

Leture give at the Formington At assu. (Hymnis) semmes J 1953 Ross Mottett

#### PREHISTORIC AMERICANS

In the first section of this program, I will attempt a brief resume of the more important aspects of Indian archaeology. In the second section I will discuss the archaeology of Cape Cod and try to show how it fits into the general pattern of archaeology for much of eastern United States. And in the third and last section, I will present some color slides of archaeological work in progress.

To remark on the methods and techniques of archaeology, I think everyone understands the principle involved in superposition, or stratigraphy --- which is that in general a deeply buried object is older than an objects of less depth. By correlating depth measurments of exca vated artifacts with changes in artifact types, prehistoric cultures may be arranged in a sequence, or order, of their beginning, climax, and decline. The sequence may show an abrupt end for a given culture, as though from warfare or a sudden failure of food supply, or more often, the sequence may indicate a gradual transition from one cultural tradition to another through a peaceful diffusion of traits and practices from an outside area. Sometimes cultural materials are found associated with geological deposits, in which cases a geologist may assist the archaeologist to arrive at an estimated age for the cultural objects. Or if the geological deposits comprise peat or other material of plant origin, a botanist, by an analysis of pollen in the deposit, may also aid in the establishment of an estimated age.

But relative and estimated dates are not the only kinds that archaeology has at its disposal. Dendrochronology gives positive dates by a system of matching growth rings of trees, a method of considerable value in the dry southwest, where wood may be preserved for a long time. Radiocarbon dating is a method based on a determination of the amount of radio active cerbon, or carbon 14, in organic substances. Any once living matter associated with a cultural stratum can be used for radiocarbon analysis, wood, charcoal, shell, bone, and so on. Although new, this method has already had a profound effect on conceptions of archaeological time.

The terminology used in referring to the various cultural complexes of the prehistoric is arbitrary in so far as concerns explicit tribal or language groups, for these distinctions are difficult to project very far back into the period before the white conquest.

As to who the Indians are and whence they came, many have been advanced. The American aborigines have on occasions been derived from freland, from Egypt, from a fanciful "lost Atlantis", and from a mythical land of "Mu", in the Pacific. Most persistent has been a notion that the Indians descended from the ten lost tribes of Israel. Not-withstanding these interesting theories, it is undoubtedly the consensus of opinion of professional anthropologists that the Indians represent successive migrations of Mongoloid peoples from northeastern Asia who came here by way of Bering Strait.

# Paleo-Indian Period

It is the general practice to divide the prehistoric occupation of eastern North America into four broad cultural horizons, or periods. These are: Paleo-Indian, Archaic, Woodland, and Mississippi.

The term Paleo-Indian refers to early hunting cultures which are known to have been thinnly but widely distributed over much of North America from over 12000 down to perhaps 6000 years ago. It is conjectured, people in this calefore. however, that the first migration from Asia to Alaska may have been as From the west, we have definite evidence remote as 15000-20000 years ago. of several Paleo-Indian manifestations, among the best known being one called Clovis, after the town of Clovis, New Mexico, with an age of about 12000 years, and another known as Folsom, from the town of Folsom, which also is in New Mexico. Folsom is thought to be younger than Clovis by some 1000 years. While Paleo-Indian traces in the eastern states are not abundant, they are widespread and a few sites have been found where Paleo-Indian artifacts have occurred in some concentration. of these locations are in New England, one being in Ipswich, Massachusetts. In the west, weapons of the Paleo-Indians have been positively associated with bones of such extinct animals as mammoths, mastodons, large bison, camels, horses, and ground-sloths. A connection between Paleo-Indian artifacts and extinct animals has so far not been established, which may possibly indicate that cocupation by early hunters came somewhat later here than in the west.

characteristic of most of the Paleo-Indians was the fluted point, a leaf shaped flint artifact with longitudinal grooves extending from (Such Andri) the base towards the tip. A feature seldom absent with fluted points is a smoothing or dulling of the side edges for some distance above the base, doubtless to protect the lashing with which the implement was

secured to a shaft. A class of early flint points called Yuma seems to have come into use later than the fluted types. Although lacking the fluting, Yuma points often resemble fluted types in general shape and also in having smoothed side edges. Often Yuma points exhibit a refinement of technique known as oblique parallel flaking, with the scars of removed flakes being very regular in width and direction. Some Yuma points are stemmed, and these may be ancestral to the more familiar is stemmed stemmed points of later Indians.

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#### The Archaic Period

The Archaic Period, the second great division of Indian prehistory, may have started around 6000 years ago, for we know that by 5000 years ago it was in full bloom. Although hunting and food-gathering still comprised the Indian economy, the Archaic showed a noteworthy advance over the preceding period, as is evidenced by the fact that, in certain favored areas, relatively large populations were mantained. There was also a great increase in the number and diversity of implements in use, and for the first time in America appear artifacts of ground and polished stone. In chipped flint work, instead of fluted and Yuma-like points, stemmed and notched forms were employed, these being large and heavy and used to tip darts or spears, which were were cast with the spearthrower. The bow and arrow was probably not known in the earlier part of the period. While there was no clay pottery, there were some vessels carved from soapstone.

Archaic remains are spread over nearly the whole eastern half of the United States. The Shell Mound Somplex, which has given a radiocarbon reading of 5000 years, was a major Archaic subdivision centered in northern Alabama, Tennesseee, and Kentucky, with northern outliers extending into Ohio. Indiana, and Illonois. In its southern range, this complex is represented by enormous heaps of fresh water shells and other camp refuse, in which implements of stone, bone, and antler, have been found by the tens of thousands. Nearer home, the Lamoka culture—— named after Lamoka Lake in central New York;—— was another Archaic manifestation, similar to and of about the same radiocarbon age as the Shell Mound Complex.

However, the most important Archaic culture, as concerns the northeastern states, was the Laurentian Aspect--- so named by Dr. W.A. Ritchey, of the New York State Museum. Taking a general view, the Laurentian covered central and eastern New York, all of New England, as well as adjacent areas of Canada. It appears to have lasted for a long time, in New York the duration, according to Ritchey's opinion, being about 2000 years, or from 3000 B.C. to 1000 B.C. In the Laurentian we find certain artifacts which do not occur in the United States outside of Laurentian territory—

(partial)

the slate semi-lunar knife, the ground slate point, and the stone gouge.

The pear-shaped stone plummet also seems to be of this northeastern origin, although it spread in a modified form far to the south and west.

We have so far no radiocarbon date for a proven Laurentian materials, although it seems quite probable that some fishwiers, discovered in constructing the Boston subway, and which have given a radiocarbon reading of 5000 years, are attributable to Indians of the Laurentian culture.

### The Woodland Period

Woodland, the third period in Indian archaeology, displaced the Archaic by, it seems, a process of transition. This change was induced by two events of great importance, of which one was the introduction of clay pottery, and the other the introduction of agriculture. ceramics of the northeastern United States appear to have come from lower Canada, and possibly ultimately from northeastern Asia. other hand, agriculture must have diffused into the northeastern states from a source of origin far to the south. The Woodland cultural tradition spread beyond its apparent center in the eastern woodlands, and in its early and middle phases it predominated in the whole section from the Atlantic westward into Kansas and Nebraska. The general similarity of early and middle Woodland throughout the area just mentioned is best shown by thegeneral presence of conoidal, or pointed bottom, vessels. At its earliest stage this Woodland pottery was marked both outside and inside with an object wrapped with a twisted cord. This type having interior cord marks is known in New York as Vinette type 1, and the same term is often used in New England for an almost identical ware. later there began in the Woodland area a zig-zag type of pottery decoration known as rocker stamping, resulting from a plain or a serrated edge being moved across the clay with a stepped or rocking motion.

Within certain large areas of Woodland territory, a remarkable flowering called Hopewell took place about 2000 years ago. Hopewell, named after the Hopewell group of mounds in Ohio, had its climax in the Sioto River valley in the state just mentioned, as is evidenced by the occurrence there of great systems of mounds and earthworks in which have been found a profusion of artistic objects of ornamental and ceremonial function. The Ohio Hopewell Indian ranged widely in his quest for

the materials of the objects which he fashioned with great skill and afterwards deposited in his burial mounds—— copper from Lake Superior, mica from the southern Alleganies, marine shells from the Gulf of Mexico, and obsidian from the Rocky Mountains. He was proficient as a weaver and as a potter, but he excelled as a carver, his masterpiece being a stone tobacco pipe fashioned into the likeness of a bird, a fish, or an animal. Beyond the Ohio center, a somewhat provincial Hopewell extended eastward into New York and westward all the way into Iowa.

In the late phase of Woodland, which on the Atlantic coast lingered on into historic times, ceramic vessels developed rounded, or globular, shapes, in contrast to the earlier pointed-base forms. Rocker work no longer appeared, although stamped decoration was still in use. In New York, where late Woodland was displaced by Iroquoian culture prior to historic times, the late Woodland potters became highly skilled. Chipped stone work in late Woodland times became less varied than in earlier phases, nearly all implements being of triangular type.

### Mississippi Period

To come to the latest broad cultural division in eastern United States, the Mississippi horizon first appeared in the lower Mississippi valley, where it was established in its early phase by some 1000 years ago. As time went on, it spread north, east, and west, into territory that theretofore had exhibited the Woodland cultural aspect. However, the latter was not entirely displaced, so that Mississippi and late Woodland were contemporaneous. Regarding its main centers, Mississippi culture was characterized by relatively populous towns built around a plaza occupied by from one to many large, truncated, earth pyramids. Surmounting the flat topped pyramids, or so-called temple mounds, were wooden structures of civil and religious function. At the same time, these buildings doubtless provided living quarters for the political chief and for the outstanding religious leaders. In addition to the temple mounds were others used for burial, in some of which have been found large numbers of skeletons with rich mortuary offerings. In the high degree of group centralization, in the pyramidal mounds with ascending stairs or ramps, and in certain pottery traits, there is much to indicate a Mexican origin for the Mississippi cultural manifestation. The highest development of this horizon took place in a belt extending from north central Georgia, through northern Alabama, northern Mississippi, western Kentucky, southern Illinois, and southeastern Missouri. The greatestcenter seems to have been the Cahokia site, near East Saint Louis, Illonois, where is found the largest Indian mound in the United States, a flat topped accumulation 100 feet high and covering 16 acres. The Mississippi culture was in full bloom at the time of early white contact, and it is interesting to note that it was towns of this manifestation that were found by De Soto in his wanderings in the 16th. century. In artistic attainment, the people of the important towns of

this period were scarcely, if at all, inferior to those of the Hopewell times, one thousand or more years earlier. Paint out his skule of Michelle of Minister fauls)

To us in the northeastern states the chief interest in the Mississippi horizon perhaps lies in the fact that it constitutes the base of Iroquois culture. Iroquoian material traits were beginning to crop up in New England in late prehistoric days, and had the white conquest been deferred long enough the coastal Algonquins would doubtless have adopted the newer cultural tradition.

(Comment on Iraques artifacts in sheet.)

## Cape Cod Archaeology.

With the foregoing as a background, we may now take up Cape Cod and see what it has to offer in the way of archaeology. It may not be amis, however, to touch on some features of local Indian life recorded by eye witnesses. Champlain visited Cape Cod in 1605 and left a written report of what he saw, and also some illustrated maps of the shores near which he anchored. He shows Nauset Harbor, in Eastham. nearly surrounded with scattered houses, each with its own plot of cultivated ground, and he indicates a similar condition of habitation at Chatham. As depicted in Champlain's drawings, some of the dwellings were dome-shaped, while others had a rectangular ground plan and a rounded arched roof. We have a description of a dome-shaped hut which was entered by the Pilgrims at Corn Hill, in Truro, in 1620. This house had a framework of bent-over saplings, on which was a double covering of rush matting, with finest mats being the innermost. A movable section of mat served as a door, and a hole in the top center allowed the escape of smoke from a fire directly below on the floor. There was a mat to close the chimney when desired. The fireplace had an arrangement of forked sticks driven into the ground, on which were cross sticks to support their pots, or to quote the old report "what they had to seeth". Beds consisted of mats laid around the fire, and utensils included wooden bowls, trays and dishes; earthen pots, small baskets made of crab shells, and also other baskets some curiously wrought in pretie workes". Food remains consisted of parched acornes and various parts of deer. Tobacco seed is mentioned, and also other seed which they report "wee knew not".

At the time of the white conquest, the Cape Indians comprised

several groups—— the Pamets in Truro, the Nausets in Eastham, the Monomoyicks in Chatham, and so on. All of these groups were, it seems, sub-tribes of the important Wampanoag tribe, centered on the mainland of southeastern Massachusetts. On the north of the Wampanoags were the Massachusetts, and on the west, in Rhode Island, were the Narragansetts. All three were culturally almost indistinguishable from one another, and, collectively, they were very similar to other coastal Algonquins from southern Virginia to eastern Maine.

The Indian habitation sites on Cape Cod are seldom found far from salt water, and usually they are on ground adjacent to a sheltered inlet. At Nauset Harbor, which I have mentioned in connection with Champlain, the signs of former occupation, consisting largely of waste chippings left from the manufacture of stone implements, extend for several miles in Eastham and Orleans. These wide spreads of discarded material, with often whole artifacts, are thin and in most cases have been disturbed by plowing in the days when the Cape was extensively farmed, so that objects of relatively late date may be jumbled with those many hundreds of years older. Collections of relics picked up on the surface of plowed fields do not, therefore, reveal much regarding culture successions, except as they can be checked against excavated materials whose chronological order is known.

There is another kind of habitation site, called a shell heap,

mind to the relatively thick. A shell heap represents long, although
not necessarily continuous, occupation of a relatively small area,
and it consists of waste shells, bird and animal bones, charcoal
blackened earth, broken pebbles, stone chippings, and whole and broken
artifacts. The latter may include potsherds and implements of bone
and antler, objects which are not found preserved in thin surface
spreads. When shell heaps are fairly thick--- say from 18 to 40"--they remain largely undisturbed by the plow. The depths of artifacts

must come and with confidence as to their original position, and
conclusions can be drawn from the data thus secured. It is from shell
heaps that nearly all of our information respecting cultural sequences
of our local section has been gathered.

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The Cape Cod Indians, and in fact all of the Indians of eastern Massachusetts, were somewhat handicapped as regards proper materials for their arrowpoints and other chipped implements. Having no adequate supply of flint, they relied chiefly on white quartz and felsite, the latter a close grained volcanic rock very abundant in pebble form in the local glacial sands. Quite a few artifacts were made of quartzite, and Probably one ortwo artifacts out of every onethere was some use of slate. hundred show the smooth fracture characteristic of flint.

So far as present information goes, Cape Cod had three distinct periods of prehistoric occupation. The earliest excavated materials appear to date from late Archaic times and are possibly 3000 n to 4000 years old. Still earlier remains, however, may be on the east-west part of the Cape, a section about which is available little exact data The late Archaic artifacts, have been found regarding excavations. underlying at least four shell heaps on the lower part of the Cape. appear to represent hunting bands who were not much interested in shell fish. The Archaic materials tend to occur in yellow sand, which may be presumed to be the old surface before any shell heap deposits Included in a Laurentian-like assemblage are the stone gouge, the plummet, the chopper, and the eared projectile point. however, are the semi-lunar knife and the ground-slate point, objects found elsewhere in the Laurentian horizon. Some very small chipped points occur, indicating that the bow andarrow was introduced about this time. Implements made of felsite tend to show a strong patination or weathering. This level on Cape Cod equates with a similar stratum on the mainland, in a more general way

and it shows a likeness to the New York Archaic.

The second cultural horizon on Cape Cod is characterized by grit tempered pottery and stemmed projectile points. This level refers to the early to middle end of the Woodland period. Some of the clay pots were of Vinette 1, the type I have mentioned as being very early, while ( show VIT when Things other vessels show rocker and other kinds of stamped decoration. Quite often the edge of a scallop shell was used to make indentations in the In addition to the stemmed points, which were predominate, were other types, side-notched, leaf-shaped, and so on. points are not very prominent. The slevel represented here was probably agricultural from the start, which may have been well before the Christian era. There is some reason to think that at this period, Cape Cod had a cultural connection more with coastal Connecticut and Long Island 5 have bone objects + mm 5 herts than with the rest of eastern Massachusetts.

The third cultural period, which on stratigraphic grounds we are able to isolate on Cape Cod, refers to late Woodland times. Pottery was tempered with crushed shell and stone points were nearly all triangular in form. With more evidence from stratified deposits than is at present available, this period probably could be subdivided into more than one phase, possibly with very coarse shell tempered, straight is sided pots earlier than fine shell tempered vessels with flaring rims. The end of this period brings us again the time of the first white contact and the beginning of the rapid decline of Indian life in this area.