shell refuse appeared in about half, while many yielded large animal bone remains. As a matter of fact, a large majority of all artifacts recovered came from these pits, and only a small number from the surrounding humus layer. Partial remains of 3 ceramic Stage 2 pots were found in three separate pits. In one of these, also, appeared one or two teeth and a few bone fragments of a large animal. Subsequently, they were identified by Harvard’s Peabody Museum as belonging to a Rangifer caribou, evidently a survivor of earlier extensive herds, which once inhabited this region.

One dog burial was located among the pits. It contained the remains of a small dog, not one of the larger Indian wolf dogs more commonly found on sites. No other burials were uncovered.

Pottery remains were everywhere in evidence, of which 2,500 potsherds were recovered. As work continued, broken fragments repeatedly appeared among the camp litter in the humus, but generally were small, from body sections of undecorated pots. However, partial remains of 3 Stage 2 pots, already referred to, have provided a means of determining the probable age of the occupation. One of these recoveries is illustrated (Fig. 2, #3,5). Enough of its sherds were contiguous to form the base of the pot, while one good sized rimsherd has provided evidence to show the styling of the pot’s upper body. Upon careful examination it reveals a conoidal based pot, sharply undercut, but still retaining the classic pointed bottom. The pot has a flat rim, straight neck, and is cord-marked outside, but stick-wiped inside. Coiling is clearly indicated, and the ware is quite thick, of probable vegetable temper. These characteristics indicate a pot of Stage 2 manufacture, probably shortly after the close of Stage 1 pottery making, since stick-wiping
has replaced the earlier technique of interior cord-marking. The other two ceramic remains indicate pots of the same period, which enables a fairly close guess as to the site's probable date of occupancy. This might be about A.D. 1000, or during the early years of Stage 2 times. A fragment of an elbow ceramic pipe, as illustrated, was recovered from a pit, which indicates that by this time, potters had begun to make pipes of clay; formerly they were of stone.

Bone implement evidence is fragmentary; only one good splinter awl was recovered from a pit, while a worked antler tine may have been a projectile point — both are illustrated.

Workshop features were noticed in two parts of the site, as noted on site map inside of dotted lines. Apparently, here most of the stone artifacts had been made, for concentrated masses of chips were scattered all about. In another section indicated inside of dotted lines, surrounding one of the wigwam emplacements, about 90% of all recovered scrapers were located. This localized separation of an implement trait is of rare occurrence, and seems to be without explanation.

Finally, a curious feature was discovered at the westerly end of the site, where the outlines of some sort of a structure were marked by 12 postmolds, each with a pointed base that extended into the yellow subsoil. As indicated on the map, this structure, whatever it was, appeared to have a rectangular shape like a long house, but probably was something else; the three pairs of unusually large 10" diameter posts through the center do not seem to fit the requirements of such a shelter — instead, it might better have been a smoke house of some sort.

**CULTURE IDENTIFICATION**

While general occupational evidence, as presented, is useful to determine certain aspects of the settlement, it remains for the stone implements — 2,164 recoveries, identified and recorded — to per-
form the important function of revealing the culture of its occupants. A contributing factor toward this end, of course, is the interpretation of pottery recoveries, as to their temporal position in the evolutionary development of ceramics. In the preceding section, the site's pottery has been shown to belong to the early phase of Stage 2 pottery making, but now, examination of the stone implements confirms the age assumption already predicated by the ceramic measure.

Enough sites have by now been excavated and reported by different Society members to offer reasonable proof of culture diagnostics as related to many different implement types. Especially, at sites where Archaic culture remains underlie those of the Ceramic Age, comparative analysis has worked to the best advantage in the identification of these types. From numerous reports in the Society Bulletin of other sites, the implement traits from this Duxbury site seem to fit typologically into the framework of the Ceramic culture. This will become more apparent as outlined under type headings that follow. In relation to the different stone materials used, it is interesting to note that in addition to all preferred indigenous stones of the area, a certain kind of black flint frequently appeared. While this may have come from glacial till cobbles, it may equally as well have been imported from Hudson Valley flint deposits. The stone has a good conoidal fracture, and has a dense dull black, smooth surface. Numerous chips of this flint were made into various small tools, as illustrated and described further along. Note: 'Number in first set of brackets below indicates quantity recovered.

PROJECTILE POINTS, (843) (Fig. 3). The Large Triangular type — 483 specimens — includes 3 notable variants, as illustrated. These have a shallow pointed base, possibly the invention of one stone worker. This large blade type appears first with early Stage 2 pottery at the Sweet-Meadow Brook site in Rhode Island, and is held to be diagnostic of this age. It seems to be the most important projectile of the North Hill Marsh site to judge from its high frequency.

Next in importance comes the Small Triangular type — 342 specimens — most all of which have straight to slightly concave lateral sides like type #5, and repeatedly have been found in the Ceramic zone at other sites. An occasional type #4 with convex lateral sides, found in the assemblage, probably represents some overlapping of ideas from the Archaic, of which it is held to be diagnostic.

Other types of points are conspicuously small in number, including Small Stem — 9 specimens, Corner-removed #3 — 6 specimens, and Side-notched — 3 specimens. While these types have been found in the Late Archaic zone at other sites, they are frequently present in the Ceramic zone as well.

DRILLS, (41) (Fig. 3, #39-46). The Crescent type — 9 specimens — has a concave base, and has never been found in Archaic zones, always in the Ceramic. The T type — 10 specimens — is more often found in Late Archaic zones, and is believed to be the original form from which the Crescent type developed. Some of the site's T-base specimens are ill-defined, with a slight concavity in their base; may well have been intended for the Crescent type (Fig. 3, #39). By far, the largest number of drills is represented by the Flake type — 21 specimens — which has a nondescript flake base. The Diamond type — 1 specimen — is not common, but has its counterpart in the Diamond projectile point, which frequently is found in the Ceramic zone.

SINEWSTONE, (9) (Fig. 4, #2,3). This implement is thought to have been used in softening bow strings, and if so, fits best the Ceramic Age, since by then, use of the bow-and-arrow was on the increase. It has never appeared in Archaic zones at other sites.

PENDANT, (1) (Fig. 4, #5). Only the one specimen, as illustrated, was found. This has a curious X on one side, which may have a meaning, if it could be deciphered.

RED OCHRE GROUND CORE, (1) (Fig. 4, #4). This recovery indicates the use of this soft stone in making red paint.

WAR CLUB PRONG, (23) (Fig. 4, #7-9). This type of small pronged club, made to set into the end of a handle, is always found in the Ceramic zone, and is thought to indicate the presence of warfare.

PESTLE, (3) (Fig. 4, #1). This type of tool, when relatively long, is known to have been used for grinding maize in mortars. Since the coming of maize is believed to have taken place during the advent of pottery, it seems to fit well in a Ceramic culture complex.

SCRAPERS, (1,145) (Fig. 4, #10-25). The Steepedge type — 721 specimens — seems to have been the most popular, since it accounts for almost 65% of all scrapers found. However, it is of common occurrence in Archaic zones, also, so has no diagnostic culture significance. This is similarly true of the
Fig. 3. PROJECTILE POINTS AND DRILLS, North Hill Marsh Site. Points: 1-3, Corner-removed 1-3; 4-6, Side-notched 4-6, 7-17, Small Stem; 18-38, Small Triangular, 47-49, Large Triangular Variant; 50-55, Large Triangular. Drills: 39-42, Crescent; 41, Diamond; 40, 43-46, Flake.
Fig. 4. MISCELLANEOUS ARTIFACTS, North Hill Marsh Site. 1, Pestle; 2, 3, Sinewstone; 4, Red Ochre; 5, Pendant; 6, Graver; 7-9, War Club Prong; 10-14, Steepedge Scraper; 15-22, Stem Scraper; 23-25, Flake Scraper; 26, 27, Stemless Knife.
Stem type — 133 specimens. When it comes to the Flake type — 304 specimens — the sizable number recovered indicates another favorite kind of finger scraping tool. A separate illustration of retouched flake implements (Fig. 5) serves to call attention to the frequent use of igneous stone, including flint flakes, quickly retouched and shaped into scrapers or knives by Ceramic artisans. Too often, such flake tools are ascribed to earlier culture periods without admitting the possibility of their affiliation with any culture as late as the Ceramic. Furthermore, recovery here of 4 Flake Gravers of Flint and 1 of white quartz (Fig. 4, #6), associated as they are with Ceramic artifacts, should show that even this implement, usually attributed to the Paleo culture, may sometimes appear as late as Ceramic times.

KNIVES, (25) (Fig. 4, #26,27). Blades used as knife-cutting implements occur mostly in thick cores, with at least one sharp serrated edge; their shapes are ill-defined and cannot be classified. A few, only, have forms sufficiently well-developed to place them in the Stemless type, as illustrated. Several of the small Flake type, also, were uncovered as previously mentioned.

HAMMERSTONE, (14) (Not illustrated). This implement type is well represented in all sizes. They are made of durable igneous stones; were used as percussion chipping tools in shaping stone implements.

RUBBING STONE, (38) (Not illustrated). Two large, and 36 small specimens of this type were found. Apparently, they had been used for various kinds of abrading work, and were of generalized shapes. They could be associated with the Archaic as well as with the Ceramic culture.

HAND SPADE, (7) (Not illustrated). This tool, flat and crudely formed with a wide blade and rough hand grip is thought to have been employed in digging the many refuse pits. However, it probably was not the only tool used for this purpose. Such a tool is found in the Late Archaic zone, at other sites, and seems to be just another tool trait to be carried over into the Ceramic Age.

CONCLUSION

When all the evidence from this site is assembled and studied, there seems but one conclusion to be reached: a closed or pure culture site of the Ceramic period. Especially impressive is the presence of a very large quantity of Large Triangular points, held to be most diagnostic of Ceramic times. Add to this, other diagnostic traits, such as Small Triangular #5 point, Crescent drill, Pestle, Sinew-stone, and War Club Prong, and this postulation becomes more convincing.

Among the most telling evidence is the Stage 2 pottery and shellfish remains. As reported at several Narragansett Bay sites in previous Bulletin issues, stratified remains show that shellfish were not added to the diet until the advent of pottery. When all this evidence is confined to a thin layer of humus, as at this site, with no occupational remains occurring below, there can be little doubt, if any, of the existence of cultures other than that of the Ceramic.

This site appears to have been used by only a few people, who lived in four wigwams. And yet the great quantity of artifacts, both broken and perfect, they left behind seems unrealistic for so few people, unless their residence was one of long
duration. However, continuous occupation based on this assumption appears out of the question. A swamp would be the last place in which to spend hot summer months; its hordes of black flies and mosquitoes would prevent it. Therefore, it seems probable that the site served as a winter hunting camp, to which its occupants returned year after year during Stage 2 pottery times. They were confined within a comparatively small area by the surrounding swamp, and therefore were more careful, it would seem, to dispose of shell refuse in middens and pits, than otherwise might have been the case.

Besides the importance of this being a closed site, with the advantage of studying its associated artifacts more objectively, the occurrence here of a new Large Triangular point variant with pointed base is of the greatest interest. It may be the first appearance of this particular projectile point modification, although a somewhat similar Stem knife variation is illustrated in the recent Society implement classification. But above all else, since this

---

**Fig. 6. CEREMONIAL PIT GOODS, North Hill Marsh Site.** 1-4, Small Triangular—5, 6, Large Triangular—7, Small Stem—8, Elongated Triangular—9, Corner-removed #3 Points; 10-15, Graver; 16, 18, Crescent Drill; 17, Plain Drill; 19, Rimsherd (Stage 2); 20, Stem Knife; 21, Flake Knife; 22, Stem Scraper; 23, Shaft Scraper; 24, Steepedge Scraper; 25, Pendant; 26, War Club Prong; 27, Hatchet Club.
site has been shown by the presentation of evidence to be a closed site of the Ceramic Age, all its artifacts must belong to that period; do not require differentiation from some earlier culture.

Pembroke, Mass.
September 1963

APPENDIX

On a day late in 1963 the writer revisited the North Hill Marsh site with the intent of exploring any promising looking area not previously excavated. One spot in particular seemed to have possibilities. A large tree stood on the edge of the site, and because of its size, former digging had avoided the area immediately surrounding it. This seemed to provide a chance for further investigation, if one were willing to dig around and under its big roots.

Almost at once, red burned dirt with bone content was struck about 6" below the surface at junction. This disturbance continued for about a foot and a half without producing anything more interesting. It was necessary at this point to begin to dig down and under the tree, and without more tangible inducement the work would doubtless have soon ended. However, just then, black greasy dirt appeared, which was an encouraging sign of something more to come. Soon, artifacts began to appear in quantity, many more than usually occur in a refuse pit. The root system had now become a definite hindrance, but in the excitement of anticipation it was attacked in real earnest, since the evidence indicated an important deposit lay below.

When the pit was finally dug out, it measured about 2½ feet in diameter, and extended to a depth of 2 feet. Throughout its greasy black content were scattered a diversified assemblage of artifacts, most of which were perfect — a representative display is illustrated (Fig. 6). An enumeration of the entire recovery, including a few broken specimens, reveals an astounding variety of implement traits. Their presence altogether in this deposit is difficult to explain. They consist of 2 Large Triangular, 7 Small Triangular, 1 Side-notched, 1 Corner-removed #3, 1 Elongated Triangular, and 1 Small Stem projectile points; 2 Crescent drills and 5 ill-defined broken ones; 2 Steepeedge and 1 Stem scraper; 1 Stem and 1 Flake knife; 2 Rubbingstones; 1 Hammerstone; 1 Hatchet Club; 1 War Club prong; 1 Pendant; 7 Gravers of flint; 1 sandstone slab about 7 x 11 x ⅜" with a large perforation pecked through each of two prominent ears at one end, with all edges carefully chipped to produce this tongue-shaped object (not illustrated); and 1 large rim sherd from a Stage 2 pot — thick ware, mineral temper, flat rim, stick-wiped inside and out.

Underneath this deposit of artifacts at the bottom of the pit was a thick 6" layer of red powdered ochre. It contained no artifacts, but evidently was a part of the deposit. It suggests a ceremonial significance of some kind, since red ochre usually is found associated with burials. However, no bones of any kind were recovered from the black deposit. Consequently, if this deposit had to do with a mortuary ceremony, it seems probable it represents a secondary burial without the body. Either a cremation had been performed at another spot, or what is more probable at this middle Ceramic date is that the body had been lost in battle, or as a result of some accident, such as drowning. [Previous uncovered evidence at several sites suggests that the cremation practice of the Late Archaic had ceased to be a part of mortuary rites by Stage 2 Ceramic times — Ed.].

The writer was surprised to find the 7 flint Gravers (illustrated), in view of what has been previously written on the subject. According to these reports, Gravers are supposed to be diagnostic of the Paleo, where they are associated with Fluted points. But here they now appear, made in similar fashion to those of the Paleo, and associated closely with Large Triangular and Small Triangular points of Stage 2 Ceramics — presence of the potsherd as indicator of early middle Ceramic times leaves no further evidence to be desired. Consequently, it now is clear that Gravers, even when made of flint, may be anticipated in New England recoveries on levels as late as the Ceramic Age. [What makes this burial Graver feature so convincing is that it is surrounded by many diagnostics of the Ceramic: Large Triangular and Small Triangular #5 points; Crescent drill; Hatchet club; War Club prong; while no Archaic diagnostic is present — Ed.].
THE LEAF KNIFE COMPLEX

WILLIAM S. FOWLER

Among various kinds of knife blades, a finely worked one, classified as the Leaf type, has been held to belong to the Early Archaic culture period. However, until recently, its association with this zone of occupation has not been entirely clear. At sites where it appeared, some intrusive element always occurred to interfere with a clear-cut interpretation of the evidence, such as confused levels of occupation due to wind or water erosion, or a broken segment appearing disturbed and out of context. Nevertheless, the blade has continued to be considered an Early Archaic trait for the reason that it has never appeared in the Late Archaic at stone bowl quarries of that age; Stemless and Stem knives have occurred instead. Nor has it appeared in the Ceramic zone of occupation that followed. Consequently, documentation of its separation from the Late Archaic in the lower zone of the Early Archaic at Mill River site in Mendon, Mass., was received with much interest.

At this site, excavated and reported by Stanley M. Roop, Bulletin of the Massachusetts Archaeological Society, Vol. 24, No. 2, five specimens of this knife were recovered, of which one is illustrated (Fig. 7, #2). Concentration of the trait was well defined as being in the lower zone, attributed to the Early Archaic and associated with its projectile point types: Corner-removed #5,8,9, and Bifurcated. The Leaf knife from this site has contours usually ascribed to this type: a broad blade circumscribed by convex sides, which converge symmetrically to a point at one end, and to a broad convex base at the other. It is made from a relatively thin spall, skillfully chipped with carefully worked serrations along both edges, and tends to large proportions rather than small. It should not be confused with the more casually chipped Stemless knife, which is elongated with an irregular expanding base, usually with only one edge serrated, and in forms which often include small sizes.

Examination of knife blades of the Leaf type, in collections consisting mostly of surface finds, has revealed some with slight differences in shape from the classified type. For example, certain specimens have irregular convex bases, while others are more truncated but retain all other characteristics of the type. However, failure to uncover any of these variants at excavations has precluded the chance of connecting them with the Leaf type, so that their culture affiliation remains in doubt.

Still another presumed variant has been observed in surface finds, which is the prime reason for his report. It conforms to all Leaf type traits, but in addition its base, instead of being expanded, is brought to a carefully worked point in symmetrical balance with that at the opposite end. This double pointed blade, while relatively sparse in this area, has an apparent wide distribution throughout many regions of the Continent, and in South America as well. It is referred to as being relatively thin with evenly worked proportions, and in many places has been considered to belong to an early period. Two fine specimens have been recovered in the eastern part of Massachusetts as surface finds, and are illustrated (Fig. 7, #1,3). Exhibit #3 was discovered in 1945 by Adrian P. Whiting while hunting, along a wood road between Little South and Great South Ponds in Plymouth. From a worn rut in the road a small part of the blade's edge protruded slightly, enough to be noticed when Whiting stooped down to pick up a pebble that resembled a plummet. This knife specimen is unusually thin and expertly serrated along all edges. It is made of stone, which is not easily recognizable on account of heavy patina that covers its sides. Presumably, it is some kind of igneous material, which appears to have the graining of felsite.

Exhibit #1 was found in 1961 by William T. Williams in Merrymount Park, Wollaston, just south of Boston. Apparently, it was dislodged and exposed to view as a result of the churning of wet soil from auto parking, on what probably was a former aboriginal camp site; other artifacts are frequently recovered on the plot in the same way. This specimen is made of a light bluish-gray felsite impregnated with tiny phenocrysts, and seems likely to have come from Blue Hill felsite deposits, only a few miles distant. If double pointed knives of this kind do belong to the Early Archaic, then these two recoveries must have found their way up from lower levels to the loam by some later day disturbance, such as plowing. Sometime, persistent excavation of sites may be able to locate this type of blade in situ and so solve the problem.

Until such time as an actual excavated recovery of this Leaf knife variant is made, it is worth noting that at Wapanucket 6 on Assowampsett Lake, Mass. an unusual knife blade with some similar traits was located in a secondary burial pit.
with red ochre, and a small amount of charcoal (Fig. 7, #4). A sample of the latter furnished a Carbon-14 date of about 4,500 years ago, which would place the blade near the beginning of the Late Archaic, estimated at about 5,000 years ago. This knife is double pointed, of thin but broad proportions, and has only one of its convex sides ground to a cutting edge. It is made from a beautiful piece of banded gray slate, ground smooth all over like an Ulu, but with a double pointed shape that is dissimilar. It has been argued that its large size, aesthetic characteristics, and irregular double pointed shape may indicate a special development. And that this together with its deposition in a secondary burial may denote its manufacture expressly for ceremonial use in connection with human cremation rites of the Late Archaic. This ground blade with its double points seems to resemble in this respect the double pointed chipped Leaf knife, which may indicate culture association. If this is so, then this recovery goes part way in suggesting a Late Archaic position at the start of the age for the double pointed chipped Leaf knife. Also, the evidence suggests that the double pointed chipped blade may have emerged from the Leaf knife of the previous age.

Bronson Museum
January 1963
APPENDIX

Several Society members of the Massasoit Chapter of Plymouth have been excavating a site at South Carver. It is located on a peninsula, which juts out a short way into East Head Pond, and is sparsely covered with 30 year old trees. Black loam overlies a sandy subsoil. This is separated from the loam by a 2" irregular junction stratum, which seems to indicate that the area has never been plowed. Good evidence of aboriginal occupation has inspired continued exploration of the area by careful excavation, and several interesting artifacts have been found.

In January of 1963, Robert G. Hacking made an unusual recovery at the site, which is directly connected with the subject of this paper. Facts concerning it are added as an appendix, since recovery was made after this report had been completed. Without noting any disturbance, Hacking ran into artifacts some 5" below junction. From then on, more were found at lower levels down to 20" below junction on white sand, but all within about a 3 foot diameter area. Altogether, there were 11 separate artifacts, many representing fractured segments of the same blade. No calcined bone, charcoal, or red ochre occurred to aid in determining the nature of this deposit, whether a pit or not. When these specimens were cleaned and assembled, they formed three complete blades (Fig. 8). A 6½" in length double pointed Leaf knife is the most outstanding of the group, since it is the first time, so far as is known, that a chipped specimen of this type has been recovered by excavation. But of equal value are the other two specimens —

Eared #2 elongated projectile points — since this type of point is held to be diagnostic of the Late Archaic era. The Leaf knife was in 8 pieces, while one of the points was broken in two. Since these fragments were found mixed together, even though at different levels, the implication seems to be that they represent a pit deposit of some kind.

After the broken parts of these implements had been glued together, they were brought to the Bronson Museum, where they have been carefully examined. Several interesting observations have resulted, which seem to shed new light on the possible reasons for their deposition.

All three specimens are made of porphyritic felsite. The knife and longer point are relatively thin, while the shorter point is chubby and thick. The first two reveal definite exposure to extreme heat, by virtue of color fading to a washed-out gray and pink, respectively. They are what is called fire-burned. An unusually light spot on each indicates the point of fusing, where the fire was the hottest. Here, the stone was weakened in each implement. In the case of the knife, this fused area is nearly half way up the blade from the right end of illustration, and at this point there are four fractures, the remaining four occurring over the rest of the blade. There are only three small breaks along the edges, where parts are missing. This is significant, for, if the blade had been subjected to a percussion blow, there would have resulted a more complete shattering with many small missing parts. In the case of the elongated Eared #2 point, fusing took place at its base, with the result that both ears have crumbled away, while the fracture occurred through its center.

Fig. 8. CACHE OF BURNED ARTIFACTS, East Head Site. 1, 2, Eared #2 Points; 3, Double Pointed Leaf Knife.
While the remaining Eared #2 shorter point shows some fire-burning, apparently, it was not exposed to as much heat as the other two specimens. And because of its additional thickness, it withstood the heat and did not fracture.

After analyzing this East Head recovery, the evidence suggests an intentional deposition of the Late Archaic, when it is known that human cremation was practiced. Since there was no charcoal found with the implements, they could not have been exposed to fire at the place of deposit. Therefore, the assumption is valid that they represent a redeposit from another place where they came in contact with fire. This would seem to fit the theory that they were first exposed to fire in a crematory, from which they were taken and redeposited in a secondary burial. As it is known that such a deposit often occurred with only stone implements involved, when no red ochre was available, it is not strange that only implements should appear as grave goods in this present instance. Apparently, they were weakened by fire in the crematory, but actually became fractured, only during their disposal in the secondary burial pit.

It seems safe to conclude that at the East Head site during Late Archaic times, soon after the start of the age, human cremation was a mortuary custom, and was practiced by its occupants. This being probable, it is likely that a crematory lies nearby, and that other secondary burial deposits exist at the site. Recent recovery there of calcined human bones, appearing in a single deposit, suggests the existence of cremation activity. Also, occurrence at the site of a fire-burned Full Grooved ax lying below junction seems to be additional evidence in support of this belief; it might have been accidentally dropped in moving it from crematory to a secondary burial.

In primitive society the medicine man held a position of much prestige. Unlike modern doctors the medicine man never admitted that he could not effect a cure. There was little if any formal training in the mysteries of the healing arts. The primitive Indian knew nothing about germs. Disease was caused by an offended spirit or neighbor. To the Indian, “medicine” had a different interpretation than to the European. Many Indians had “medicine” but a few had stronger “medicine” than most. This type of medicine was the possession of and control over supernatural power. Usually, one learned that he had “medicine” by accident. Perhaps in a fit of anger he wished harm to come to a neighbor who had offended him. If something bad happened to the offender, this was enough to convince everyone that the offended one had “medicine.” The sufferer had to find one with more powerful “medicine” to gain relief.

Once a person found that he had “medicine” he tried to find a way to increase his power. Medicine men had animal spirit helpers. In 1953 the late Passamaquoddy, Sabatus Tomer said that four animals still had this power: spiders, weasles, crows, and wolverines. Another important possession was the medicine bag which contained an image of the animal spirit helper: roots, sticks, bark, and perhaps a flute or whistle. Magic or the supernatural played a large part in Indian healing. Flannery said:

“It seems safe to say then that shamanistic practices in the northern belt were employed preponderantly in the magico-religious activities concerned with hunting, and directly with health only insofar as illness was caused by witchcraft. There was no distinction into various classes of medicine men, nor was there any recognized apprenticeship. The general pattern was modified locally and within the local pattern there was rather wide scope for individuality.” (Flannery, p. 266, 1939).

Music, too, had its part in curing. The drum and rattle along with the discordant song of the medicine man were supposed to aid in driving away evil spirits. E. T. Adney says in his unpublished manuscripts: “So when the old Malecite Shaman beat the medicine drum it was through him that the Sun was speaking, and when he rattled the tortoise shell, it was the Moon speaking . . .”
Disease was a condition resulting from offending a spirit or neighbor. While among the Naskapi, Speck observed: "Disease arises from neglect of observance of requirements of the soul-spirit; so does death. Also the ‘arrival’ of alien and hostile spirit forces in the body causes ailments and death." (Speck, p. 224, 1935). Since the Indians never doubted the system, faith healing was the medicine man’s greatest power. Whatever the medicine man said was inevitable. The power of the mind is illustrated by Wallis’ observation: "...a man still feared contact with a menstruant, for, he believed this would deprive him of the use of his legs. Should this happen, he would not attempt to take a step, convinced that he was helpless ..." (Wallis & Wallis, pp. 244-245, 1955).

Cuts, broken bones, eye irritations from smoky fires, skin irritations, burns, frozen limbs, and stomach ailments were common disorders easily cured by the northeastern Indians. Women generally knew the herbs for curing them, and no medicine man was involved unless infection (bad spirits) set in.

In a short time the whole way of life changed, after the advent of the Europeans. Disease seemed to attack the Indians from the ocean, up rivers and even on large lakes. The medicine man or shaman must have greatly increased his business and power for a time, while germs from the far corners of the world carried by those aboard the European ships ran rampant among the Americans, who had never been previously exposed to them. It did not take the Indians long to observe that coastal people were the first to get the diseases, and gradually the pestilence moved deeper into the forest, as the whites encroached on their lands. The redmen thought that the whites were showing that they had the stronger "medicine" and that the Indians, therefore, should bow to the Europeans.

There were many ways in which disease could catch the Indians unawares. The change to European clothing often brought disease. Even now the Danish government does not permit clothing to be given or sold to the Eskimos of Greenland, fearing the introduction of germs.

"It is difficult to gauge the influence of European clothing upon the health of the Indians. In a cold climate like that of eastern Canada the superior article of clothing would have been that which possessed the greater protective property, and it is well known today that no cloth ever manufactured by a European has equaled the fur of the Indian as a protection against inclement weather. Moreover it is possible that skins absorb sweat better than wool, and in this respect the native material was perhaps more sanitary." (Bailey, p. 62, 1937).

The fur trade brought with it a shortage of meat. Europeans introduced many strange foods which began to supplement the red man’s diet. "European foods tended to unbalance the diet of the natives causing and facilitating the spread of disease." (Van Vart, p. 577, 1948)

Each medicine man must have tried very hard to find a cure-all for periodic maladies. Many times shamans were aided in their dreams. Penobscot, Passamaquoddy and Malecite have similar tales relating to the origin of medicines. Perhaps this was a dream in which a medicine man was told to use acornus calamus, popularly known as calamus root or muskrat root, to cure one of the early epidemics. Basically, the three tales tell the same story, but just as different columnists report the same story in a different vein, so do these. They suggest that Indians were present for a long time before they were bothered by disease, and then suddenly something terrible came with which they were unable to cope. Perhaps, too, many Indians had observed the importance that Europeans placed on their herb gardens.

European interest in the medicinal plants of the new world began very early. Dalechamp, Clusius, Lobel, and Alpinus, all 16th century authors refer to North American flora. Indian corn, sidesaddle flower, columbine, common milkweed, everlasting, and arbor vitae were known to these men before 1600. It was said that Clusius obtained a sidesaddle flower, which he drew, from Claude Gonier, apothecary at Paris. He got it from Lisbon, where it had been taken by a fisherman from the Newfoundland coast. Linnaeus said that the evening primrose was known in Europe as early as 1614.

It seems that the native Americans were aware of the importance that Europeans placed in herbs for the curing of diseases from the earliest contact period. It would be only natural for the Indians to look to herbs for cures as well.

It might be expected that shamans and medicine men would soon fade away with the establishment of a strong European culture in North America. In spite of government health aid to the Indians of Maine and the Maritimes, medicine men are still popular. Certain conditions predetermine that one will be a medicine man. The seventh consecutive son born in a family, or a baby born on
February 29th, is destined to be a medicine man. Obviously the latter criteria of fairly recent origin, perhaps, was established to fill a need to have doctors. Northeastern Indian communities have always lacked a well-developed social organization. Those elected to the few positions, still, actually have little power. Those who are said to possess “supernatural power would give authority in the absence of social organization.” (Eckstorm, p. 110, 1945).

A middle-aged Malecite couple told the author that when they were young it was practically unknown for an Indian to have his appendix out. If a person even suggested that he wanted to undergo an operation for appendicitis, neighbors considered that he wanted to be like a white person. It was much better to patronize their own herbalists. In 1951 the late Gabriel Polchies, a Malecite residing at his wife's home on the Penobscot Reserve at Old Town, Maine, said:

“Indian medicines are safe. You can drink any amount and they won't hurt you. Not like white man's medicines that kill you if you take too much. I can make medicines to cure anything. White doctors put salve on wounds. That wrong. Wound must make scab, then heal underneath out, not from top down. I have medicines that form scab and heals underneath. No good to tell white man, medicines must tell someone of other sex; otherwise no good. I'll tell my wife someday. I can make medicine that will relieve consumption. No white man cough medicine will do that. No alcohol in it either.”

In 1953 Gabe’s brother who was then Chief of the Kingsclear Reserve was asked about Indian medicines by Jerry Gillespie, reporter for the Daily Cleaner. The Chief was reluctant to reveal herb secrets and said: “There's no reason why whites should bother about Indian remedies when they have their own high-priced medicine men and streamlined hospitals.”

The role of the women should not be underestimated in preserving the herb medicines. The braves went off to war with the Europeans, to the trading houses and even aboard ships, but for the most part women remained at home. A few married traders but the majority of women had little association with those from across the sea. When they needed medical attention they would call on one of their own herbalists rather than a stranger. Many women had an excellent knowledge of the healing herbs.

The eastern Indians used the following medicinal plants which were introduced from Europe: barberry, bittersweet, burdock, buttercup, caraway, catnip, chamomile, dandelion, elcampane, live-forever, mullein, pennyroyal, peppermint, plantain, rose, spearmint, tansy, and yarrow. Since the same variety of lily of the valley is found on both continents, it is difficult to determine if the Indians used it medicinally before the coming of the Europeans. Most of these herbs were used to cure nausea or upset stomachs; four were for sprains or sores, all of which would have been common ills to people, who had recently been introduced to alcohol. Most likely, soldiers in the French and Indian Wars had been observed being treated with some of these herbs.

The Kickapoo Indian medicine men were patronized by large numbers of people and have been followed by other herbalists, who also do a lucrative business. Many of their concoctions are little changed from those our ancestors brewed from the herbs in their colonial herb gardens.

With the advent of foreign germs, the Indians readily accepted colonial concepts of herb medicine. The role of the medicine man changed from that of a powerful magician or shaman to that of herbalist. However, many magical theories were retained, without which herbs could not, it was thought, effect a cure.

Evans Mills, N. Y. April, 1963

APPENDIX

Following is a glossary of plants with the diseases they are thought to cure, as used by either the Malecite, Passamaquoddy, or Penobscot Indians. It is believed to be incomplete, since many individuals in these tribes will not readily make available information of this kind.

ALDER, Alnus incana — Steep shredded bark (astringent); for sore mouth, cramps and retching.
ASH (MOUNTAIN), Pyrus americana — Steep bark (emetic); for a physic.
ASH (YELLOW), Fraxinus americana — Steep leaves for bitter tea; to cleanse mother after child birth.
AVENS, Geranum rivale — Steep roots; to cure diarrhea, weak appetite.
BALM OF GILEAD, Populus candicans — Steep buds, mix with tallow; salve for sores.
BALSAM, Abies balsamea — Liquid gum; for external cuts, burns, frozen limbs, blood poisoning, colds.

*Refers to those plants, which have been naturalized since the arrival of Europeans.
*BARBERRY, Berberis vulgaris — Steep bark, roots; for laxative, spring restorer, ulcers.

BEAR’S CLAW, Lycopodium dendroides — Steep plant, roots; for nerves, female troubles, kidneys alinement.

BEGGAR’S TICK, Bidens frondosa — Steep plant; for bladder trouble.

BIRCH (WHITE, YELLOW) — Steep bark for root tea; diarrhea cure, swellings.

*BITTERSWEET, Celastrus scandens — Steep bark of root for strong tea (emetic); to cure kidney trouble, nausea.

BLACK HAW, Viburnum prunifolium — Steep bark; for nerve tonic.

BLOODROOT, Sanguinaria canadensis — Steep roots (cathartic); for tonic, stomach, to prevent bleeding, a sedative.

BLUE FLAG, Iris versicolor — Soak, pound into poultice; for rheumatism — Steep plant; for colds, even for babies.

*BUCKTHORN, Rhamnus cathartica — Steep bark (cathartic); for coughs, diarrhea, dysentery.

BUNCHBERRY, Cornus canadensis — Steep berries when red, or whole plant; for T.B., fits, convulsions, washing sores.

*BURDOCK, Arctium lappa — Powder root; for sore limbs, boils, abscesses, headache.

*BUTTERCUP, Ranunculus — Pound leaves, tie in cloth; for headache.

BUTTERNUT, Juglans cinerea — Steep bark with molasses; a physic for children’s worms.

CALLI LILY, Calla palus — Powder roots and smoke; for asthma, catarrh.

*CARAWAY, Carum carvi — Steep seeds; for colic.

*CATNIP, Nepeta cataria — Steep plant; tonic for colds, colic, sleepless babies.

CATTAIL, Typha latifolia — Powder root when plant is 4” tall, mix with tallow; for salve.

CEDAR, Arbor vitae — Char stick or make poultice; for boils, swellings, or tooth ache.

*CHAMOMILE, Matricaria chamomilla — Steep flower; for sprains, swellings.

CHERRY (BLACK), Prunus ser. — Steep bark; for coughs, diarrhea, wash for piles.

CHERRY (WILD), Prunus vir. — Steep bark; for bronchitis, heart trouble, digestion. — Steep berries; for diarrhea, worms, jaundice. — Steep dried plant; for kidneys.

CLEAVES, Calamus aromaticus — Steep dried plant (diuretic); for colds, urinary disorder.

*CLOVER (RED), Trifolium pratense — Steep blossoms; for swellings, ulcerated teeth.

COHOSH (BLACK, RED & WHITE), Cimicifuga — Use berries, or steep roots; for consumption, anemia, kidney trouble, V.D., emmenagogue.

COUGH GRASS (QUITCHE), Agropyron repens — Steep root; for bladder and kidney trouble.

COW PARSNIP, Heracleum lanatum — Steep root; for blood poisoning, T.B., small pox, heart trouble, cholera.

CRANBERRY TREE, Viburnum Opulus — Steep plant; for swollen glands, mumps.

CRANBERRY (MOUNTAIN), Vaccinium vitis-idaea — Steep plant; for kidneys, crampyelas.

*DANDELION, Taraxacum officinale — Steep plant; for fever, diarrhea.

ELECAMpane, Inula Helenium — Steep dried roots with hemlock bark; (externally), for skin diseases; (internally), for women after delivery, cold, pneumonia.

ELDERBERRY (RED, PURPLE) — Steep bark; for sore throat, bleeding lungs — Steam blossoms of both; for diarrhea, fever.

EVERLASTING, Gnaphalium poly. — Steep flower; for colds, fever, influenza.

FERN (CHRISTMAS), Polystichum acrostichoides — Steep roots; to stop flow of blood in kidney trouble.

FERN (MAIDENHAIR), Adiantum pedatum — Steep plant; for fits.

FERN (ROYAL), Osmunda regalis, (CINNAMON), Osmunda cinn. — Steep roots with sugar; for coughs, diarrhea, dysentery.

FIDDLEHEADS — Steep green new shoots; for spring laxative.

FLEABANE, Erigeron ram. — Plant in bloom dried, steeped; for dysentery.

GINSENG, Panax quinque folium — Steep root; to increase fertility.

GOLDENDROD, Solidago odor. — Steep leaves, flowers (aromatic and stimulant); for nausea, pneumonia.

GOLDENSEAL, Hydrastis canadensis — Steep plant; for tonic, laxative.

GOLDTRODGE, Ranunculaceae coptis groen. — Steep roots, or chew (astringent); for chapped lips, sore mouth, teething, tonic for barren women.

HARDHACK, Thyoida tomentosa — Mix leaves with sugar (astringent); for cholera.

HEMLOCK (GROUND), Taxus canadensis — Steep twigs; for colds.

HEMLOCK, Tsuga canadensis — Steep bark, needles; for colds, rheumatism, bladder, sprains, swellings — Inner bark powdered; for babies.

INDIAN PIPE, Monotropa uniflora — Steep root; for T.B.

JACK-IN-THE-PULPT, Arisaema triphyllum — Rub root on; for poison ivy, oak, etc.

JUNIPER, Juniperus communis — Steep fruit; for colds, asthma.

LABRADOR TEA, Ledum groen. — Steep plant; for kidney trouble.

LADY’S-SLIPPER, Cypripedium hir. — Steep roots; for colds, poisoning, tonic.

LILY OF THE VALLEY, Convallaria majalis — Steep flowers in cheese cloth; for fits.

*LIVE-FOREVER, Ledum purpurale — Steep leaves into poultice; for rheumatism.

LOBELIA, Lobelia symp. — Steep seeds, leaves; for vomiting.

MAISE — Steep tassels of young ears; for bladder, kidney trouble — Corn meal poultice; to stop wound bleeding.

MAPLE — Root pointing to east scraped, powdered, strained; for sore eyes.

MAPLE (STRIPED), Acer pennsyl. — Steep bark; for troubled limbs.

MILKWEED, Asclepias syriaca — Make into poultice; for ulcers, skin irritations, warts.

*MULLEIN, Verbascous Thapsus — Make leaf poultice; for baldness — Mixed with milk, sugar, vinegar; for diarrhea — Leaves dried, powdered and smoked; for asthma.

OAK (WHITE), Quercus alba — Steep bark; for bleeding piles — Steep acorns; for worms, gargle for sore throat — Acorns eaten; induce thirst.

*PARSNIP (WILD), Pastinaca sativa — Steep with flag root, stinking alder; for pneumonia — Steep singly; for syphilis.
INDIAN MEDICINE: FACT OR FICTION?

*PENNYROYAL (MOCK), Hedeoma pulegioides - Infused (antispasmodic); for nausea, whooping cough, hysterical cases.

PINE (WHITE), Pinus strobus - Peel bark in summer; for splints.

PISSISEWA, Chimaphila umbellata - Steep roots (astringent); for cancers, rheumatism, urinary troubles - Steep whole plant; for kidney trouble, blisters.

PITCHEr PLANT, Sarracenia purpurea - Soak tubers, cut and apply; to draw poison from infection - Steep plant; for T.B.

*PLANTAIN, Plantago major - Soak leaves in vinegar or oil (poultice) for inflamed areas - Steep leaves, roots; for diuretic action.

PLEURISY ROOT, Asclepias tuberosa - Root used as a diaphoretic and cold medicine.

POKEWEED, Phytolacca americana - Poultice made of root and sheep dung; for measles.

POPLAR, Populus trem. - Steep bark with sugar; to improve appetite, poor health - Steep bark only; for worms, colds, sore eyes.

POND LILY (YELLOW), Nymphaea advena - Root poultice; for swellings - Steep roots; for T.B., blood poisoning.

POPPY - Steep flower with sugar; for sleepless babies.

POTATO - Peel, rub on wart, throw over left shoulder; in 3 weeks wart will disappear.

PUFFBALL - Make poultice of spores; for soft dressing to stop bleeding.

PUSSY WILLOW, Salix discolor - Powder roots, bark; for sores, sexual sedative.

RASPBERRY - Steep leaves; for ulcers, burns - Steep flowers; for laxative.

RED OSIER (WILLOW) Salix exaeulis - Steep bark; for sore throat, eyes.

ROCK BRAKE, Polygala vir. - Steep root; for cholera, colds, pleurisy, girls in puberty.

SARSAPARILLA, Aralia nudifl. - Steep root; for rheumatism, skin diseases, coughs - Poultice; for wounds, ulcers - Steep root with molasses and pine roots; for blood tonic, colds, sore eyes.

SASSAFRASS, Sassafras albidum - Steep root; for dry coughs, scurvy.

SCULLCAP, Scutellaria lateriflora - Steep leaves; for nerves.

SKUNK CABBAGE, Symplocarpus foetidus - Steep plant; for piles, asthma - Poultice preparation; for warts - Powdered roots; for snuff, swollen places.

SNAKERoot, Aristolochia Serpentina - Gaze at plant; for fits.

SNAPDRAGON, Impatiens pall. - Crush stems; for skin poisoning.

*SPIRIT, Mentha spicata - Steep leaves (carminative); for nausea.

SPHAGNUM, (MOSS), Sphagnum - Use while fresh; for cleaning wounds.

SPIKENARD, Aralia racemosa - Steep root; for boils, T.B., gonorrhea.

SQUARE, Picea canadensis - Cut up like tobacco; smoked for asthma - Steep bark; for sore eyes, diarrhoea - Made into poultice; for boils, piles.

SUMAC, Rhus typhina - Steep leaves, bark, berries; for children's gargle.

SWEET FERN, Myrica asplenifolia - Steep leaves; for poison ivy, sprains - Boil leaves in melted hail stones until white; considered pure water.

SWEET FLAG, Acorus Calamus - Steep root (aromatic); for colds, nausea, tooth ache, etc.

TAMARACK, Larix laricina - Steep wood, bark (astringent); for colds, headaches.

*TANSY, Tanacetum vulgare - Powder leaves into poultice; for bruises, sprains.

THORN APPLE, Datura - Steep fruit, roots; for fever.

TOBACCO, Nicotiana - Smoke blown into ear; for earache - Blown onto salt; for poison ivy.

WAKEROBIN, Trillium Arum triphy. - Powder dry root; for poison ivy, etc.

WATER LILY, Castalia odor. - Steep root (astringent); for female troubles - Stem smoked; for catarrh.

WINTERGREEN, Gaultheria procumbens - Steep berries; for urinary diseases - Steep leaves; for colds - Steep bark; for upset stomach.

WITCH HAZEL, Hamamelis virginiana - Use blossom; for astringent agent.

WILLLOW (BLACK), Salix nigra - Scrape bark with salt into poultice; for rheumatism - Steep bark; for colds.

WORMWOOD, Apocynum cannabinum - Steep roots; for worms.

*YARROW, Achillea millefolium - Steep plant with sugar; for colic, blood, skin diseases.

REFERENCES


Beck, Horace — Correspondence to Peabody Museum, Salem, Mass.


Fyles, John — Account of his captivity . . . various editions, Samuel G. Drake’s Indian Captivities.


Thoreau, Henry D. — “In the Maine Woods,” various editions.

