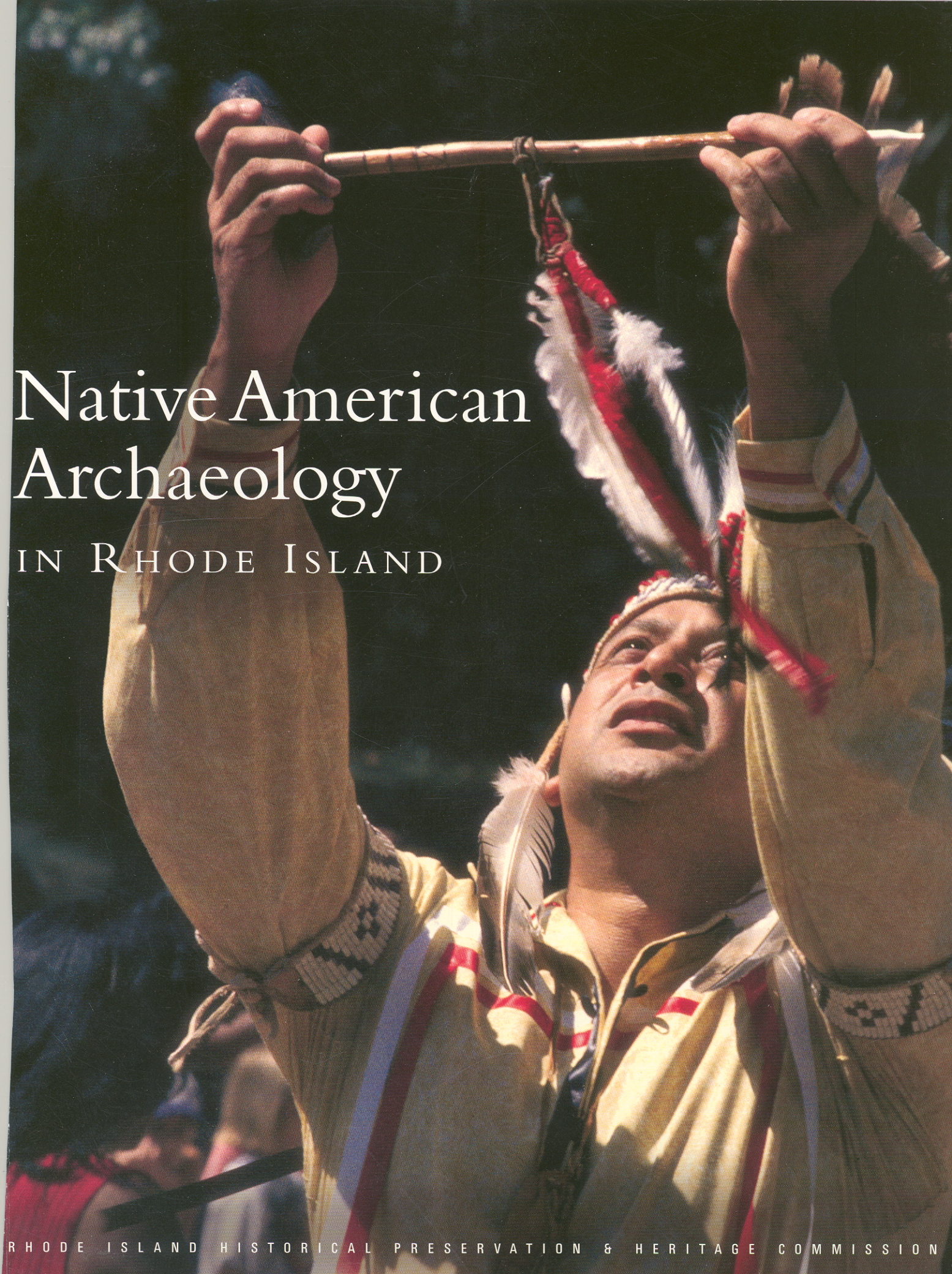


Native American Archaeology

IN RHODE ISLAND

RHODE ISLAND HISTORICAL PRESERVATION & HERITAGE COMMISSION

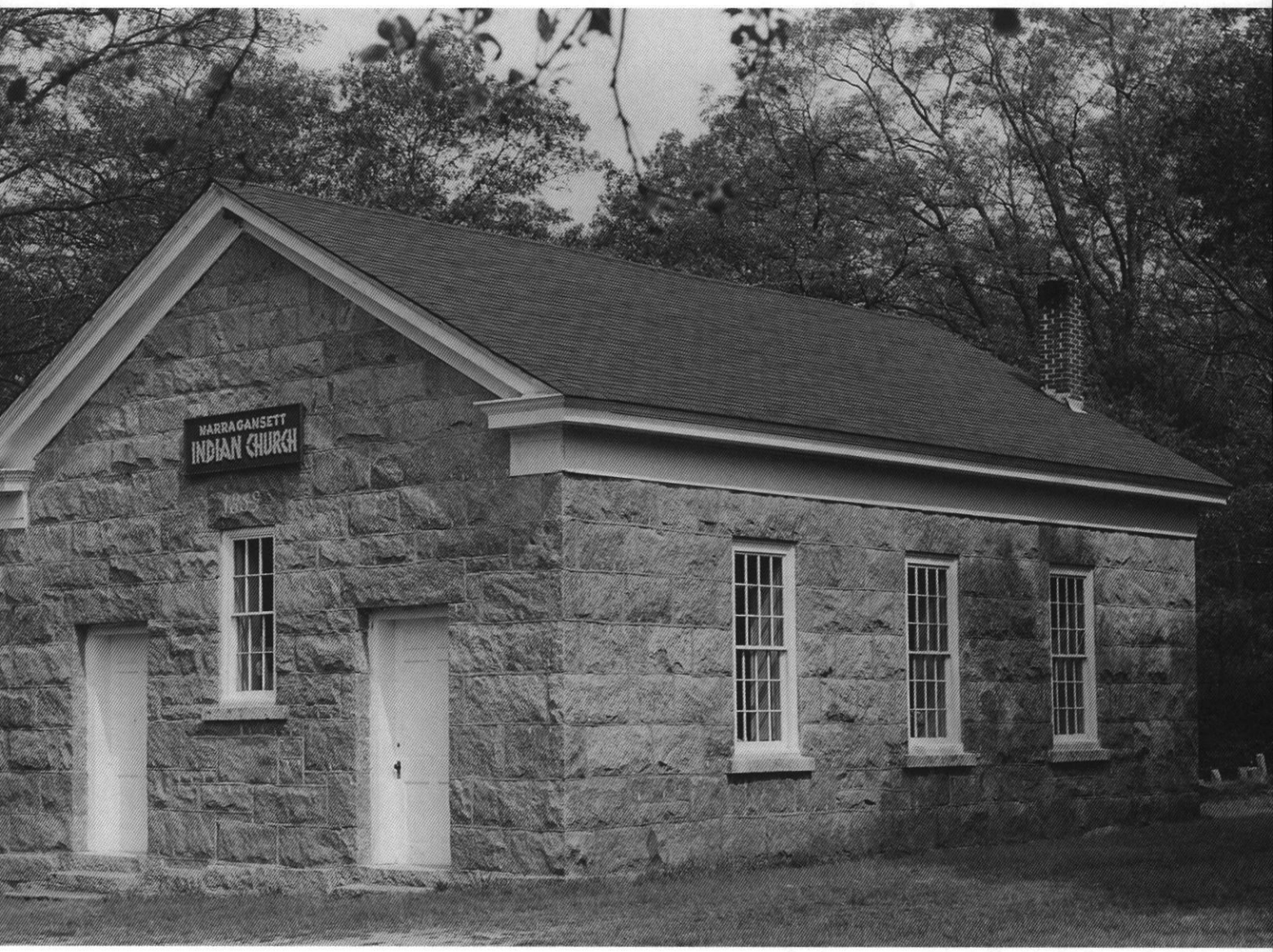
COVER

Chief Sachem Matthew Thomas of the Narragansett Indian Tribe at the annual August meeting.

OPPOSITE

The Narragansett Indian Church, off Route 112 near Charlestown, stands on land that was never taken from the tribe. First built of wood by tribal members in1740, it was rebuilt of stone in 1862 and again in the mid-1990s after an arsonist's fire.

Native American Archaeology
IN RHODE ISLAND



RHODE ISLAND HISTORICAL PRESERVATION & HERITAGE COMMISSION 2002

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Native American Archaeology
IN RHODE ISLAND

PREFACE

The Rhode Island Historical Preservation & Heritage Commission was established in 1968 by an act of the General Assembly to develop a statewide preservation program under the aegis of the National Park Service, United States Department of the Interior. Citizen members of the Historical Preservation & Heritage Commission are appointed by the governor; serving as ex officio members are the directors of the Departments of Environmental Management and Economic Development, the chief of the Statewide Planning Program, the state's Building Code Commissioner, and the chairs of the House and Senate Finance Committees.

The Historical Preservation & Heritage Commission is charged with the responsibilities of conducting the statewide survey of historic properties and recommending places of local, state, and national significance for inclusion in the National Register of Historic Places; developing the state's historic preservation plan; administering programs of financial aid, including grants, loans, tax credits; reviewing public projects which may have an impact on historic resources; providing technical assistance on a variety of preservation issues to state and municipal officials and to citizens; and regulating archaeological exploration on state lands and under state territorial waters.

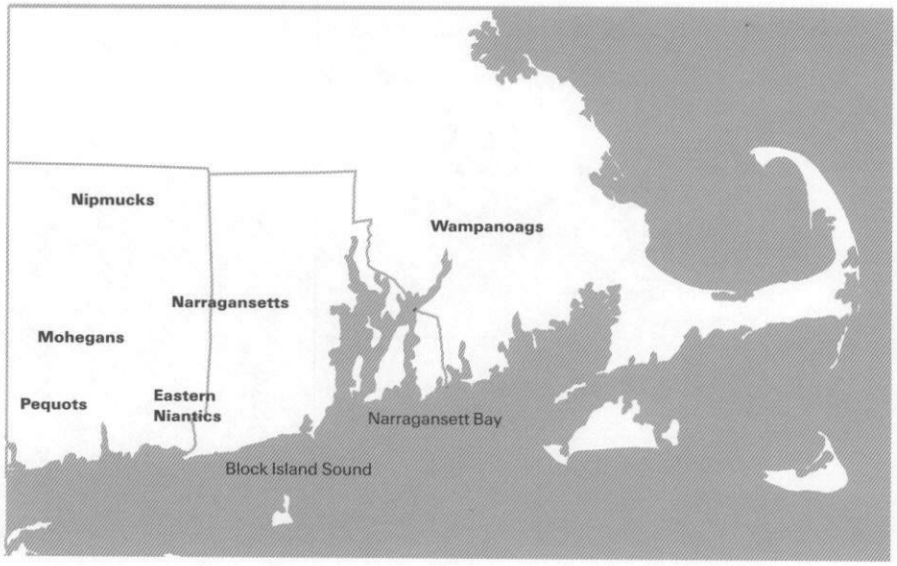


FIG 1 Map of southern New England showing locations of tribes as reported by Europeans in the seventeenth century.

INTRODUCTION

For thousands of years people have lived and worked on the land we know as Rhode Island. Hundreds of generations were born here, made their living by hunting or growing their food, built houses for themselves and their families, paid homage to their deities, taught their children, followed leaders, made war and peace and mourned their dead.

What do we know about these people? Until a few hundred years ago, they left us no documents to tell about themselves. Their history and literature were oral, stories told by one to another, never written in books.

Yet there is a record of their lives in the physical world, in the objects they used to shape and create their lives. The things they left behind—tools, weapons, currency, venerated objects—can tell us something of their lives, just as the things we create today speak about the way we live.

The landscape of Rhode Island is filled with these places where the earliest people lived and worked. Their lives are documented in the things they made and used in places throughout our state. Now for the most part under ground level, these things are part of their heritage and a part of the heritage of all Rhode Islanders.

It is the job of archaeologists to interpret the objects left behind by the earliest people who called Rhode Island home. Just as we need interpreters to understand the meaning of written documents in another language, we rely on archaeologists to help us interpret the meaning of the objects left behind by early peoples. Using scientific and imaginative tools, archaeologists can give us glimpses into the lives of these earliest Rhode Islanders.

This report summarizes what archaeologists have learned about the first peoples who lived around Narragansett Bay. The story is based on the work of the archaeologists at the Rhode Island Historical Preservation & Heritage Commission, which is the state office for historic preservation and archaeology. For nearly thirty years the state's archaeologists have excavated sites, studied the objects found, collected information from the work of other archaeologists, and consulted with the Narragansetts and other Indian tribes. Archaeologists at area universities and public archaeologists have made many contributions also. This report synthesizes what is known from the archaeological record about the earliest people in Rhode Island.

The first section of the report tells the story of the people who lived here in Rhode Island before European settlement in the seventeenth century and of what happened to those people after Europeans came to this area. The second section describes some of the ways in which archaeologists have learned this story. The third section discusses the listing of sites in the National Register of Historic Places and contains a list of important archaeological sites in Rhode Island with a short description of each one. A final section discusses some of the sources used in preparing this report and makes suggestions for further reading.

Rhode Island has an extraordinary collection of archaeological sites, a record which rivals any other area in the United States. These sites are the patrimony of our state, a resource well worth study and care.

ACKNOWLEDGEMENTS

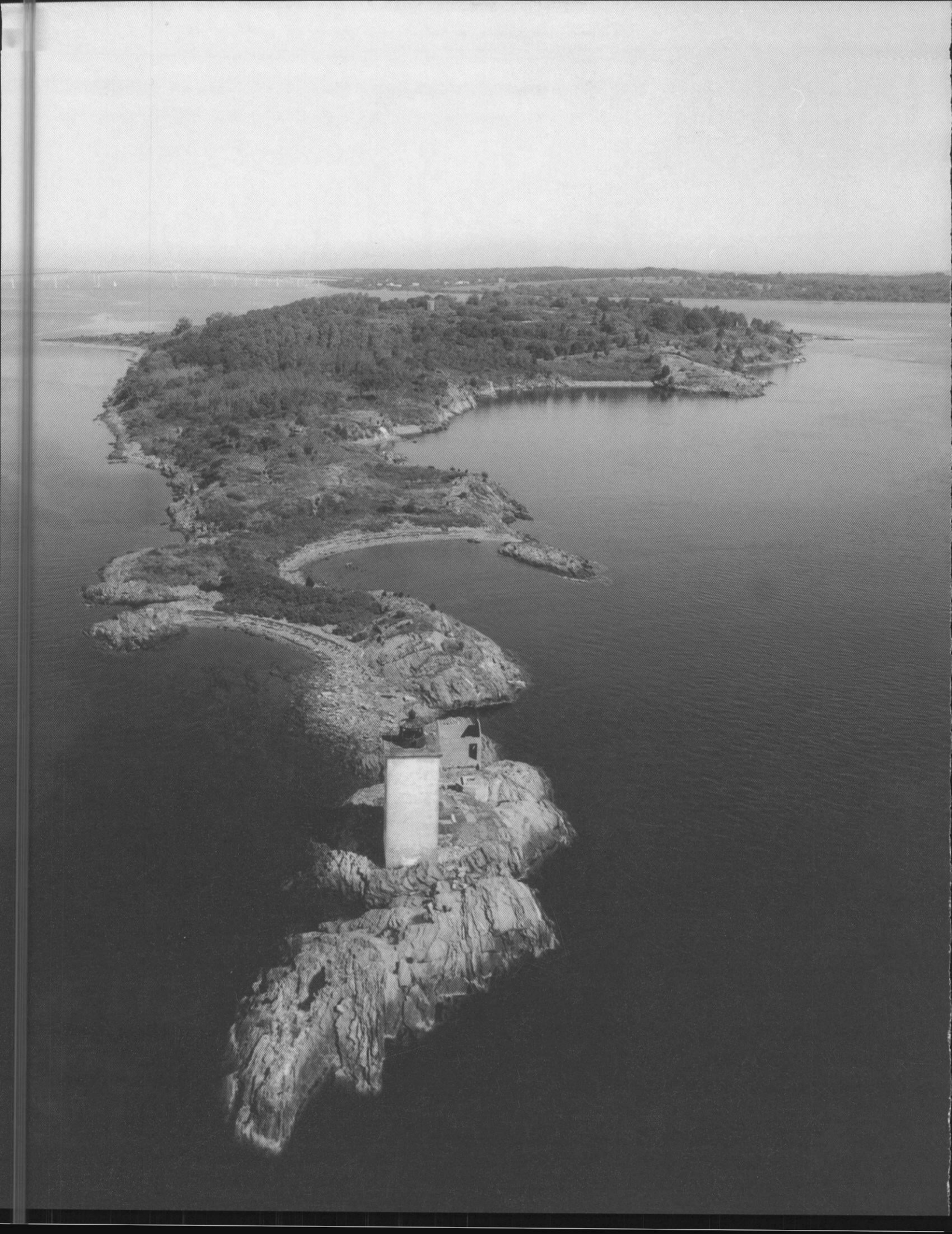
We acknowledge the contributions of several scholars who read and commented on a draft of the book: Michael A. Hebert, Supervising Archaeologist at the Rhode Island Department of Transportation; Albert T. Klyberg, Director of the Rhode Island Heritage Museum; Alan Leveillee, Senior Archaeologist, the Public Archaeology Laboratory; Patrick M. Malone, Associate Professor, American Civilization Department and the Urban Studies Program, Brown University; E. Pierre Morenon, Associate Professor, Department of Anthropology, Rhode Island College; and Patricia E. Rubertone, Associate Professor, Department of Anthropology, Brown University. We are grateful for the time these people took to review the text and for the many helpful suggestions they made. We also thank William A. Turnbaugh, Professor of Anthropology, Department of Sociology and Anthropology, University of Rhode Island, whose contributions to the archaeology of Rhode Island provided many useful sources for this book. We also thank the staff of the Newport Historical Society for their contributions to the project.

A draft of the book was sent to the Narragansett Indian Chief Sachem and Tribal Council and to the tribe's Historic Preservation Office. We thank the people in these tribal offices for reviewing the draft, and in particular we thank Chief Sachem Matthew Thomas, and John Brown and Doug Harris from the Tribal Historic Preservation Office. These three offered many comments, and we recognize that we sometimes differ on our interpretations of Narragansett history offered in this book. We appreciate that the Chief Sachem agreed to our use of his photograph on the book's cover.

The photograph on the cover of Chief Sachem Matthew Thomas as well as several other outstanding photographs of Rhode Island landforms and landmarks were created by Salvatore Mancini. Mr. Mancini is an artist of great talent and we are grateful that he contributed some of his exceptional photographs to this book.

Much of the work represented in this book was funded through state and federal projects. Over the years, however, two state agencies and one federal agency in particular have contributed in major ways to the state's archaeology program. The Rhode Island Department of Transportation and the Federal Highway Administration have sponsored archaeological projects throughout the state as part of their project planning. Many people at RIDOT and FHWA have been helpful. In particular, however, we would like to thank RIDOT's Michael A. Hebert, J. Michael Bennett, and Edmund T. Parker, Jr. The Coastal Resources Management Council has also supported the conservation of archaeological resources by requiring archaeological investigations as part of its review of some projects along the state's coastline. Under the direction of CRMC Executive Director Grover J. Fugate, projects in Narragansett, South Kingstown, Charlestown, Block Island, and Barrington have been particularly important.

We also appreciate the help we received in obtaining permission to use images and photograph objects belonging to other organizations: Shirley Blancke, Massachusetts Archaeological Society; Jefferson Chapman, Frank H. McClung Museum, The University of Tennessee; Frederick "Bud" Cooney, Charlestown Historical Society; Allison Cywin and Sanafigne Munroe, Rhode Island Historical Society; Susan Danforth, John Carter Brown Library; Sara Davis, The Globe Pequot Press; Michael Delaney, Providence Journal Company; David Gregg, Haffenreffer Museum of Anthropology, Brown University; Jordan Kerber, Department of Anthropology, Colgate University; Alan Leveillee, the Public Archaeology Laboratory; E. Pierre Morenon, Department of Anthropology, Rhode Island College; Paige Newby, Pollen Laboratory, Brown University; Michael Roberts, Timelines, Inc.; Bob Selby, artist; William Simmons, Brown University.



THE FIRST PEOPLE

Great sheets of ice called glaciers have covered North America many times in the past. Glaciers have slowly advanced across the continent and then melted and retreated as the earth cooled and warmed. Each time the glaciers have moved across the land, they have changed its form, grinding down hills and filling valleys, carrying rocks, gravel, sand, and clay in their ice.

The last time a glacier covered our region was about 15,000 years ago. Created by centuries of snowfall piled on snowfall, packing the lower layers into ice, a thick sheet of ice, a mile deep in some places, covered the upper half of what is now the United States.

In our region the glacier covered all the land we know as Rhode Island and reached as far south as Long Island, Block Island, Martha's Vineyard, and Nantucket. As the glacier advanced, its front edge acted like an immense bulldozer, moving a huge layer of gravel and rock. When the glacier slowly melted about 13,000 years ago, it left the gravel and rock in great piles which we now know as offshore islands.

As the glacier melted, the boulders and gravel locked in its ice formed a covering over the bedrock of Rhode Island which we can see now under the topsoil and on the bottom of Narragansett Bay. The retreat of the glacier was not uniform and smooth; it moved, then paused, then moved again. One break in its retreat may be seen in the line of low hills along Rhode Island's southern coast.

Were there people in our region before the last glacier moved through? Certainly, there were people on the American continents before the most recent glacier. Most archaeologists think that human beings first migrated to the Americas from Asia at least 12,000 to 15,000 years ago, moving slowly across a land bridge which once connected Siberia to Alaska. Over the course of many centuries, the descendants of these people moved south and east. It is possible that there were people in Rhode Island before the glacier; the evidence of their presence may be buried in sites which are now off the coast and under water. If such a site were found and could be examined, it would give us important clues into the lives of these first settlers. For the present, we know nothing.

As the last glacier slowly drew back north over centuries, it left a landscape here which we would hardly recognize. The climate was cold, like present-day arctic regions. Narragansett Bay did not exist—indeed, the coast of our region was located some eighty miles south of Providence. Block Island was a high hill on a broad, flat plain.

The land was open and treeless, covered with low-growing bushes, such as birch, sedge, myrtle, willow, and hornbeam, and grasses and herbs. Feeding

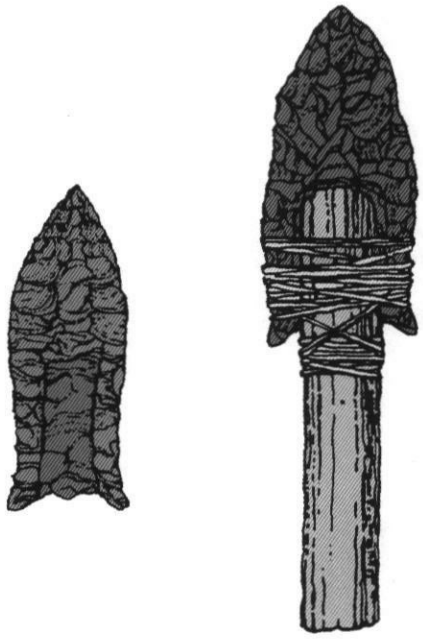
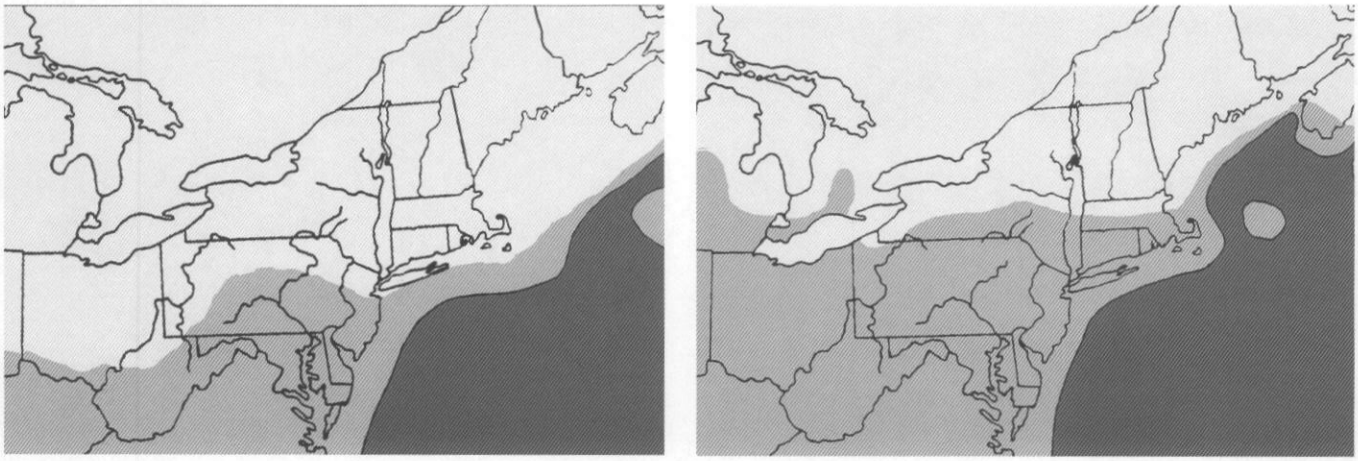


FIG 2 (opposite) Dutch Island. When people first moved into the region, Narragansett Bay had not formed. What we know as Bay islands were high spots overlooking freshwater lakes and rivers and a large expanse of coastal plain. Dutch Island may have been a place where early settlers observed the movement of caribou and other large animals.

FIG 3 (above) Fluted points were glued and bound to spears, darts, or lances and used for hunting.

FIG 4 This series of maps shows the general retreat of the glacial ice front (white) and the changing shoreline (gray) from 18,000 years ago to 10,000 years ago.



18,000 years ago

14,000 years ago

on these scrub plants were animals—caribou, bison, musk oxen, mammoths, and mastodons.

Did people share this arctic tundra with these animals? Again, it is difficult to know. It is possible that some humans were here. Perhaps small groups of people moved through the region hunting animals for food, but there is as yet no physical evidence of people for the first centuries after the glacier's retreat.

With the glacier in retreat, the melt water drained off through the rivers and streams which laced through Rhode Island, pouring huge amounts of water into the ocean. As the glacier's water flowed off the land, the level of the sea rose, and the ocean began to move inland, covering what had been dry land. The climate slowly grew warmer as the ice sheet moved further and further north.

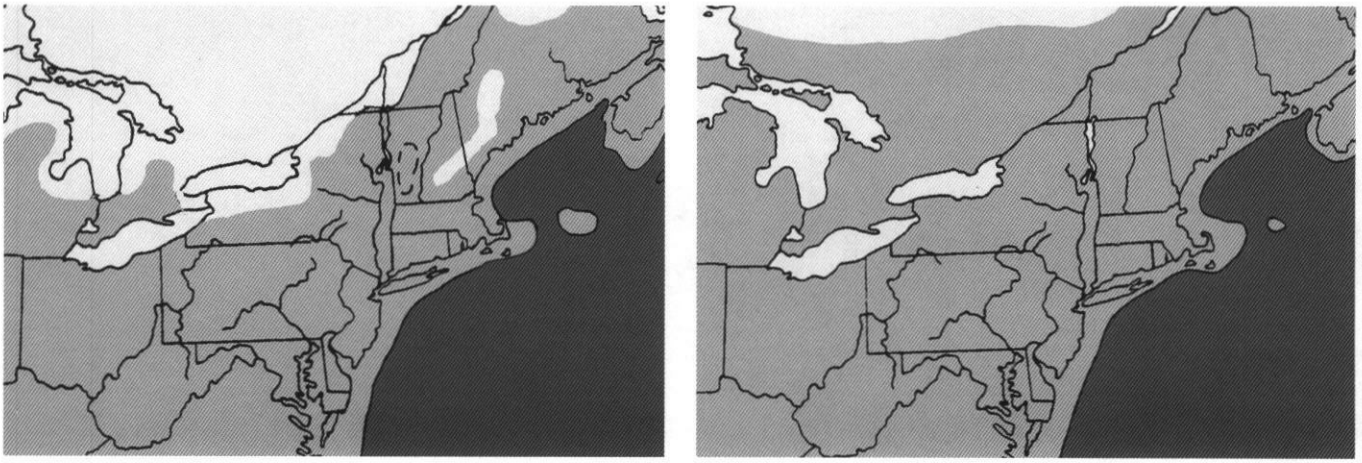
The warming land could now support different kinds of vegetation. The short scrubby bushes of the open arctic tundra were supplemented and then replaced by larger plants. A thousand years after the glacier began retreating, trees such as spruce, birch, and pines covered the land.

The change in plants led to a shift in the animal population as well. The mammoths and mastodons, which were suited for the coldest climate, died off. Herds of elk and caribou migrated across the region, browsing on the tundra plants and the evergreen and deciduous trees which were increasing in number. The herds probably moved with the seasons, searching for new grazing areas, and gradually moving north. And, for the first time, there is archaeological evidence that human beings were here on the land that we now occupy. The first settlers seem to have migrated from warmer areas south and west of our region. There were probably only a very limited number of people in the region, living in small groups.

These first settlers were migratory. They made their living by hunting game and gathering wild foods. They traveled long distances, looking for and following the grazing herds of caribou and elk on which they depended, and seeking the types of stones (such as chert or quartz) which they used to make their tools and weapons. These people favored high places for stops during their travels, from which they could observe the movement of game and organize their hunt. The places we know as islands, in Narragansett Bay and offshore, would have been high hills to them and would have made good look-outs. They may also have commonly stopped at places near water—beaches, streams, and lakesides.

The earliest people made fires at their stopping places and sometimes built shallow pit houses for shelter. We do not know what these people believed or how they saw the world. We do know, however, that they traveled light, and we know something about their tools. Their implements, made of stone and bone, were designed for killing and cutting up animals. They were lightweight tools such as spear points, knives, and scrapers which could be easily carried in their travels. They did not make heavy clay or stone pots or equipment for grinding up food, so we can infer that they ate their food as they found it, without much processing, except perhaps for cooking meat.

The first people were what archaeologists call opportunistic. They lived in a world of great change: climate, vegetation, indeed, the landscape itself, all were changing at a rate which might have been noticeable to an individual. Their food supply was moving and changeable, never thoroughly reliable. The sea level was rising at ⅔ of an inch each year; over a 30-year life span, a person might see a rise in the ocean of a foot and a half. On a flat coastal plain, such a rise could mean the flooding of hundreds of feet of land. Early people had to adapt to this volatile and uncertain environment. Over generations, they could move north as the caribou and elk did, or stay in the same area and learn to use the new plants and animals which became available. New stopping places would be found as old ones were flooded by the rising sea.



12,000 years ago

10,000 years ago

The first settlers were migratory. They made their living by hunting game and gathering wild foods. They traveled long distances, looking for and following the grazing herds of caribou and elk on which they depended.

How have archaeologists learned about these earliest people? In Rhode Island, no large sites from this period have been found, but sites in the surrounding states have been studied and our understanding of this period draws on these other places.

The most easily recognizable objects surviving from this period are tapered stone spear points, called fluted points. These stones were used by hunters—a point was attached to a wooden spear and thrown or thrust at an animal. The flute, a groove carved into both sides of the point, was used to fit it onto a wooden shaft. Fluted points were made by carefully detaching two long channel-shaped flakes with a tool of bone or antler. This is a difficult task; the toolmaker would likely have broken several points and tossed them away before he succeeded in making the perfect groove.

One such broken point provides the earliest evidence of people in Rhode Island. At the South Wind site near Wickford Cove, a fluted point was found in 1985, surrounded by some small pieces of stone debris that indicate the point was being made here when it was discarded. Nothing else from this early period was found, just these few pieces of stone to document a craftsman's unsuccessful attempt to make a spear point 10,000 years ago. Similar points have been found at locations in East Providence and southwestern Rhode Island. They are an intriguing testimony of the first people in Rhode Island.

Most of our questions about these people are still unanswered. Sites from this earliest period of human settlement are rare and extremely difficult for archaeologists to find. A mobile and thinly scattered population, the early people left behind only a few artifacts. Many of their living areas were later flooded as the ocean moved inland. Places that escaped flooding, like high elevations, have not been well preserved in the last ten thousand years. It is possible that archaeologists may be better able to predict the location of such sites in the future, as they learn more about the period and gain a better understanding of the world at the end of the ice age. In the meantime, the South Wind site and others like it are Rhode Island's only evidence of these ancient people.

PEOPLE SETTLE IN TO STAY

8000 - 3000 years before the present[1]

For several thousand years following the retreat of the glacier the climate continued to warm, causing changes in the land and waterways and in animal and plant communities. In time conditions stabilized and people established large fairly permanent settlement areas.

The retreat of the last glacier had a profound impact on the shape of the land and waters of this region for thousands of years. As the glacier melted, filling the ocean, the sea continued to move landward until it reached a limit we can recognize as the shoreline of Narragansett Bay.

The bay was formed from three long valleys, running north to south, which were flooded as the glacier withdrew and the sea advanced. The west passage lies between Conanicut and Prudence Islands and the mainland. The east passage is between the eastern sides of Conanicut and Prudence and the western side of Aquidneck Island. The Sakonnet River is set between the eastern side of Aquidneck and the west shore of Tiverton and Little Compton.

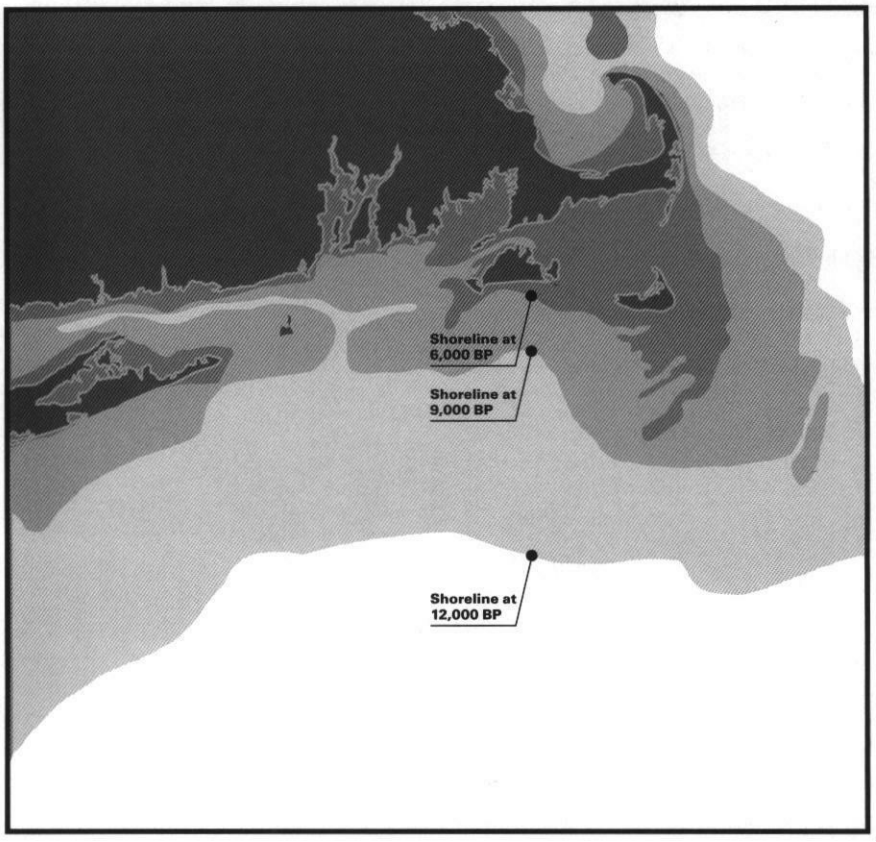
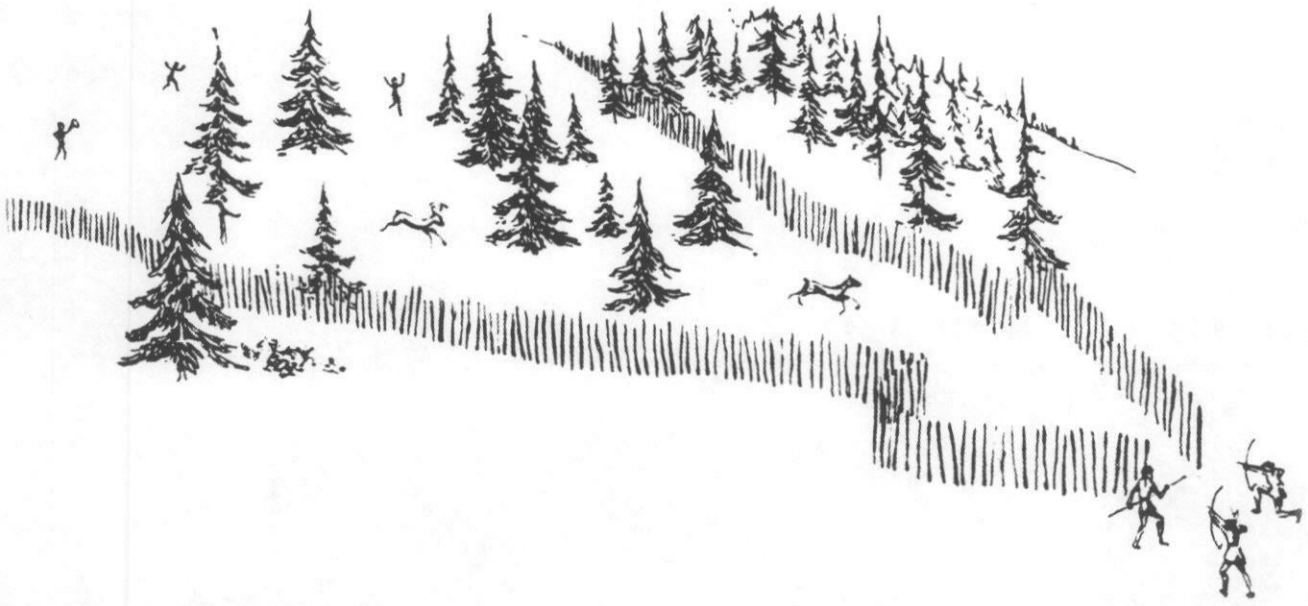


FIG 5 (opposite) A riverbank settlement of several families.

FIG 6 (above) Sea level changes from ca. 12,000 years ago to the present. At 6,000 years ago, Martha's Vineyard and Nantucket were part of the mainland. It was not until about 3,000 years ago that the coastline with its small estuaries and salt ponds fully formed.

[1] Archaeologists use the dating system established by radiocarbon scientists: BP stands for before present which is standardized to 1950. Thus 3000 BP is roughly 1050 BC.



During the long stretch between 8,000 and 3,000 years ago, the archaeological record suggests that there was a substantial increase in population in the Rhode Island area and that for the first time people settled in villages which had some permanence and stability.

Seven thousand years ago ocean water filled the lower west bay and the Sakonnet River. About 6000 years ago, the west passage was flooded, and Block Island was separated from the mainland's south coast, but the upper west bay and the Sakonnet River valley were still dry land. By 5000 years ago Conanicut Island had been cut off from the mainland, though Dutch Island was still connected to it by a land bridge. About 3500 years ago, salt water had reached the present head of the bay, at what is now Providence, and the bay looked roughly like the familiar waterway we know today.

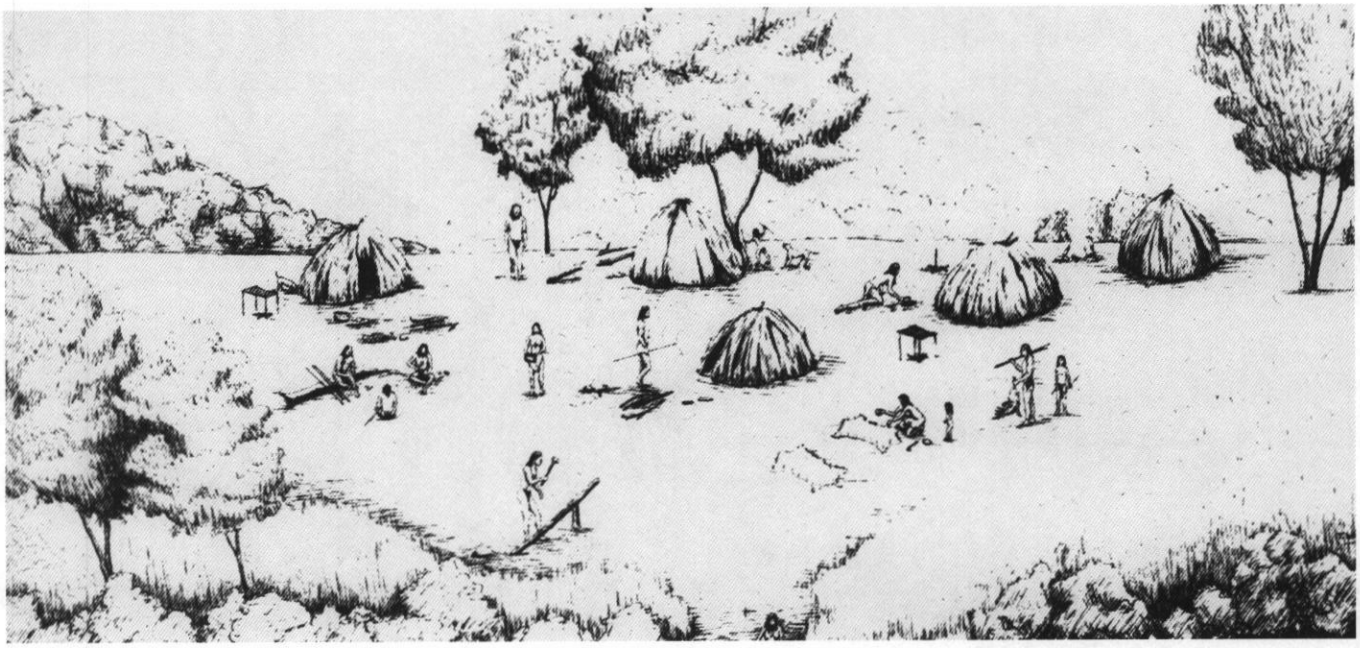
This steady rise in sea level over the course of thousands of years reshaped and altered the land of Rhode Island. The flooding of the river valleys formed islands from high points and created an indented and varied shoreline. As the ocean continued to move slowly landward it filled in coastal lagoons, marshes, and mud flats along the shore.

These changes in climate and in the patterns of land and sea were accompanied by changes in animal and plant populations as well. The fresh and salt water habitats created by the rise in sea level made the region congenial for an increased number of fish, shellfish, and waterfowl. The spruce forest of the preceding era gave way over millennia to trees suited to the warming climate. First oak and then other leafy hardwood trees, such as hickory, chestnut, and beech, added to the woodland. The changing forest offered improved habitats for a wider variety of animals. Deer, bear, rabbits, beavers, and other small mammals moved into the region.

Compared with the first centuries after the glacier, sources of food for people were far more numerous and more plentiful. An abundant variety of food was available, and getting it was much easier than it had been for the first migrants to this area. Deer were an important source of meat, but people ate fish and clams as well. Foods from plants, such as seeds, nuts, roots, and berries were available, so that even though people did not plant and harvest crops, they could find foods in the forest and the meadows.

With more ample food, it became less urgent to travel over long distances, following scarce game or searching out edible plants. It was now possible for people to settle in this region, rather than merely cross it or stop briefly as they moved on.

In addition, and even more importantly for the people who lived here, it was becoming easier to predict when and where the plants and animals were likely to be found. The most important characteristic of this new environment was its stability—as food sources established themselves in well defined areas, they could be counted on. If people knew from one year to the next where the best nut trees grew, where the fish ran, where the deer gathered, where



WAPANUCKET 141

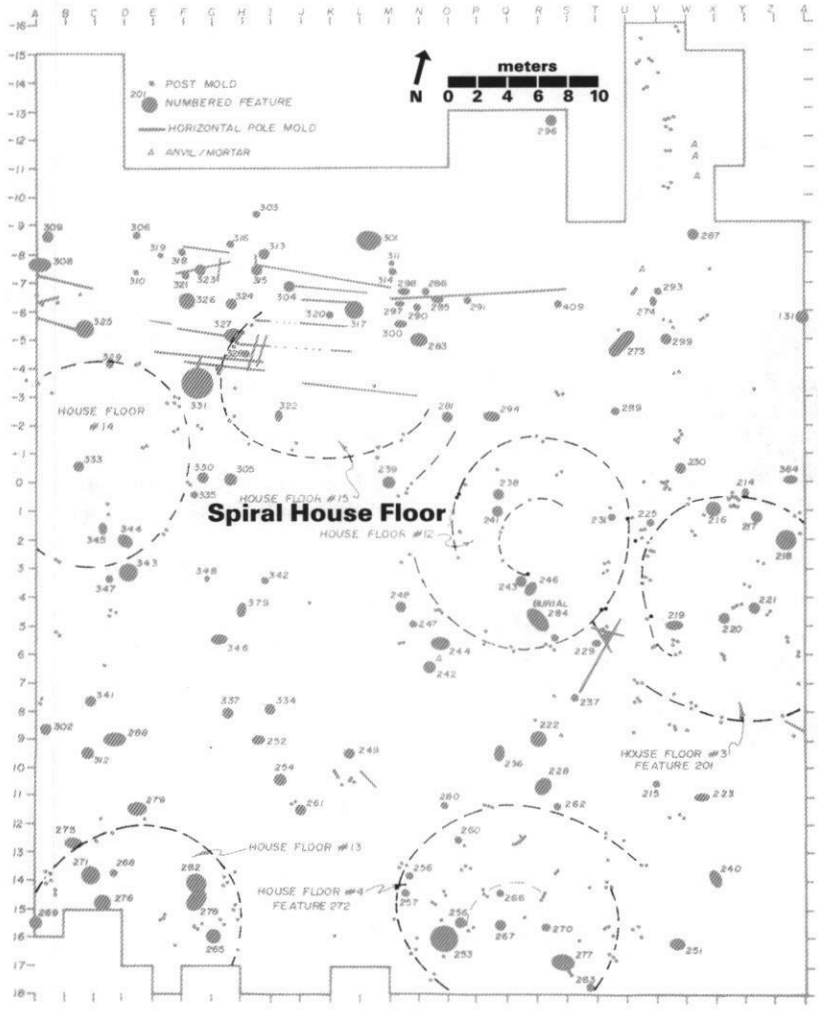


FIG 7 (opposite) Groups of people hunted deer by driving them into a long wedge.

FIG 8 (above) A riverbank settlement of several families.

FIG 9 (left) An archaeological plan of several house floors at the Wapanucket site on Lake Assawompsett, Massachusetts. Archaeologists determined the shapes of the floors by exposing the location of posts that held the wigwams in place.

SITE NUMBER	DATES FROM
F115	AD 1098
F116	AD 658
F77	330 BC
F79	380 BC
F82	484 BC
F86	1148 BC
F118	1440 BC
F111	1660 BC
F39	2580 BC

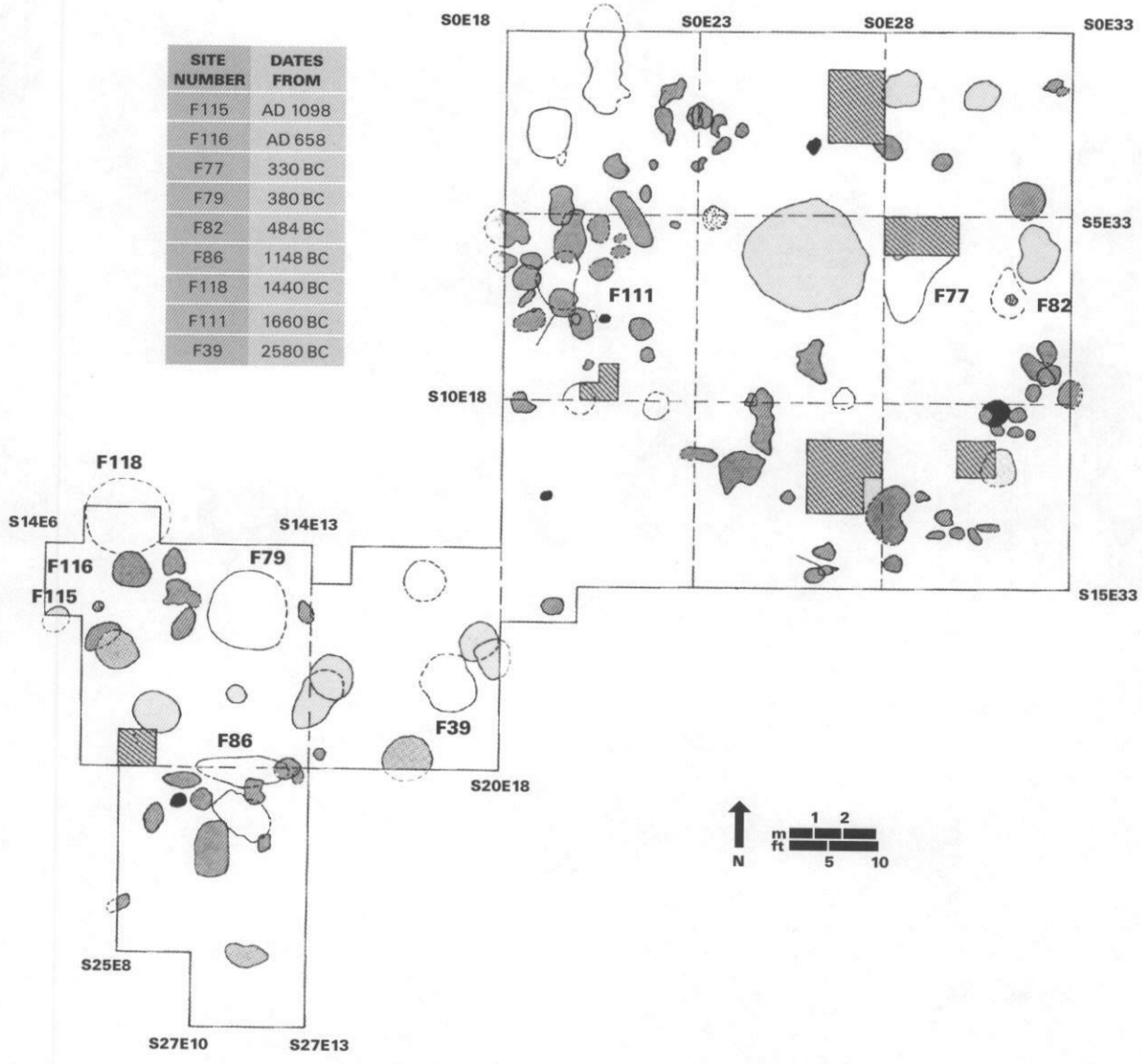


FIG 10 (above) An archaeological plan of part of the Joyner site. Features were exposed from several settlements indicating that people returned many times over more than three thousand years to this site in Jamestown.

FIG 11 (opposite) Bowls and other vessels were carved from soapstone, a soft stone found in several places in Rhode Island. The drawings are from an archaeology text written by Charles Willoughby and published by the Peabody Museum of Archaeology and Ethnology at Harvard University. They represent a period in American archaeology when artifact collecting and description were the primary goals of the discipline.

the geese stopped on their migration, then they could feel that there was a measure of safety in locating more permanently near these food sources.

During the long stretch between 8000 and 3000 years ago, the archaeological record suggests that there was a substantial increase in population in the Rhode Island area and that for the first time people settled in villages which had some permanence and stability.

As with the earliest period, our knowledge of this era comes from archaeological sites in Rhode Island and nearby states. Sites from 8000 to 4500 years ago are found in East Providence, Providence, Coventry, North Kingstown, and throughout South County. None of these sites can yet be identified as a village, but an early village site has been discovered just north of Rhode Island on Lake Assawompsett in Massachusetts. This nearby village contains clusters of small round houses and some larger structures, apparently used for ceremonial occasions, and also some graves.

The earliest firm evidence of a settled community in Rhode Island comes from the Joyner site in Jamestown. The Joyner site was used by people for over several thousand years, but its earliest use dates from the end of this long period of environmental change, sometime between 3700 and 3100 years ago. At Joyner, the evidence from this early period is sketchy, and

ANTIQUITIES OF NEW ENGLAND INDIANS

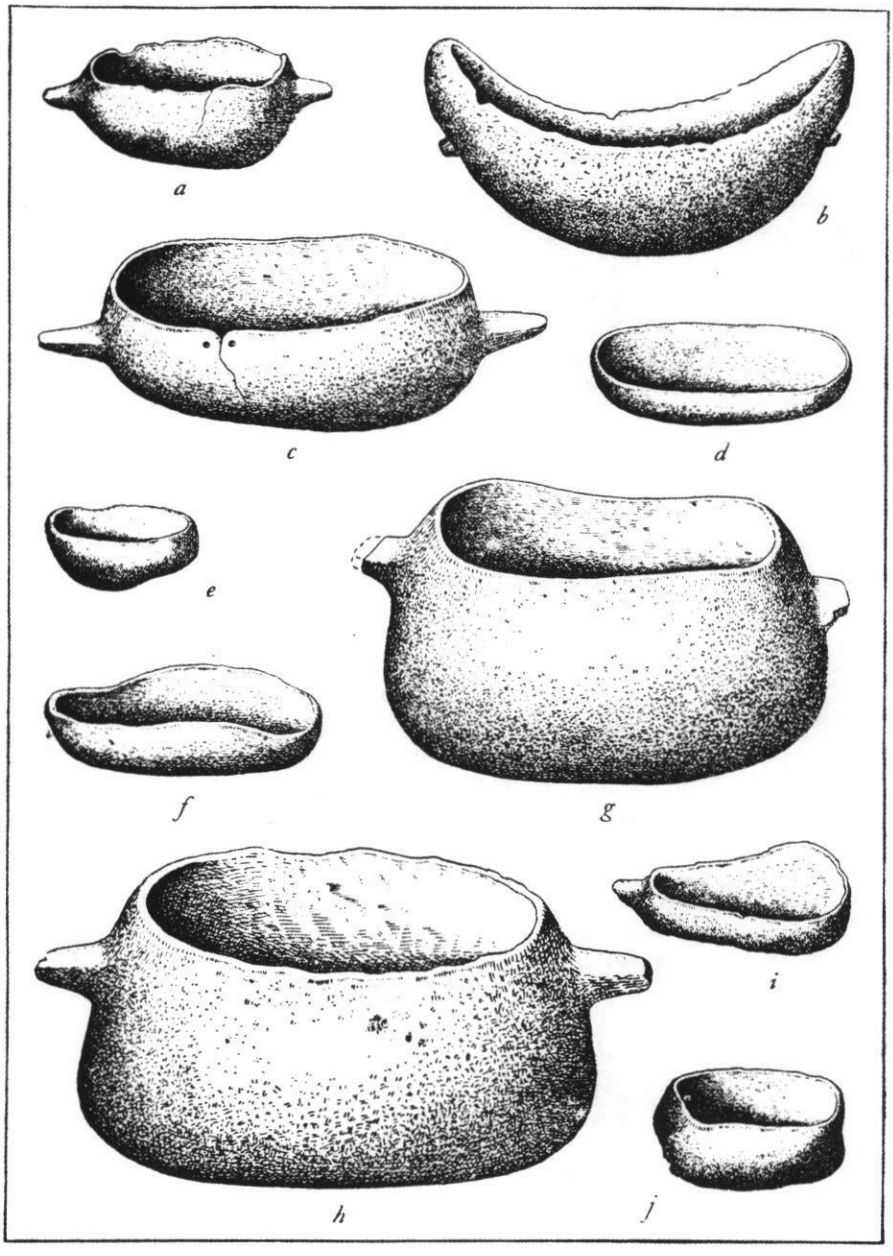


Figure 84. Soapstone Pots and Dishes. All from Massachusetts with the exception of i, which is from Cranston, R. I.: a, Tewksbury; c, Lawrence; d, Hadley; e, Worcester Co.; f, Millbury; g, Lynnfield; h, South Hadley Falls; j, Hadley. a, b, e, f, i, Peabody Museum of Cambridge; d, h, j, Amherst College Museum; c, Andover Archaeological Museum; g, Society for the Preservation of New England Antiquities, Boston. (About 1/7.)

People were permanently settled into village areas and they were organized well enough to carry out large construction projects. Some members of their communities had authority to organize others for work.

the conclusions drawn by archaeologists are tentative. But when the Joyner artifacts are examined in the context of other sites (such as the contemporaneous village at Assawompsett), we can deduce some things about these early villagers in Rhode Island.

The earliest evidence of people living at Joyner comes from storage pits, probably dug out under the floors of houses. Though the evidence of the houses themselves was destroyed by later plowing of the land, the storage pits remained intact.

Many of the objects found at Joyner were used for getting and processing food: spear points for hunting game, choppers and scrapers for breaking up animal carcasses, small stones probably used to weigh down fishing nets, stone bowls used for cooking, mortars and pestles for grinding nuts and wild grains. Food evidence shows that these early people ate deer, various shell and fin fish, several kinds of birds (the most common was passenger pigeon), and plant foods gathered from the wild, such as hickory nuts, grapes, and goosefoot, which was valued for its seeds.

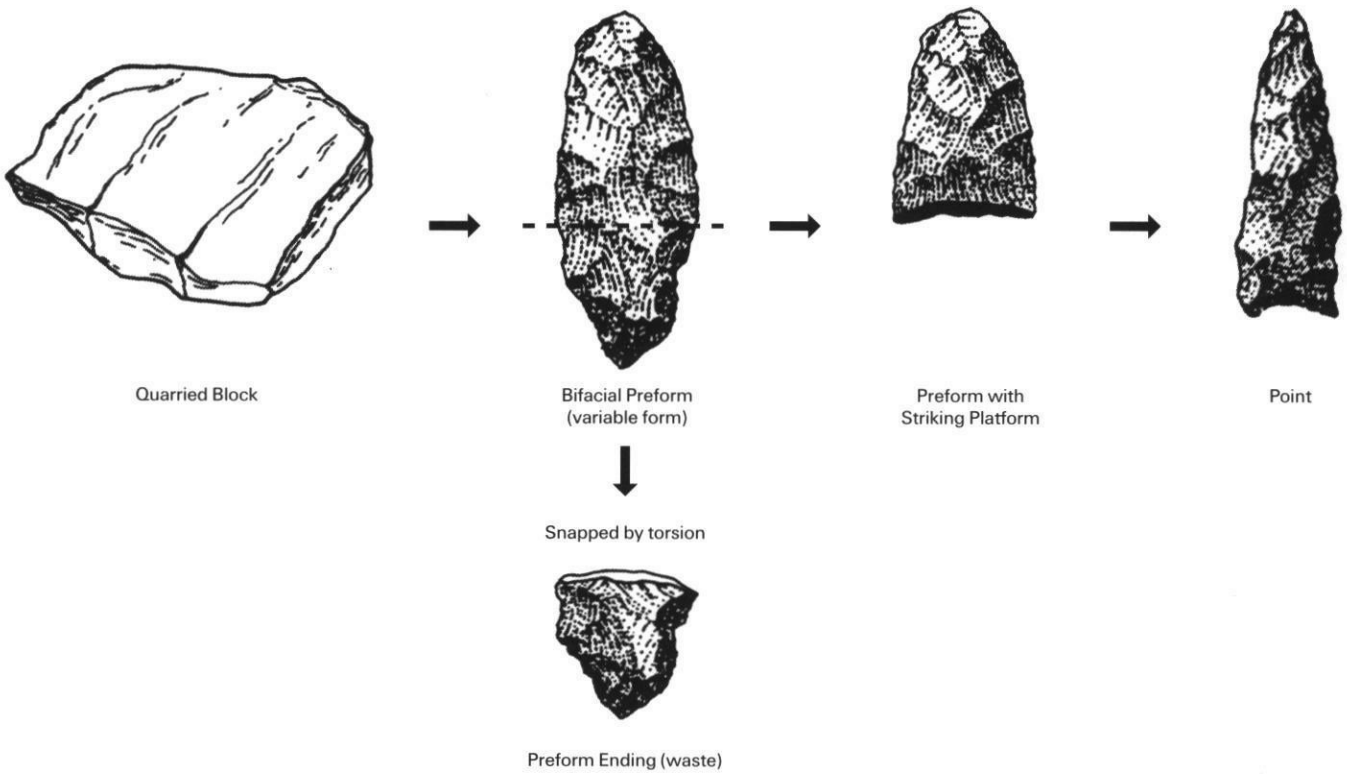
Tools like wedges and drills were used in making wood or bone objects, while scrapers could be used to dress animal hides which were used as clothing. One of the Joyner pits contained a supply of graphite, a soft black stone used to make a kind of black paint.

A nearby site at West Ferry in Jamestown contains graves from the same period as the earliest artifacts at Joyner. The materials included in these graves tell us something about the beliefs of the people who lived in these early settlements. Some of the individuals buried at West Ferry were cremated before burial. Some graves contained only bones; others included objects as well, such as containers, tools, weapons, shells, and stones. No doubt such objects had great meaning to the people who buried them with their dead. The containers may have held food to nourish the soul on its journey. Some of the objects may have been part of the burial clothing; others could have been prized personal possessions of the dead or gifts from mourners. The tools may have been for use in the afterworld.

During this period people began to make bowls and other things from a soft carvable stone called steatite or soapstone. Stone bowls are durable but very heavy—when they are found at an archaeological site, they suggest that the people who lived at the site were well settled into a place. Unlike the light portable tool kit carried by the earlier wanderers through this area, the soapstone objects could not easily be carried over long distances, so they indicate a more established settlement.

Soapstone objects are found at the Joyner site and other Rhode Island sites of the same age. The stone was quarried in Rhode Island at outcroppings in Providence, Johnston, and Cranston. At the Ochee Springs Quarry in Johnston it is still possible to see how stone bowls were made four thousand years ago. A stoneworker would block out the form of the bowl in the bedrock, bottom side up, with stone hand picks and chisels. The partially completed bowl was split from the rock and then hollowed out. Sometimes the stoneworker would carve lugs into the sides of a bowl or drill holes near the top so that the heavy bowl could be carried or suspended.

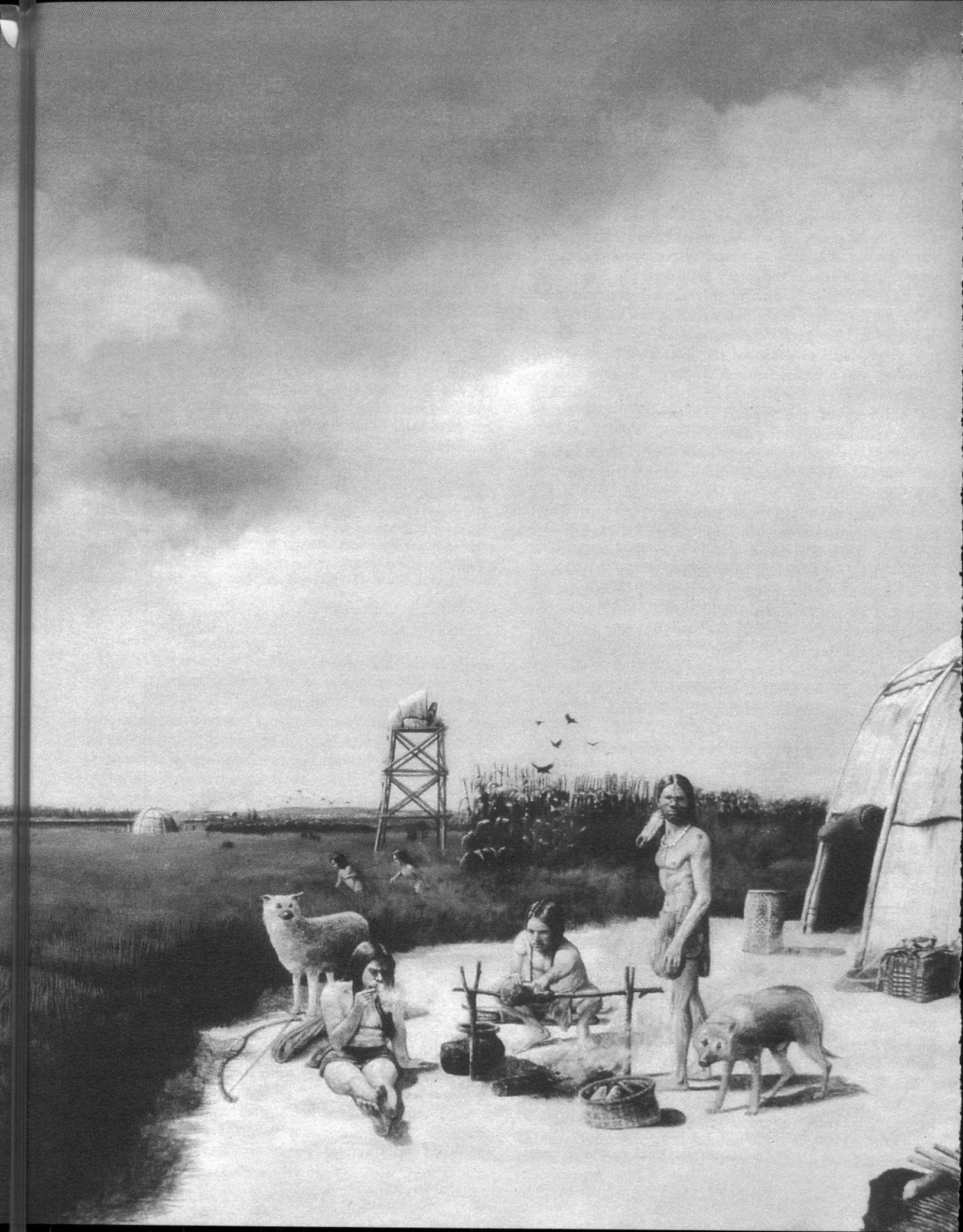
Though the evidence from this period is still scanty, archaeologists can tell something about these people by careful study of the available sites and by inference from examination of sites in nearby regions. We know, for example, that not only were people permanently



settled into village areas but that they were organized well enough to carry out large construction projects. Some members of their communities had authority to organize others for work. A Massachusetts site demonstrates this: four thousand years ago a large fish weir was built in what is now Boston. The weir, a kind of fish trap, is a fence of sharpened sticks set across an inlet with brush closing the spaces between the sticks. More than 65,000 stakes were required for the Boston weir. The construction and maintenance of such a trap needed a large work force organized over a long period of time to perform the various tasks required for its construction. People from several villages probably worked together on the fish weir.

Contact among various communities in the southern New England area was common. Archaeologists know about these contacts when they find stone materials in sites far from their natural sources. Quartzite from Connecticut is often found in sites in Rhode Island; red felsite from the Attleboro region is found in sites around Narragansett Bay. The movement of these materials helps archaeologists to determine how far away trade goods were carried. Rhode Island villagers from this period had contact with others in areas as far west as the Hudson River and as far north as the Merrimack River. This may seem a wide area of contact, but compared to contemporaneous settlements in the American west and southeast, these Rhode Island settlements seem to have been relatively insular. In Kentucky, for example, a grave from 5,000 years ago contains both shell from the Gulf of Mexico and copper from the Great Lakes region, indicating much longer trade routes and communication lines.

FIG 12 Quartzite from ledges along the Blackstone River was used to make projectile points between 5,000 and 3,000 years ago. Blocks of the stone were chipped to produce the finished artifact.



SETTLEMENTS AROUND THE BAY

3000 - 500 years before the present

Three thousand years ago people had settled all along the coastal edge of the newly formed Narragansett Bay. In the long era between 3000 and 500 years ago these people created a pattern of life for themselves—they used the resources of the bay and the land, invented new technologies, created an elaborated culture and system of religious beliefs, shaped their political lives, and fashioned and re-fashioned their environment.

Year after year, Indian people lived with the changing seasons, dependent on their own understanding of the bay and the forest, relying on their knowledge of the animals and plants which supplied their needs. The intimate relationship between the landscape and the Indian people living within it is documented by archaeological sites.

Over 200 sites from this period have been identified in Rhode Island. These sites help to explain some of the great changes which occurred during this period, especially the increase in population, the introduction of baked clay pottery, and the adoption of agriculture. But important questions also remain unanswered. For the end of the period there is an additional source of knowledge in the written descriptions of Indian people by the first Europeans who came here, but the era's history is no doubt more complex than we know. The study of archaeological sites in the future will help to fill in some of the blanks in our knowledge.

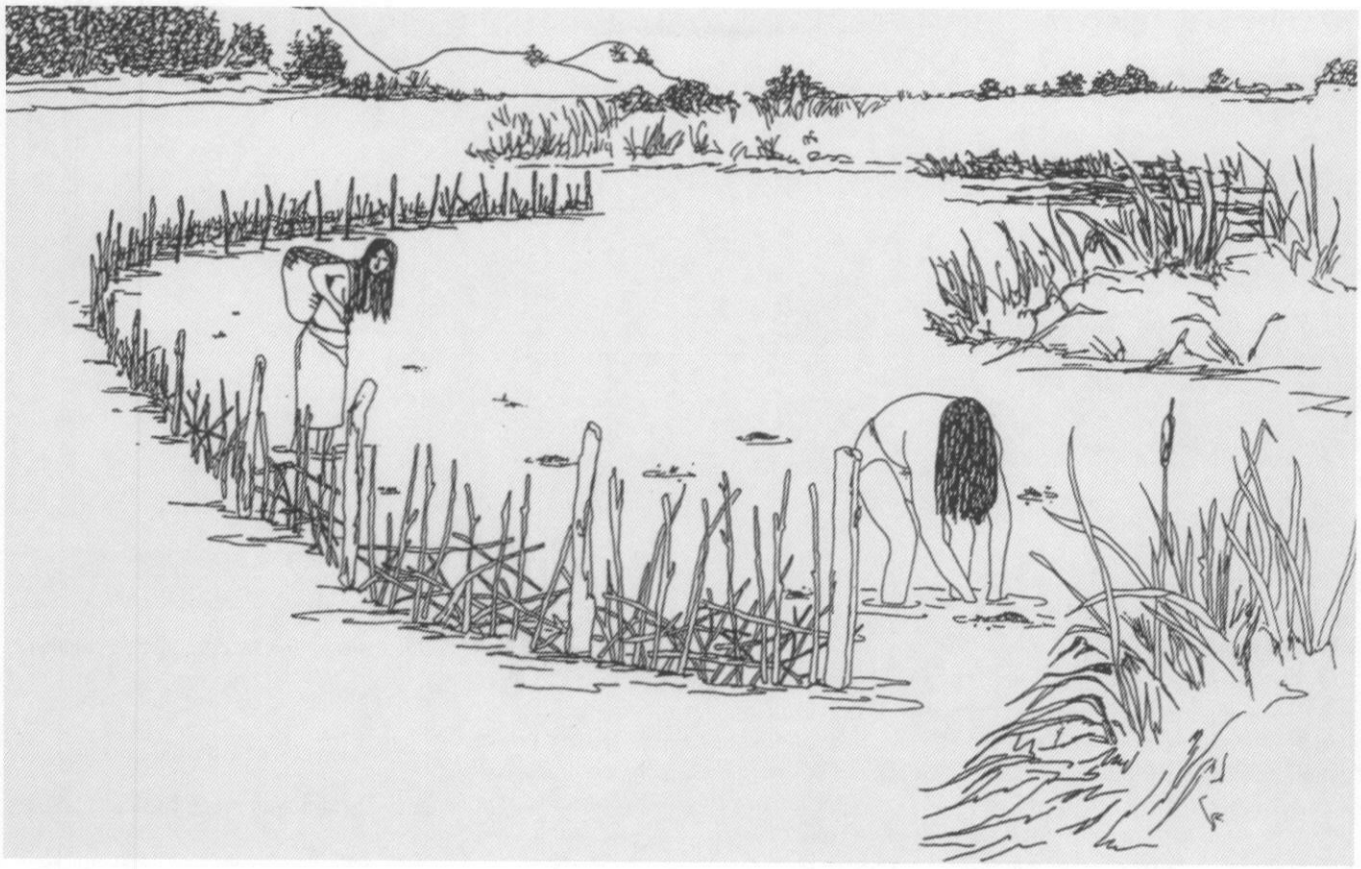
It is known that the population of this area was substantially larger during this period than it had been in the earlier, colder centuries. Some people may have migrated from the west at the middle of the period, or the local population may have grown as food sources stabilized and increased.

Some sites from this era show evidence of year-round occupation, but these people also moved with the seasons. They spent warmer months near the coast and the colder times in upland and inland areas. Though they stayed in one location for only part of the year, there is evidence that people returned year after year to the same places; some archaeological sites show evidence of over a thousand years of use.

Indian villages grew up along the coastline of the bay, at well protected places like Greenwich Cove, Wickford Cove, and Nonquit Pond, and also near the lagoons (called "salt ponds") in coastal areas, at places like Potter Pond in South Kingstown and Great Salt Pond on Block Island. Together with inland settlements along rivers and streams, these village sites make a patchwork of large and small sites all over Rhode Island.

Some sites from this era show evidence of year-round occupation, but these people also moved with the seasons. They spent warmer months near the coast and the colder times in upland and inland areas...there is evidence that people returned year after year to the same places.

FIG 13 Scene in a Narragansett village, drawn from Narragansett tribal oral history and research by historians, archaeologists, and geologists.



The introduction of agriculture, the annual planting and harvesting of food, is an important point in the history of many peoples. The change from food-gathering to food-growing is seen as an economic revolution, a momentous event which has far-reaching effects.

FIG 14 (above) Fish weirs built of stakes and twigs allowed for the easy capture of fish at low tide.

FIG 15 (opposite) The formation of tidal mudflats, such as this one at Sapowet, coincided with the establishment of large Indian settlements in coastal areas around 3,000 years ago.

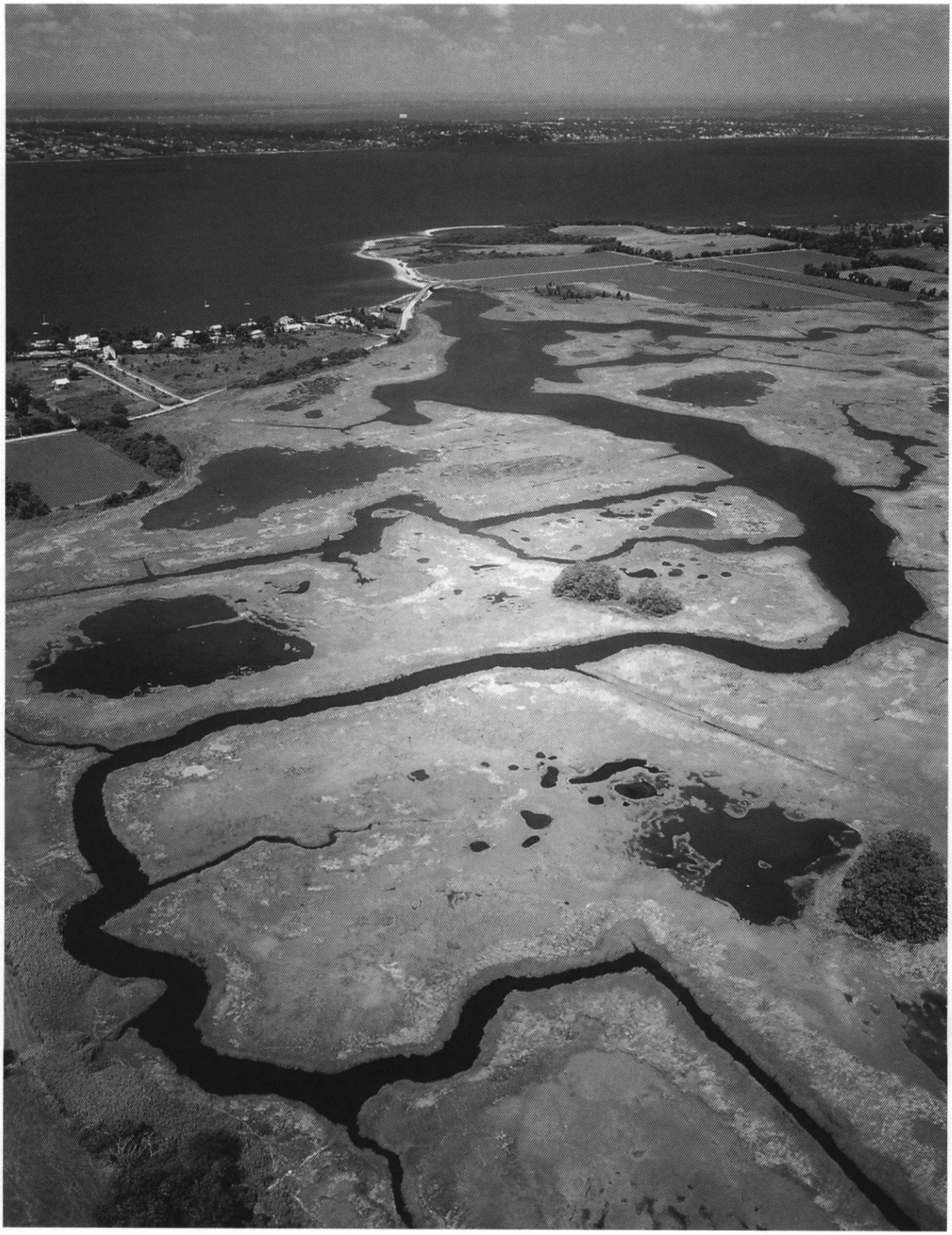
Indian people hunted animals and gathered plants that were available near their settlements. These resources were carefully managed to encourage a regular and predictable harvest. Controlled fires were set in the autumn, probably after the nut harvest, to create and maintain the open meadows and the clear forest floor that attracted deer and other animals and to encourage the growth of strawberries, gooseberries, raspberries, and currants. Weirs were built to capture fish; shellfish were gathered from mudflats and ponds; and game animals were hunted and trapped.

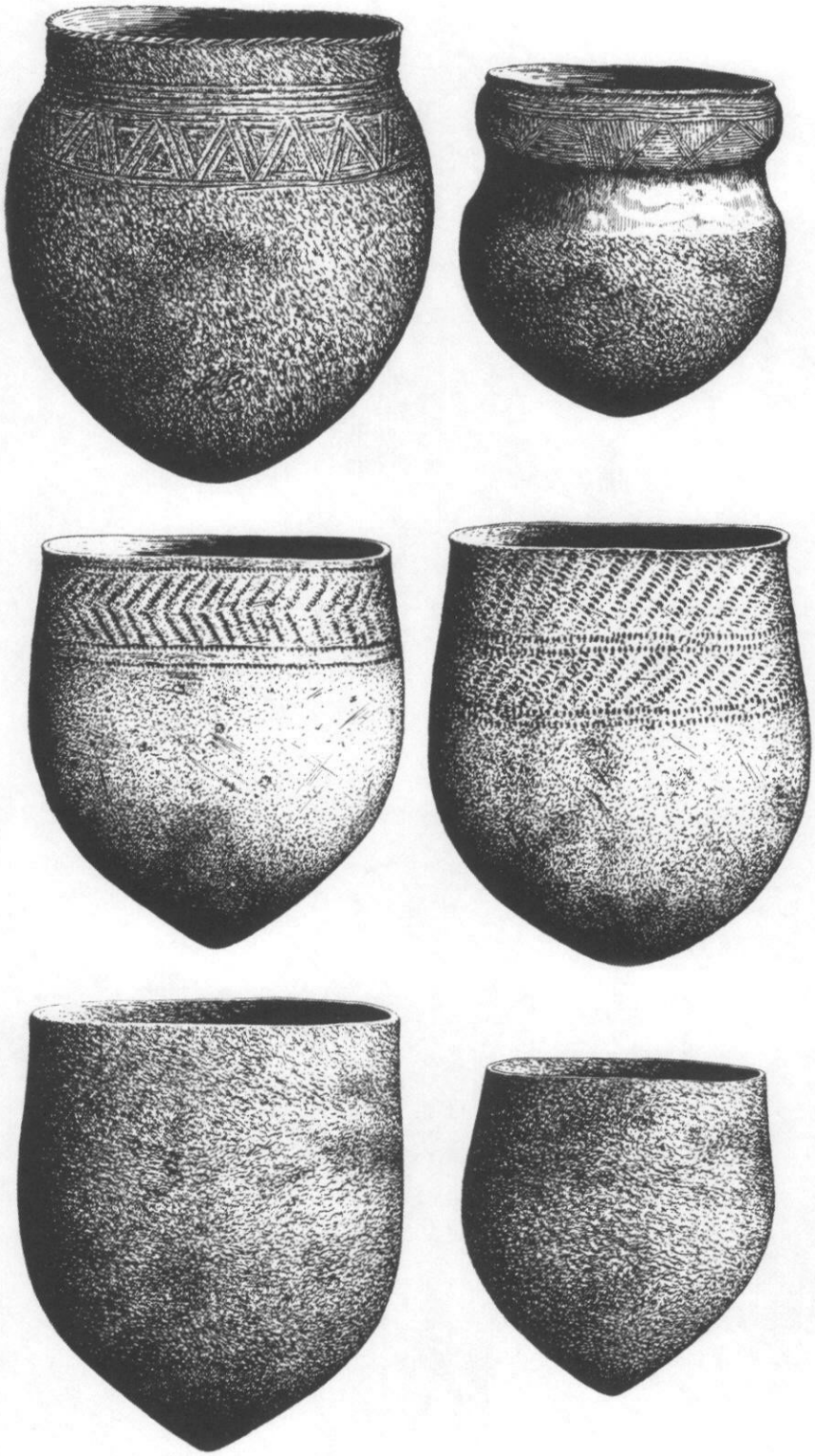
The introduction of ceramics around 3000 years ago provided lightweight vessels for carrying and storing food. The technology of making fired clay vessels was imported from nearby areas; the earliest pots are made of clay mixed with tiny bits of crushed stone; later ones are made of clay mixed with fine crushed shell. The pots themselves were formed by coiling the clay or patting it into shape. Decorative motifs, both abstract and representational, were sometimes incised in the clay, early surviving evidence of art made by people living near the bay.

The village areas from this era which have been examined by archaeologists show evidence of houses, larger community buildings, places for processing and storing food and for making tools, and places for burying the dead.

Much remains to be discovered about the magnitude and complexity of these communities, but it is known that in general American native people organized themselves in tribes, groups of individuals and families. Their leadership was sometimes vested in a single individual; at other times authority was shared. Tribal identities encompassed several villages. The village itself may have included several houses, perhaps a dozen or more households, for a hundred or more people. Winter locations seem to have been smaller than summer villages.

These communities were in large measure self-sufficient. Within the land and water comprising a community's summer and winter locations was a rich variety of resources. Foodstuffs





were gathered and hunted, but the many materials needed for making tools, clothes, and shelter were also available. Deer and seal provided not only food but also leather. Marsh grasses were made into baskets and mats. Clay deposits were used to create ceramic pots. Shells, bone, and stone were made into a wide variety of tools.

Narragansett Bay people also traded with others for goods brought from long distances. Both jasper (a kind of quartz) from Pennsylvania and copper from southeastern Canada or the Great Lakes region were imported to Rhode Island, and the soapstone of this area was exported to other areas.

About a thousand years ago, people in southern New England began to plant and grow food crops. Beans, squash, and corn became an important part of their diet. Of these three foods, corn was the most important. A subtropical plant, corn was originally adapted for cultivation in central America. Information about its culture moved from tribe to tribe, north from its original development in central America.

The introduction of agriculture, the annual planting and harvesting of food, is an important point in the history of many peoples. The change from food-gathering to food-growing is seen as an economic revolution, a momentous event which in theory has far-reaching effects: it allows for more permanent settlements, provides a surplus of food to sustain a larger population, a surplus which may increase opportunities for exchange, and increase control over the environment. For many people in the northern United States, the cultivation of corn was just such a force; corn was a dietary staple for the Seneca, Onondaga, Mohawk, and Huron peoples.

The cultivation of corn presents a tantalizing problem for archaeologists when they excavate and study sites in Rhode Island. Only tiny amounts of corn, a few kernels, have ever been found at Rhode Island sites. Dozens of sites from this period have been studied but only two sites have produced evidence of corn or bean seeds; the Phenix Avenue site in Cranston and the Salt Pond site in Narragansett contained a few charred seeds. The Cove Lands site in downtown Providence, a large complex of food storage pits, cooking hearths, and refuse areas, contained no corn, beans, or squash. If these crops had been part of daily life for people who lived at the site for several hundred years, one would certainly expect to find some sign, yet there is none.

This archaeological evidence is apparently at odds with written sources from the end of this period. When European visitors first described this region in the 1500s, they noted the importance of corn and beans for Indian people and described their garden plots.

It is possible that people on the coast of Narragansett Bay did not grow much corn until late in this period, near the time that Europeans first arrived. It may be that they did not need to grow this crop to survive and live well. The resources of the bay and the woodlands probably provided a good surplus of food and other necessities. Growing food, after all, takes more labor than hunting and gathering—if horticulture is not required for survival, it may not be an important part of a people's life.

The introduction of ceramics around 3000 years ago provided lightweight vessels for carrying and storing food. The technology of making fired clay vessels was imported from nearby areas.

FIG 16 About 3,000 years ago women in southern New England began making clay pottery. These vessels quickly replaced stone bowls in native communities as clay deposits were more plentiful than soapstone, and once the craft was mastered, clay pots were easier to make.

Around Narragansett Bay there was a varied and plentiful food supply. A site near Greenwich Cove dating from about 1000 years ago, for example, contains evidence of seven species of shellfish, ten kinds of land mammals, two species of reptiles, five different sorts of saltwater fish, and three species of birds, all available within a few hundred yards of the site. Other sites show that Narragansett Bay people had the technology to store foods for lean times. By contrast, in the nearby Connecticut River Valley, large amounts of corn have been found in sites of this period; but the inland people of Connecticut did not have access to the same panoply of wild foods available in Rhode Island. The question of how and when native people began to plant and grow food remains an important area of research for Rhode Island archaeologists.

The hundreds of sites from this period provide information about how people lived, about their technology, about how they created and distributed material goods. But they also tell us a little about other, more spiritual aspects of the people who lived around the bay—what they believed about themselves and their world, how they represented their own roles in the world, how they maintained relationships with their neighbors, what they thought about the afterworld.

The Lambert site in Warwick is especially important in addressing these questions. The site contained a mound of shells, created almost 900 years ago. The mound was about three feet across and two or three feet high. The shells were gathered at different times of the year and seem to have been accumulated and saved for a special event which was planned in advance, as if for a scheduled ceremonial occasion. This may have been a social or spiritual event, perhaps involving feasting, dancing, gift-giving, or games; it may have involved the people of one community or several.

The Lambert site mound was built in several layers of different kinds of shellfish. Beneath the mound were found the skeletons of two young dogs. Placed next to the dog bones were two shells: a single side of a soft-shell clam and a whole knobbed whelk. In the mound itself were various foods (deer, fish, and birds), some burned rocks, pieces of special stones (jasper from Pennsylvania and chert from New York), mica fragments, and a stone pipe.

These objects seem to have been valuable and powerful things for the people who made the mound. Spiral-shaped shells were a common symbol of spirituality among native peoples, and dogs had a special place in the lives of many tribes, sometimes as a food delicacy, as a protecting spirit, and as a measure of wealth. Perhaps these valuable objects were placed in the mound as offerings to the spirit world. They are an intriguing mystery, giving us a glimpse into the intellectual and spiritual life of the people who lived around Narragansett Bay.

FIG 17 (opposite) Waterplace Park in downtown Providence recalls the Great Salt Cove that once stretched from the base of the State House to downtown, and from the Produce Warehouse to Canal Street. Beneath several feet of urban fill along Gaspee Street, archaeologists found the well-preserved remains of a large Indian settlement that flourished at the Cove from at least 900 to 1300 AD

FIG 18 (above) An archaeologist from the Public Archaeology Laboratory excavates a shell mound at the Lambert farm site. The mound may have been constructed for a celebratory feast, ca. 900 AD

CONTACT BETWEEN NATIVE PEOPLE AND EUROPEANS

1524 AD - 1709 AD

In the hundred and fifty years after the first visit by a European to Rhode Island, the way of life created by Narragansett Bay peoples changed radically. Newcomers arrived from Europe and, over the course of two centuries, they altered many aspects of life for people who lived around the bay. The period began amiably with exploration and trade, but it ended in violence and war.

The first European visitor to meet and describe the people of Narragansett Bay was Giovanni da Verrazzano who arrived in 1524. The record he left of the fifteen days he spent near the bay is a snapshot of life among the native people he saw and knew and suggests what life had been like for these people for several hundred years.

Verrazzano was a Florentine working for the French; he spent three months exploring the eastern seaboard from the Carolinas to Nova Scotia and made landfall at Narragansett Bay. What Verrazzano found was a good deep-water port, probably the harbor at Newport; he explored the entire bay and its islands and found the bay bordered by open fields where native people cultivated their gardens. The wooded areas he saw were clear beneath the trees' leafy canopy; today's familiar undergrowth of briars, vines, and immature plants did not clutter the forest floor, as the native people regularly burned the undergrowth. Verrazzano reported deer and fish in abundance. The land was "as pleasing as it can be," he wrote.

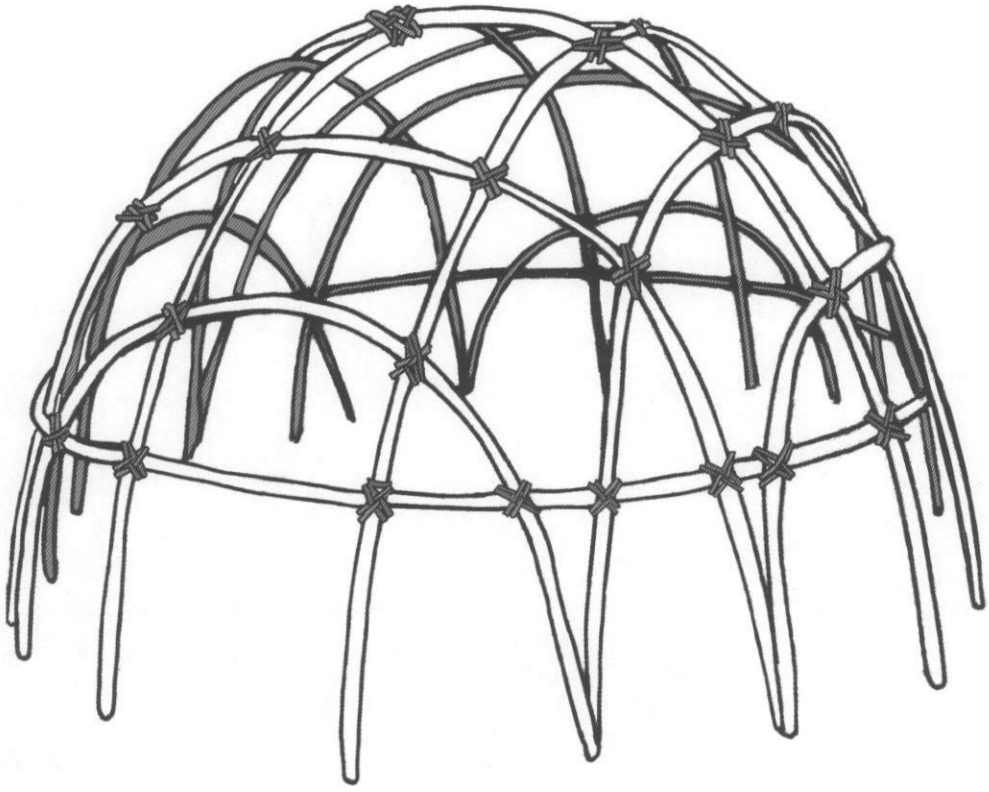
The native people Verrazzano saw lived in villages, as indeed their ancestors had for generations. Their houses were circular in shape, some measuring forty feet in diameter. The houses were framed with bent saplings and were covered with woven mats. Each family lived in its own house; since Verrazzano reported as many as thirty individuals living in each house, it is likely that he was describing an extended family living in each one. The shelters were temporary structures—the explorer observed that a family could easily move, taking the bark or rush mats from the sapling frame of the house and building a new frame elsewhere.

The people Verrazzano saw were at home on the coastal waters as well as the land; the French ship was met by twenty small dugout boats, each manned by about fifteen men, and Verrazzano was shown a safe anchorage by his hosts.

The native people were hospitable; they shared food with the visitors and gave them gifts. Verrazzano probably did not understand the full significance of their welcome. According to the custom of these people, new settlers

Verrazzano probably did not understand the full significance of the native people's welcome...The arrival of cooperative newcomers, especially those who had some wealth, would increase the power and status of an Indian leader.

FIG 19 Fort Ninigret, in Charlestown, was the seventeenth-century stronghold of Ninigret, Sachem of the Eastern Niantics. The embankments of the fort are marked by an iron fence, erected by the state in the 1880s, when this site was made a monument to the native tribes of Rhode Island.



who moved into the area were free to stay if they offered allegiance to the local leaders. The arrival of cooperative newcomers, especially those who had some wealth, would increase the power and status of a leader. In sharing their goods, the native people may have expected or hoped that Verrazzano would share his wealth with them or stay in the area. But he sailed on and did not return.

Other seventeenth-century sources tell us that the lands around the bay were occupied by two tribes. The Narragansett territory was on the west side of the bay; the Wampanoags lived in a territory extending east to Massachusetts Bay. The eastern shore of Rhode Island and some of the upper bay was contested land. Both tribes were part of the larger Algonquin language group spread over much of northeastern North America. Their lives were characterized, as we have seen, by the use of stone tools and weapons, by the hunting and gathering of wild foods and the cycle of planting and harvesting, by seasonal mobility with summer locations near the coast and inland winter spots. Though their economies were largely self-sufficient, Narragansett and Wampanoag people traded with others for some specialized materials. Their travel routes are still followed by several modern Rhode Island roads, such as the Old Post Road, Route 44, and parts of Route 2.

Their leaders were called sachems, though political power in the Narragansett and Wampanoag tribes was not strongly centralized—the making of important decisions needed consensus, achieved in a council; political arrangements were somewhat fluid and leadership was conditional; and there were other leaders as well as the sachems. Medicine men and women, for example, performed such roles as healing, carrying special knowledge, and interceding with deities.

In the decades following Verrazzano's visit, the Narragansetts and Wampanoags (and neighboring tribes such as the Pequots and Nipmucs) saw little of the Europeans. Only sporadic efforts were made to settle the region; trading contacts were more common. Dutch traders worked the trade routes along Long Island Sound. English and Spanish fishing voyages touched northern New England. French trading locations were located to the northwest. The English made several expeditions to New England between 1602 and 1611. They sometimes kidnapped native people to serve as guides and interpreters, and violent exchanges between the native people and the Europeans were not uncommon.

Tragically, European traders and explorers carried diseases, such as measles, to which native people had no resistance. Minor maladies for Europeans could be deadly for Native Americans. Between 1616 and 1619, waves of epidemics swept through the population of New England, destroying whole villages, altering social structures, and disturbing the balance of power among American tribes.

FIGS 20, 21 (above, opposite page) A bent sapling frame was covered with bark or rush mats to make a family wigwam.

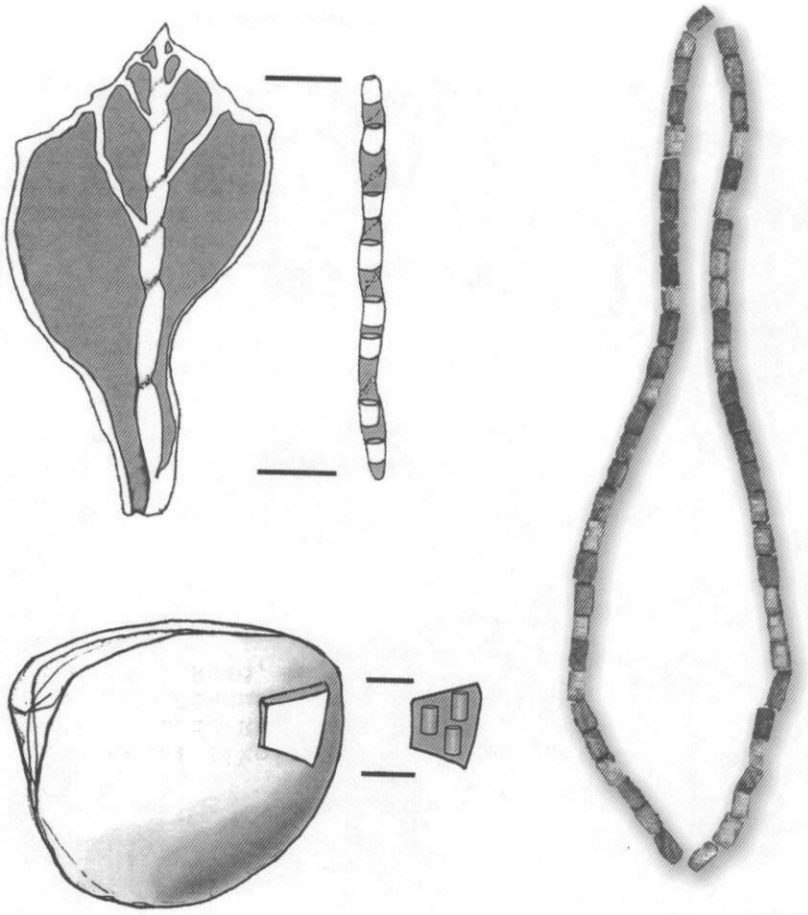
The first permanent European settlement in the region was made at Plymouth in 1620 by English Separatists who settled in Wampanoag lands. Ousamequin, the leader of the Wampanoags, controlled the land stretching from Narragansett Bay east to Massachusetts Bay. His main village was located on Mount Hope Neck in present-day Bristol. Several Wampanoag villages were located in what is now Rhode Island; Sowams village was in the Barrington-Warren area; another village was located in Bristol near the Bristol Narrows.

Plymouth colonists found the Wampanoags a weakened tribe—the awful epidemics of the previous decade had reduced the tribe in number and diminished its power. On a visit to Sowams in 1621, Plymouth leader William Bradford described the people of the village as "not many, being dead and abundantly wasted."

Throughout the mid-seventeenth century three colonies of European settlers expanded into Wampanoag and Narragansett lands. First, the Plymouth colony was settled. Plymouth township was never very large or important, but as a colony Plymouth followed expansionist policy. New towns were created by its government throughout the middle of the century. Between 1630 and 1650, nine autonomous new towns were added to the original settlement. Second, Massachusetts Bay Colony was settled at Boston harbor in 1629, and quickly became a center of trade. As in the older colony at Plymouth, Massachusetts formed new towns throughout the seventeenth century. Emigrants from these older colonies settled in the third colony in the area which is now Rhode Island: Roger Williams and his party located at the head of Narragansett Bay in 1636; in 1638 Portsmouth was settled; in 1639 a group of colonists arrived at Newport. Other settlers followed, often building towns near the sites of Indian villages, at Wickford, Warwick, Pawtuxet, and Block Island.

Ousamequin sold land to Plymouth and Massachusetts Bay for their new towns; the Europeans eagerly sought to buy Indian lands, and the Wampanoags frequently sold off acreage. In 1641, Ousamequin sold a large tract to agents for a group from Massachusetts Bay who founded Rehoboth; in the 1640s and 1650s Massassoit sold the land which today encompasses the towns of Swansea and Somerset, Massachusetts, and Warren and Barrington, Rhode Island, to settlers from Plymouth, which had authorized its agents to purchase "all such land as the Indians can well spare." When Ousamequin died in 1662, large tracts of what had been Wampanoag lands were the property of white settlers. Plymouth now made attempts to control land sales to avoid antagonizing the Wampanoags, but Ousamequin's successors felt keenly the pressure of surrounding white settlements.

On the other side of Narragansett Bay, a somewhat different situation prevailed. For reasons which are not clear, the Narragansett tribe did not suffer from the disastrous epidemics of the 1610s. Indian survivors attached great significance to the Narragansetts'



The Narragansetts were at the height of their power in the early seventeenth century. The tribe numbered perhaps 40,000 people, while its enemy the Wampanoags were growing weaker. The land area the Narragansetts controlled was not large, but their economic and social arrangements were effective and reliable.

survival—the epidemics were halted, they thought, by the power of the Narragansett medicine people, or by their special ability to resist what seemed to be a peculiarly English threat.

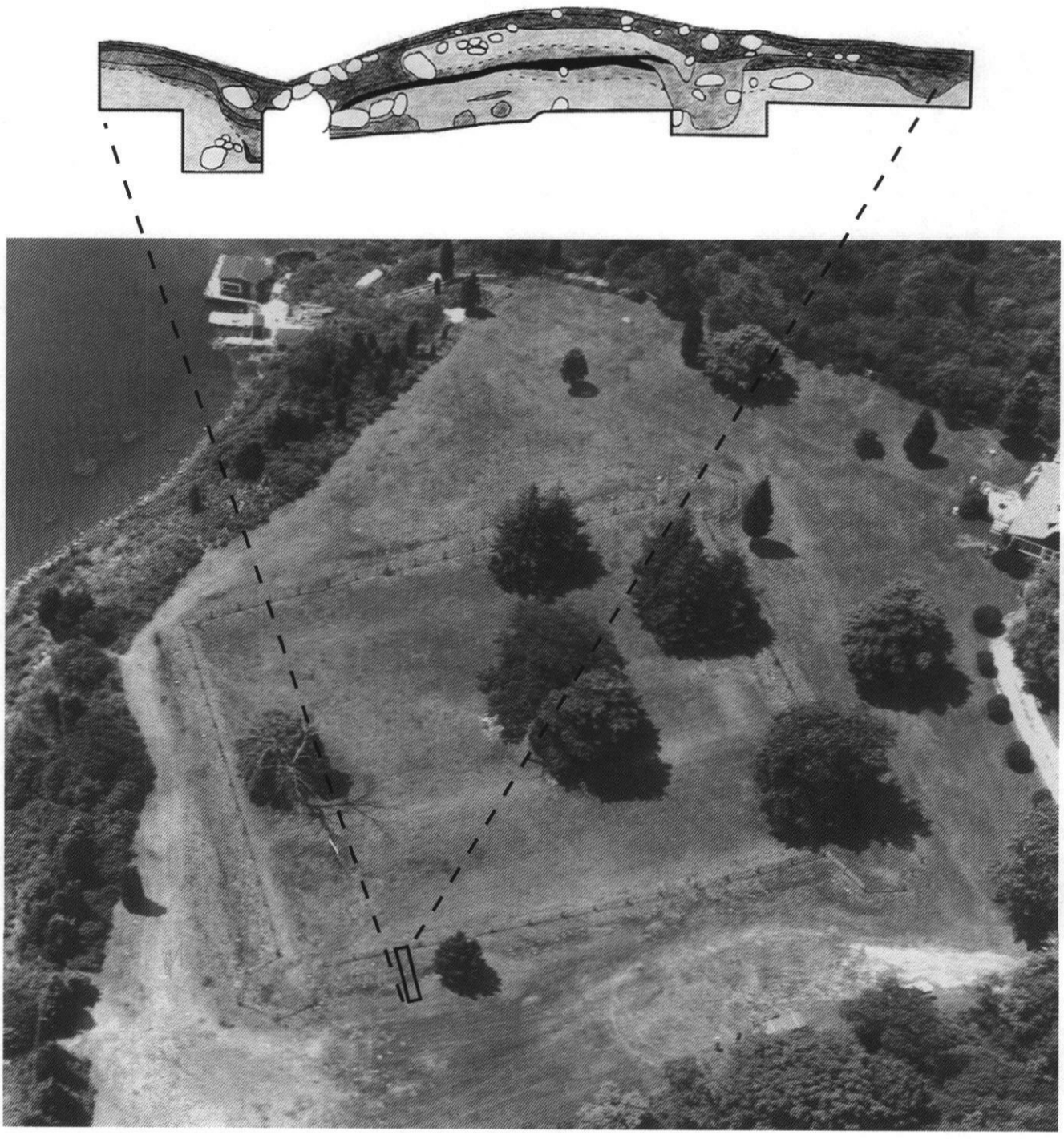
In any case, the Narragansetts were at the height of their power in the early seventeenth century. The tribe numbered perhaps 40,000 people. The land area the Narragansetts controlled was not large, but their economic and social arrangements were effective and reliable. And, in addition, they had excellent leadership in their two sachems, Canonicus and Miantinomi. Through their sachems, the Narragansetts effectively represented a number of communities on the west side of the bay, including the Pawtuxets, Shawomets, Cowesets, Nipmucs, and Niantics.

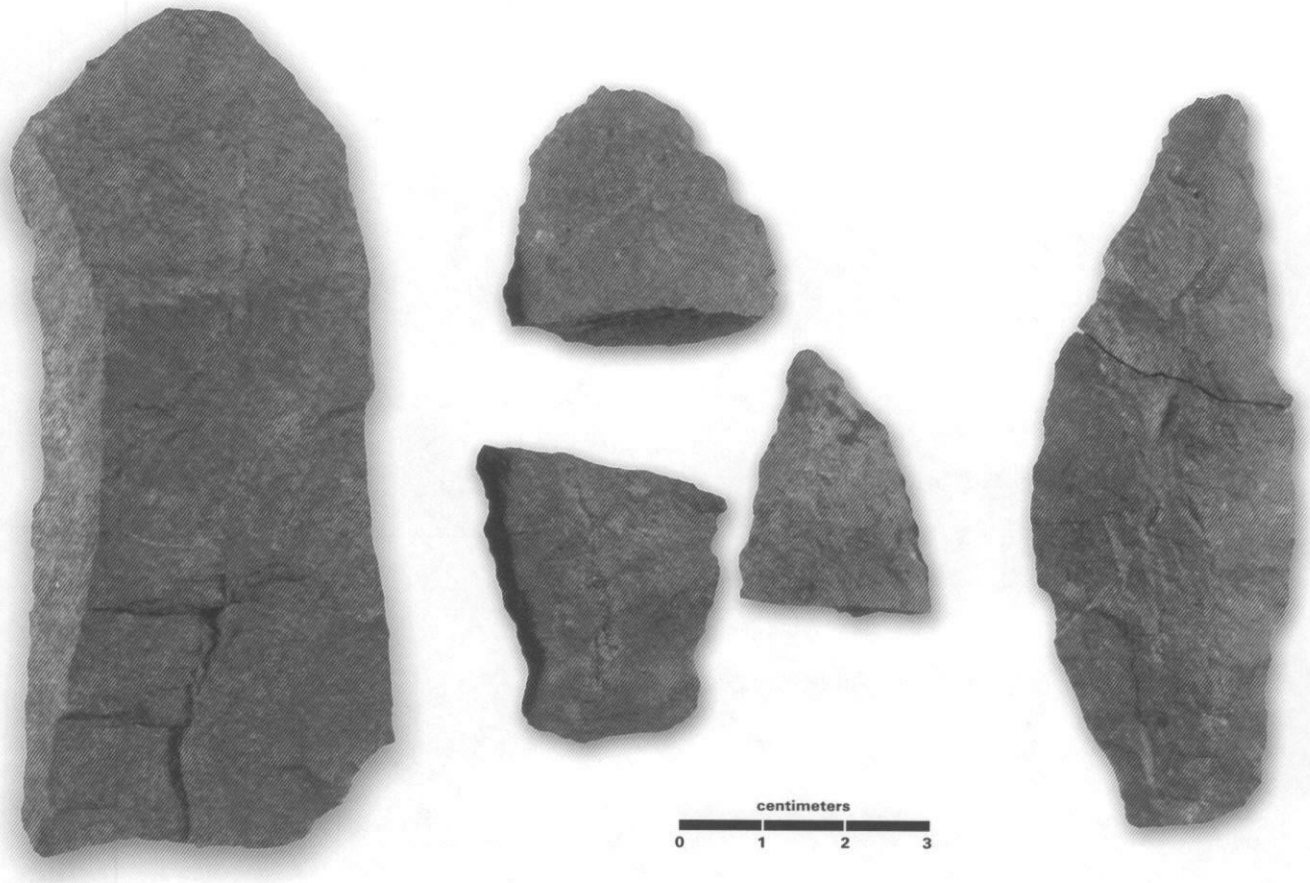
In the 1620s and 1630s, the Narragansetts were deeply engaged in an important trade network. Dutch and French fur traders operating from New York and St. Lawrence River depots sought furs from native populations. In exchange they provided a variety of manufactured goods. But the demand for furs was far too great for the market to be sustained solely by barter; some real currency was needed, and there was a severe shortage of European coins.

Wampum—shell beads made by native populations—was a ready substitute for European currency. Originally made only in small quantities and used in specialized exchanges (such as long distance trade, ransom, tribute, or to settle a feud), wampum was quickly adopted as a useful form of money by the European trappers and traders.

FIG 22 (above) Shell beads, called wampum, were the main currency of seventeenth century New England, and also had great symbolic importance to the native peoples who made them. White beads were cut from the center columns of whelk shells, and purple beads from the edges of quahog shells. The beads were then ground smooth, and strung.

FIG 23 (opposite) The wall of a trench excavated through one of the embankments at Fort Ninigret, a seventeenth-century Eastern Niantic site in Charlestown, shows the complicated history of the fort's construction. Earth was taken from ditches inside and outside the fort, and heaped up to make the embankment. The large stones which fill the exterior ditch perhaps served as a foundation for a wooden stockade.





From the 1620s to the 1660s, wampum was the common cash of traders, native people, and colonists alike. Wampum was a useful form of money for a region which otherwise had a shortage of legal tender: it was produced locally, was durable, and could be easily counted and measured.

Large amounts of wampum were needed to sustain the colonial economy and the production of the beads was controlled by Narragansetts and their neighbors to the west in Connecticut, the Pequots. Indian communities produced the beads, beginning the shift from the subsistence economy which had developed over centuries to the Europeans' market economy. As producers of the currency, these two tribes gained power and dominance over others. Some Indian villages were deeply involved in the manufacture of wampum. In Rhode Island, archaeological excavations at Fort Ninigret in Charlestown and Fort Island on Block Island indicate that these were wampum-making sites.

When white settlers first arrived in the area which is now Rhode Island, the Narragansetts sold and gave land to them in order to preserve the hegemony they had developed, transferring lands which served as a buffer between their own village areas, other colonial settlements and Indian adversaries. In their land dealings with settlers, the Narragansetts tried to secure their lands against the Wampanoags and to keep open their trade route to Boston.

When Roger Williams settled Providence in 1636, he occupied land which was strategically important for the Narragansetts. At the head of the bay the area called Mooshausick by the Indians and Providence by Williams was on the border of Wampanoag and Narragansett territories and was claimed by both. Here at the junction of three rivers, important trade routes converged, and Indian trails led east to Massachusetts Bay, west into Pequot country, north along the Blackstone River, and south into the Narragansetts' land. In fact, the area had been occupied by Indian peoples for hundreds of years—the Cove Lands site has yielded evidence of the tools, cooking hearths, and refuse of native people who lived here for more than 600 years before Williams arrived.

The Narragansetts' concern for the safety of their borders was at least partly a response to their observation and participation in the 1637 colonial war against the Pequots. Tensions between the English in Connecticut and in Massachusetts Bay and the Pequots had been strained by several incidents in 1636; in May, 1637, the English declared war. Miantinomi and the Narragansetts had a treaty with Massachusetts Bay. With their Indian allies (including Narragansetts), Massachusetts troops attacked a Pequot settlement at Mystic. The attack became a massacre, with the wanton killing of hundreds of Pequots. With the power of the Pequots broken, the Europeans gained greater control

FIG 24 Eight thousand years of Indian history is represented in the archaeological record at Providence Cove where Roger Williams settled. Shown here is red felsite from the Attleboro area of Massachusetts which was brought to the cove in block form and crafted into cutting tools.

over wampum production, and the Indian monopoly on the currency was broken. Further, the Pequot War had important implications for Narragansett policy. The level of slaughter was remarkable, and the Narragansett leadership came to regret their participation. It was no longer assumed by other tribes that the Narragansetts were able to control the English in some fashion, and their power was weakened. The willingness of English towns to ally themselves together for the destruction of an Indian town was a further revelation. Miantinomi made attempts to bind together several tribes for unified opposition to the whites, but to no avail. In 1641, he traveled to Long Island to appeal to Indian leaders there for unity. Massachusetts authorities learned of his attempts, and the following year arranged his assassination at the hands of the Mohegans.

Throughout the 1630s, the Narragansetts were faced with circumstances which reduced their power and diminished their influence, which had been so strong in the 1620s. Their hold on currency production and their ability to control the English newcomers were both now in doubt, and the tribe was substantially weakened.

When Canonicus and Miantinomi transferred land to Roger Williams, they helped to fortify their eastern frontier. Through the 1630s, Canonicus and Miantinomi allotted additional lands to Williams and those who followed him into Rhode Island—first Prudence Island, then Aquidneck Island, then a trading post, and in the 1640s, a large tract on the west side of the bay.

The Narragansett sachems Canonicus and Miantinomi met often with Williams, developing a relationship that enabled Williams, better than most other Europeans, to understand the Narragansetts' way of life and their attitudes toward the English. Williams was accused by some of being overly sympathetic to Indian views. Even before his banishment from Massachusetts, for example, he argued against the opinion of most Puritan officials that because land looked empty it was free for the taking. Williams observed that Indian people might hunt on part of the land and plant gardens on other parts; that they would burn the undergrowth twice a year and would periodically move their residences. The Indians simply used the land differently, Williams said, and although much of it was unfenced and looked empty, it was, nevertheless, Indian land.

Land and ideas about ownership were at the center of many disagreements between Indians and English. To the English, a purchase of land, generally transacted with a specific amount of wampum, was a bounded finite transaction: the land became English when the wampum changed hands, and the people who sold the land were often required to leave it. To the Indians, at least at first, the exchange of wampum did not finalize a sale. Instead, it affirmed a new social obligation. The Indians would let the English use the land and, in exchange for that privilege, expected the newcomers to contribute to the social well-being of the Indian community.

An example of this conflict was the "sale" of Prudence Island to John Winthrop, of Massachusetts Bay, and Roger Williams for a small amount of wampum. Winthrop considered the land personal property. Williams pointed out to his partner, however, that the Narragansetts disagreed, and wrote to Winthrop in 1638 to clarify the difference between Indian and English ideas of exchange: "Sir," Williams wrote, "be pleased to understand your great mistake: neither (Prudence or Aquidneck) were sold properly. The truth is, not a penny was demanded for either, and what was paid was only gratuity, though I chose, for better assurance and form, to call it a sale."

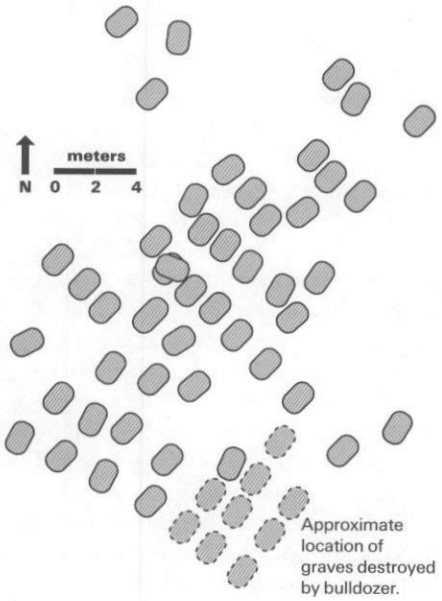
Soon after his arrival in Rhode Island, Williams established a trading post on Narragansett land at Cocumscussoc in North Kingstown, trading corn, sugar, wampum, and manufactured goods. Richard Smith and John Wilcox also operated trading posts nearby. Williams's and Smith's posts were located on the site of present-day Smith's Castle. In the early 1650s Richard Smith bought the two other posts and continued to operate as a trader. In the 1660s and 1670s Smith's son, also Richard, operated the trading location deep in the heart of Narragansett country. Archaeological investigations at Smith's Castle carried out over the last decade may reveal something of the interaction between the Narragansetts and the traders who lived among them.

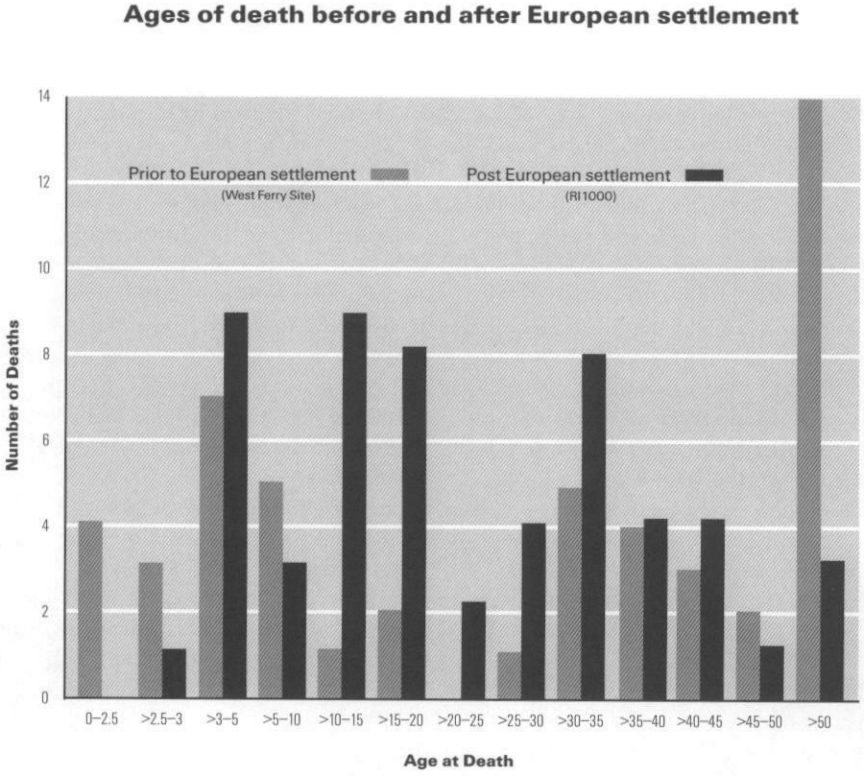
The years between the mid-1640s and the mid-1670s saw an elaborated diplomacy and a building tension among the settlers of four colonies (Massachusetts, Plymouth, Connecticut, and Rhode Island) and the Indian tribes of southeastern New England. Shifting alliances and acrimony among European colonies, towns, and land companies, as well as native peoples, were the essential characteristics. Roger Williams, who knew the Indian language well, was often a leading diplomat and negotiator, serving white and Indian communities alike.

The disputes consistently centered on the demand for land and the pressure of increasing colonial population on Indian land—by 1675, there were about 5000 white settlers living in Rhode Island. Though alliances changed from time to time as the issues among the various parties shifted, the disputes derived above all else from land—there were fundamental misunderstandings arising from different notions of land tenure, but also disputed terms, phony sales, fractionalized sales of land shares, hazy land descriptions, clandestine and secret land sales, claims, counterclaims, maneuvers, extortions, and outright frauds—and overriding all the disputes was the scramble by settlers for more land.

Adding to the atmosphere of political tumult was social turmoil. The presence of European settlers turned the Indians' world upside down. Patterns of life which developed over thousands of years were now upset, as the deep-seated and long-standing character of life and culture changed. The objects of daily life, such as food, clothing, and tools, changed; the pattern of life also changed, as the Indian subsistence economy and self-sufficiency gave way to a market and trading economy. Revealing evidence of these changes is found in an Indian cemetery from the period.

Known as RI 1000, the Narragansett cemetery in North Kingstown was





People buried at West Ferry lived most of their long and relatively healthy lives prior to English settlement. By 1650 English settlements were well-established and an alarmingly high proportion of teen-aged individuals were dying.

excavated in 1983. Fifty-six Indian people who died during the 1650s, 1660s, and 1670s were buried here, ranging in age from a three-year-old child to several people in their 50s and 60s. Cemeteries are, of course, sacred places to contemporary Indian people and, indeed, to many Rhode Islanders. They are not excavated if there is any alternative way to preserve them. RI 1000 was discovered accidentally by a backhoe operator during a construction project; its excavation was carried out with the approval and participation of the Narragansett Indian Chief Sachem and Tribal Council. The graves which were excavated provide a picture of the lives of these individuals during this turbulent time.

Men, women, and children were buried at the RI 1000 site, and their remains reveal that their lives were not easy. A disproportionate number of the burials were of young people, between the ages of ten and thirty, usually years of good health and physical strength. Many suffered from tuberculosis, a disease associated with poverty and malnutrition. Though archaeologists cannot always tell how someone died, it is possible that tuberculosis weakened resistance to other diseases; perhaps pneumonia or measles killed some of these people. Dental disease was common, a reflection of new foods introduced by Europeans—flour, molasses, and sugar.

The Narragansetts who buried their dead here placed objects in their graves; some were the belongings of the dead, others were gifts from friends and family to accompany the dead into the afterlife. Many of these grave-offerings were of European manufacture: brass kettles and rings, glass bottles and beads,

FIG 25 (above left) An archaeological plan of RI 1000, a Narragansett cemetery in North Kingstown, used from 1650 into the 1670s. The orientation of the graves to the southwest was a strong affirmation of traditional beliefs.

FIG 26 (above right) The harmful effects of European colonization on the health and physical well-being of Narragansett Indian people are indicated by the ages of death at two cemeteries. People buried at West Ferry lived most of their long and relatively healthy lives prior to English settlement. By 1650 (see RI 1000) English settlements were well-established and an alarmingly high proportion of teen-aged individuals were dying.

bone-handled iron knives, latten spoons, small bells. Perhaps some of these goods were purchased or bartered at the Smith trading post at Cocumscussoc, not far from the cemetery; others may have been obtained from day labor in English homes and on farms. The grave goods also include objects from Indian life: wampum, shell and bone beads, clay pots, stone tools. Plainly, these people lived in two different worlds—the ancient world of traditional Indian life and the new world shaped by contact with English settlers—and grave gifts from both worlds accompanied them in their death.

The arrangement of bodies in the cemetery reflects how important traditional Narragansett ways remained, even in a world which was changing quickly. Unlike Europeans, the Narragansetts buried their dead on their sides in a flexed (or fetal) position, wrapped tightly in mats or blankets. Narragansett people had been buried this way for generations, and the tradition continued even as other aspects of life changed.

By the 1670s the persistent antagonism among various Indian and European polities had reached a wide scale. The complexity of land disputes kept pace with social and political change. Canonicus and Miantinomi died in the 1640s, and the various communities which had acknowledged Narragansett leadership now separated from that tribe and the Narragansett dominance of the 1610-1640 period came to an end. Pessicus, Canonchet, and Ninigret became leaders of the Narragansetts. The Wampanoags' Massassoit died in 1662, but was succeeded a few years later by his son Metacom (sometimes called Philip by colonists).

Metacom was an extraordinary leader. Incensed by his brother's death (at the hands of Plymouth settlers, he believed) and fearing the eventual diminution of the Wampanoags as European settlement increased, Metacom began to prepare for war and to try to bind together tribes that had long been enemies.

Hostilities broke out in June, 1675, and affected large areas of New England; towns and villages, both Indian and European, were evacuated and later destroyed by hostile bands. Early in the conflict Rhode Island authorities professed neutrality but provided aid to Plymouth. Massachusetts and Connecticut sought to keep the Narragansetts neutral in the conflict and several times extorted promises from the Narragansetts that they would not harbor Wampanoag refugees. But in July, 1675, a number of Wampanoags fled from their homeland to Narragansett country. These people, some of whom were Narragansetts, were sheltered in a village deep in the Great Swamp in South Kingstown.

Plymouth, Massachusetts, and Connecticut assembled troops to move against the Narragansetts; they landed in Wickford (in boats provided by Rhode Island) and moved toward the Great Swamp. On December 19, 1675, they attacked the village. What began as battle became carnage. The colonial troops torched the village, killing large numbers of Narragansetts and Wampanoags.

The massacre, known as the Great Swamp Fight, brought the Narragansetts fully into the war. Led by Canonchet they carried out raids across southern Rhode Island in the first few months of the following year, matched by raids by colonial troops on Indian villages. In March, 1676, Providence and Warwick were burned, as was Richard Smith's trading post at Cocumscussoc. By the summer of 1676 Canonchet had been killed, and most of the Narragansetts had been scattered and defeated. Colonial troops hunted down Wampanoags in the east bay and eventually killed Metacom.

The conflict, which is today called King Philip's War, was an appalling cataclysm for the native populations of southeastern New England. It was also disastrous for white settlers, but they had access to resources which allowed recovery—the Indians did not, and they lived with the consequences of the war for generations. On the east side of the bay, the Wampanoags were dispersed. Some fled to Indian communities west of the Hudson River or went north to Canada. A few communities endured, notably at Mashpee and Gay Head. On the west side of the bay the situation was only slightly better. In the 1640s the trader Richard Smith estimated that 30,000 Indian people lived on the west side of Narragansett Bay and on Block Island. After the war, fewer than 1000 remained alive.

Following the conflict, colonists moved back and re-established their towns. Providence was rebuilt and continued to expand on the salt cove at the head of the bay. Bristol, Barrington, and Warren developed on Wampanoag lands. Block Island, Wickford, and Warwick were re-settled.

While Europeans rebuilt the communities destroyed during the war, their defeated enemies were scattered. Some Indian prisoners of war were sold into slavery outside Rhode Island; some were forced into long terms of forced labor here. Indian children were indentured until their thirties; Indian adults were sentenced to seven years of labor. Some Indian people were given the European names of their bondholders; contemporary Narragansett names such as Stanton, Hazard, Champlin, and Brown, date from this post-war period. Working for and sometimes living with

Entertaining Paſſages

Relating to

Philip's WAR

WHICH

Began in the Month of June, 1675.

AS ALSO OF

EXPEDITIONS

More lately made

Againſt the Common Enemy, and Indian Rebels,
in the Eaſtern Parts of New-England:

WITH

Some Account of the Divine Providence

TOWARDS

Benj. Church Eſqr;

By *T. C.*

BOSTON: Printed by *B. Green*, in the Year, 1716.

European settlers, such as farmers and merchants, Indian laborers sometimes fell into a pattern of debt which extended their terms of labor, a cycle of work and debt which could continue for many years beyond the original sentence.

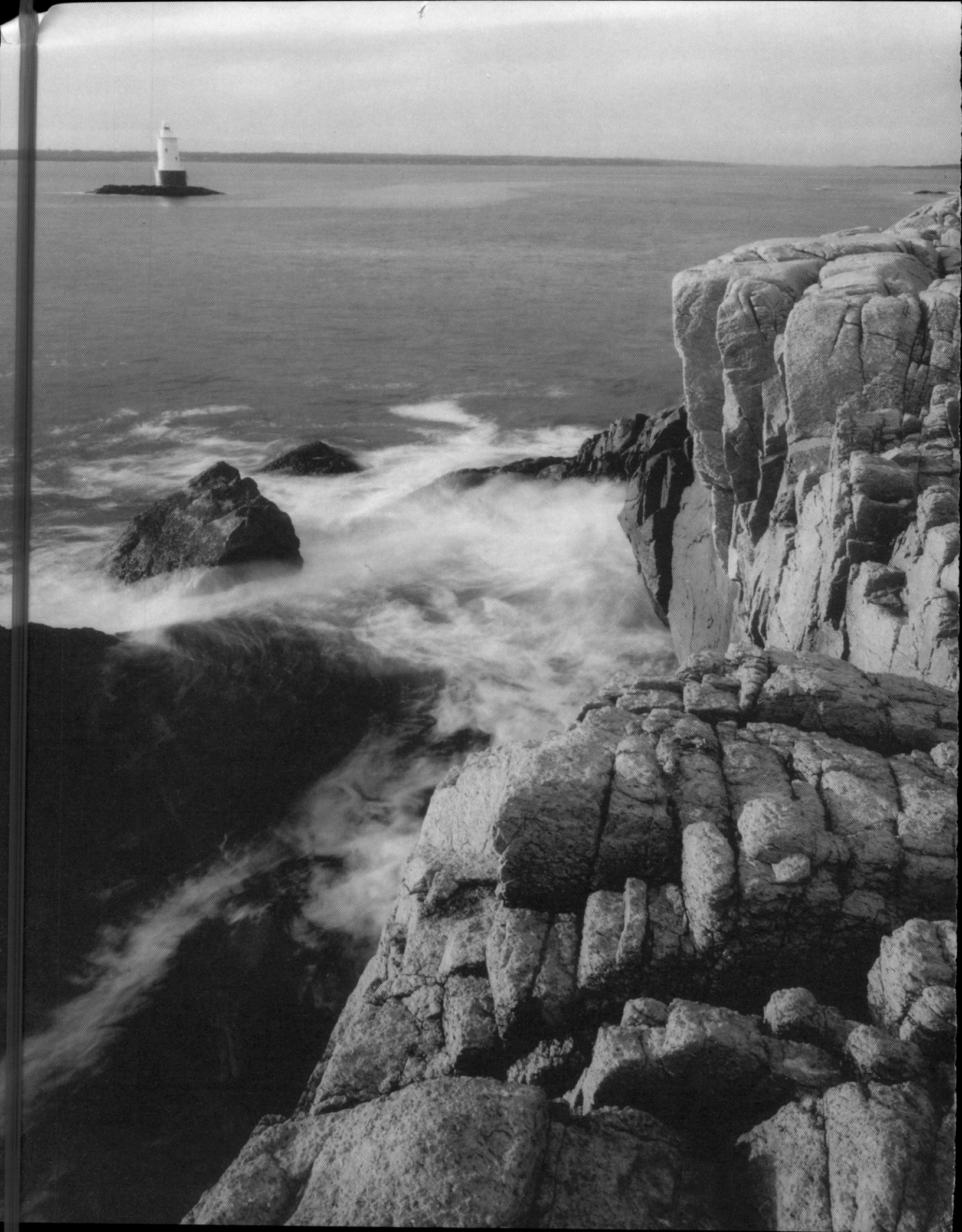
Some Indian people found refuge with the Niantics in southwestern Rhode Island. The Niantics, led by Ninigret and later by his son (called Ninigret II, in the European fashion), had not joined with the Narragansetts during the war and had sheltered some Narragansetts who did not fight. Together with the post-war refugees, the Niantics-Narragansetts numbered five or six hundred and were one of the largest communities of Indians in southern New England.

In the decades following King Philip's War, the colonial government of Rhode Island set up an Indian reservation, land which was set apart for the Native Americans. The reservation was formally established in 1709. A tract of about 30 square miles in Charlestown was identified by the colonial legislature as Narragansett land, reserved for the Narragansetts. The legislature specified that the land was set aside for Ninigret II and his heirs forever. The sachem was prohibited from selling the land without the colony's approval; he gave up a claim to other Niantic-Narragansett land in southern Rhode Island.

Defeated in war, much of their land conquered, seized, and occupied, Indian people in Rhode Island faced an uncertain future.

FIG 27 (opposite) Many accounts of King Philip's War were written by New England colonists. The memoirs of Colonel Benjamin Church, a resident of Little Compton at the time of the war and a prominent figure in the war's conduct, contain vivid and detailed accounts of military action including the colonial attack at the Great Swamp in South Kingstown and the capture and execution of Metacom (Philip) in Bristol.

FIG 28 (above) The Great Swamp monument in South Kingstown memorializes the surprise attack and massacre of many Narragansett Indians by Colonial soldiers on December 19, 1675.



LIFE IN AN OCCUPIED LAND

1676 AD – present

At the beginning of the eighteenth century, the Indians who lived on or near their reservation were a remnant of a once large population. Reduced in numbers and influence, they contended with poverty, the antagonism of the colonists, the disruption of their traditional ways, and with the preservation of their culture in difficult circumstances.

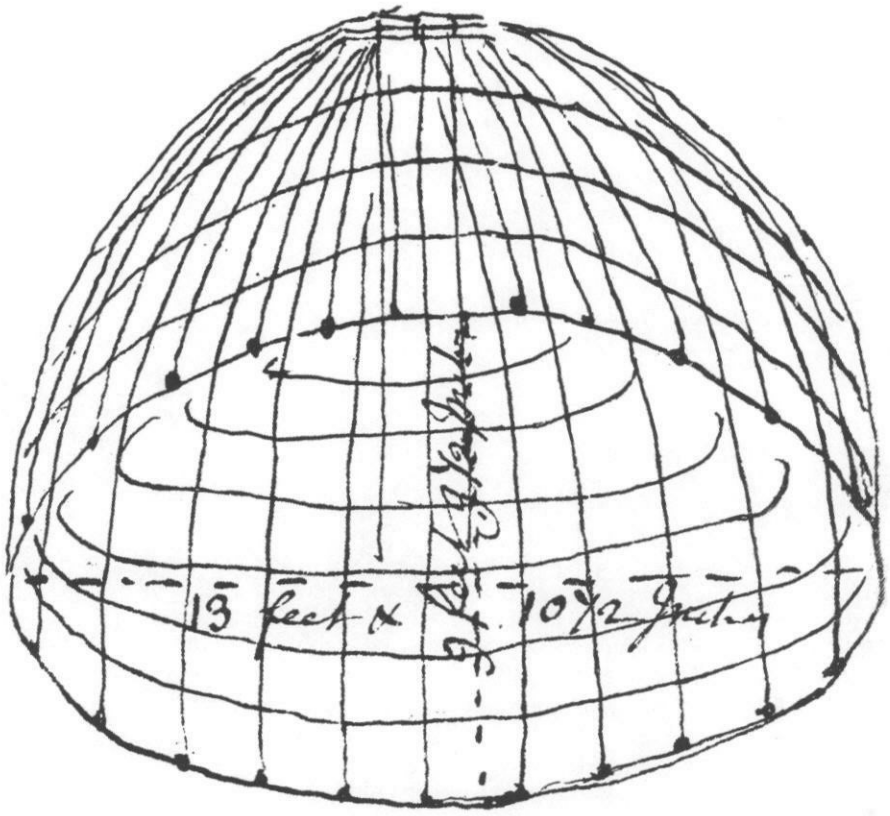
Though they were a gathering of several separate tribes, especially Niantic and Narragansett, but others as well, the Indian population in southern Rhode Island from the 1710s onward was treated as a single group and known to the colonial authorities as the Narragansetts.

The Ninigret family, supported by colonial authorities, became the established rulers of the tribe and its lands, an ascendancy which lasted almost a century. Ninigret II and his descendants who followed him as sachem were recognized by a colonial authority which found it convenient to deal with a European-style leader. No longer leading by consensus with the counsel of tribal members, the Ninigret family assumed power over land transfers, selling and renting the reservation land for their personal gain. The Ninigrets lived in English-style houses, hired other Indian people as servants and laborers, were formally educated in the European fashion, worshipped as members of the Anglican church, and adopted non-Indian ways. As a visitor to George Ninigret wrote, "This King lives after an English mode."

By contrast, during the colonial period and well into the nineteenth century, most Indian people made their livings by combining paid labor with work on their own land. People worked both on the reservation and off, sometimes as laborers on other peoples' farms. Hunting and fishing remained an important part of many peoples' lives; the salt ponds continued to yield their harvest; and small garden plots were common. Many Narragansetts continued to build and live in traditional wigwams, though some lived in wooden houses. While most native people lived in the southern part of the state, there were still some Indians scattered throughout the state, sometimes working as servants or laborers or getting marginal livings at the edges of white settlements. Some Indian people continued to follow the older pattern of seasonal movement, leaving and returning to their homes as the seasons changed, moving to traditional fishing and hunting places. Some Narragansetts converted to Christianity; in the eighteenth century they built a small wooden church in Charlestown.

FIG 29 The rocks off Sakonnet Point represent the sorrow and disgust that Native Americans felt about the occupation of their lands by Europeans. According to an eighteenth-century Wampanoag story the rocks represent the giant Maushop's wife, her head and arms broken off by Europeans.

The Ninigrets lived in English-style houses, hired other Indian people as servants and laborers, were formally educated in the European fashion, worshipped as members of the Anglican church, and adopted non-Indian ways.

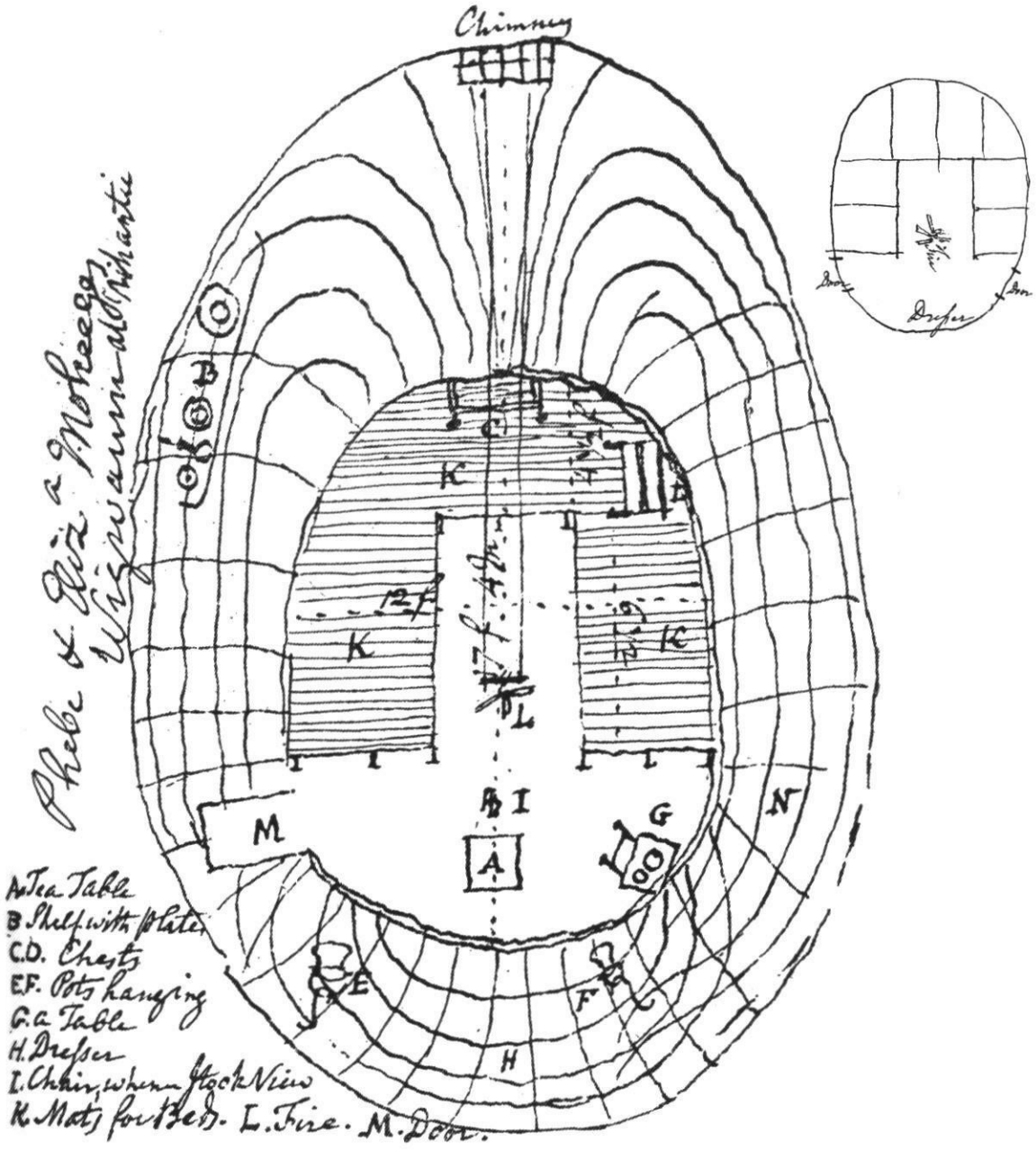


In the colonial era, the southern Rhode Island area was the location of large commercial farms, an economic system based on large tracts of land and slave labor. The institution of enslaved labor reached a level in this area which is unusual in the history of the northern colonies.

The Narragansett lands were located in South County, one of the areas of a concentrated African-American population as well. In the colonial era, the southern Rhode Island area was the location of large commercial farms, an economic system based on large tracts of land and slave labor. The institution of enslaved labor reached a level in this area which is unusual in the history of the northern colonies. On such large farms both African-Americans and Native Americans worked and, in some cases, raised families together as well.

The contrast between the way of life of most Narragansetts and the extravagance of their leaders, the Ninigrets, reached a crisis point in the 1760s, during the tenure of King Tom Ninigret. Educated in England, King Tom emulated the styles of South County's leading Yankee families, and fell into debt. To pay his creditors he sold off pieces of reservation land. In 1759 the colonial legislature had given him permission to sell land without consulting either the legislature or his own tribe, and, over the next four years, King Tom sold off more than 3200 acres, including family farms and community fishing places. A dissident group of Narragansetts led by Samuel Niles, an Indian lay preacher, petitioned the legislature to stop the land sales, saying that many Narragansetts were in "danger of being utterly deprived of the means of procuring a maintenance, and must either starve, or become a town charge." The legislature did not act to stop the land sales and, indeed, after King Tom's death continued the sales under its own authority until 1773 to pay off additional debts. The Niles group requested that the legislature abandon the position of sachem in favor of a tribal council, which was instituted shortly after the Revolutionary War.

The transition from the leadership of the sachems to government by council did not occur in time to stop the reduction of the Narragansett lands. In 1773, Niles complained that "all the land joining to the sea is already sold, that we can't in no one place go to the saltwater without passing through land



FIGS 30 and 31 (above, opposite page) Ezra Stiles, President of Yale University, made these sketches of traditional wigwams at Niantic, Connecticut in 1761. The drawing on the right shows sleeping platforms and mats, a chimney, and furnishings.

now in possession of the English." Indian people, said Niles, were "deprived of the privilege of fishing, which is the main branch of support of the greatest part of the tribe."

The deprivation caused by the loss of these lands is amply illustrated in the archaeological sites of this period. Archaeological remains of Narragansett homesteads, wigwams and small rectangular houses dating from the eighteenth century, occur in small, protected areas throughout the rocky hills of Charlestown and South Kingstown known as the end moraine. Here, archaeologists find evidence of Indian homesteads tucked into the hidden swales and saddles of the landscape, sites that provided places for hunting and tending garden plots. These settlements were connected to the salt ponds by a network of footpaths that led to areas where Indian people fished and gathered shellfish.

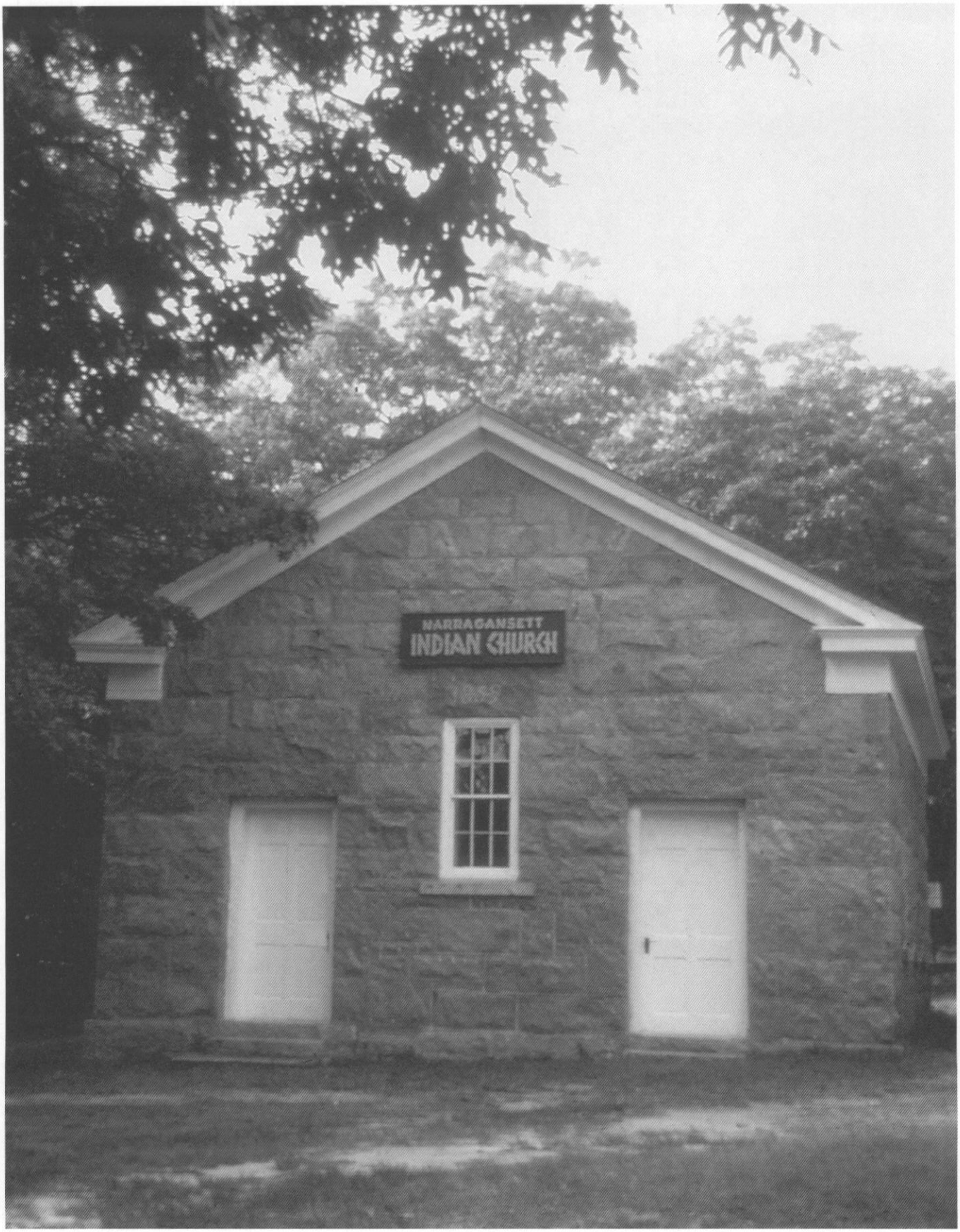
As access to the sea and the ponds became more difficult and some of the best fishing places and farms were sold off, some Narragansett people simply left Rhode Island. Some accepted the invitations of other tribes to move to western New York and even further into the old northwest territory, an emigration which persisted well into the nineteenth century. Others went to sea as whalers or as fishermen. During the last quarter of the eighteenth and into the nineteenth century, the number of Indian people in the state continued to decrease.

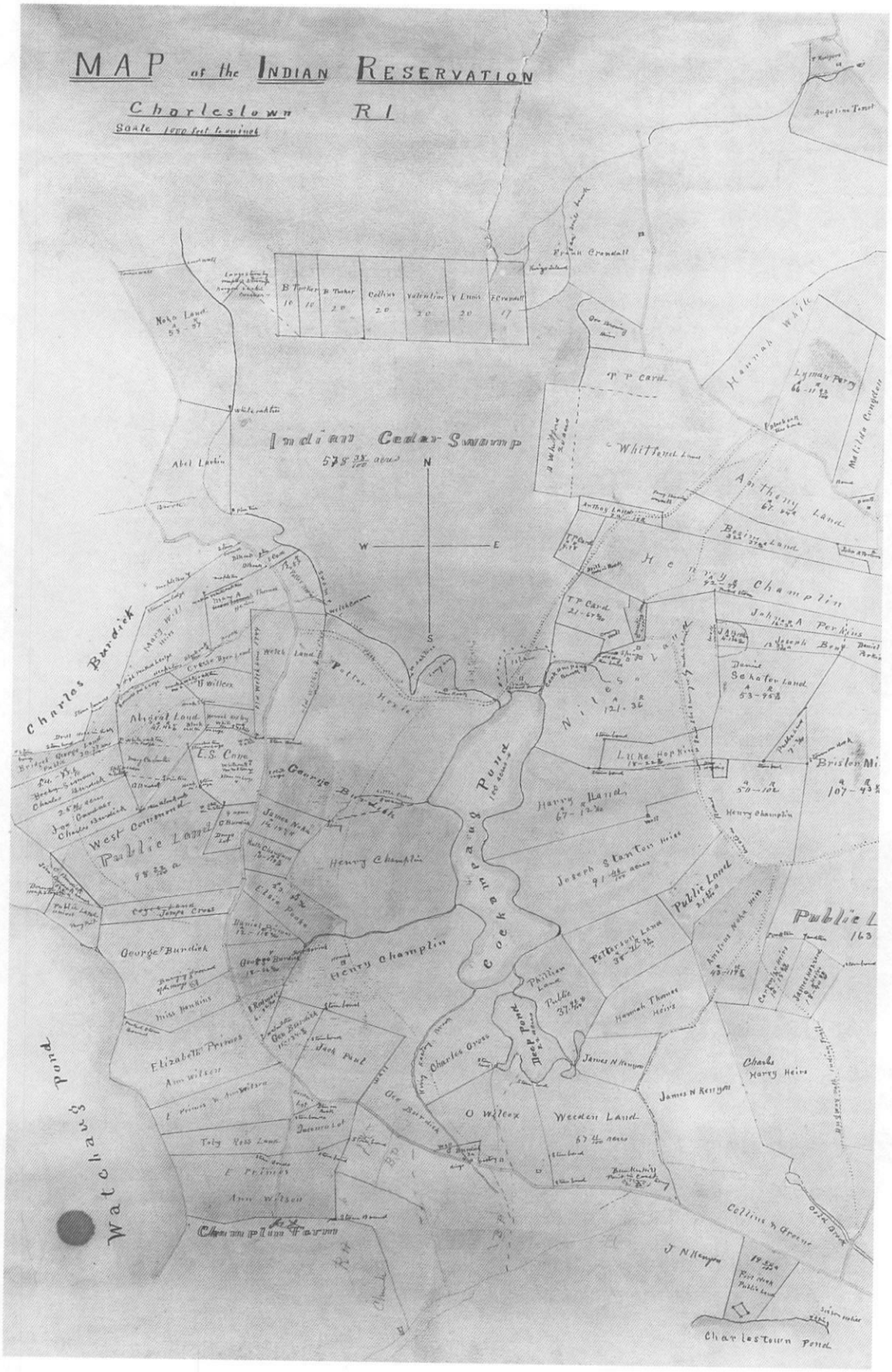
In 1816, the state government of Rhode Island authorized its towns to remove all "indigent Indians" to the Narragansett lands. By this time, the land owned in common by the tribe was about 1200 acres within Charlestown; many of the tribe's families owned parcels of land nearby which they farmed or used for grazing. The archaeological sites of this period include these farms created from cleared land, with their small rectangular stone foundations marking the location of houses and outbuildings. The use of the common land, principally for wood cutting, was regulated by the tribal council.

Beginning in the 1830s, there was some sentiment in the legislature in favor of selling off even the reduced acreage that the Narragansetts retained and ending the status of the tribe as a legal entity, a process known as detribalization. The interest in detribalization gained momentum from a growing sense among some whites that reservation life destroyed individual initiative and that tribal ties prevented Indian people from being fully integrated into the mainstream society. Though early efforts in Rhode Island failed, in 1879 the state legislature appointed a committee to look into the question and hold hearings. Most Narragansetts opposed detribalization, but in a closed-door session the legislature

FIG 32 (above) In the mid-eighteenth century, the Narragansett Sachem Thomas Ninigret (King Tom) built an English style house on Ninigret Pond. This photograph shows the house after it had been enlarged and altered by later owners. The house was destroyed by fire in 1922.

FIG 33 (opposite) The Narragansett Indian Church and Meeting House at the August Meeting Grounds on the Narragansett Indian Reservation.


NARRAGANSETT
INDIAN CHURCH


MAP of the INDIAN RESERVATION
Charlestown RI
Indian Cedar Swamp
Public Land
Henry Champlin
Champlin Farm
Watchaug Pond
Cocksparrow Pond
Deep Pond
Charlestown Pond
N
S
E
W

approved the sale of the tribe's remaining 922 acres of land to the state. About 600 of these acres were swamp land, the rest was rocky but workable; some of the land bordered Deep, Schoolhouse, and Watchaug Ponds. The tribe reserved only a small lot of two acres, the site of the stone church built in 1859 to replace the early wooden church. The common lands were sold for $5000, which was divided equally among the 324 tribe members.

Though the legal extinction of the tribe had been accomplished, Narragansett people continued to live in Rhode Island as they always had. Their tribal council continued to meet; church services were regularly held; and each August Indians gathered together. Narragansetts continued to press various land claims, especially along the shore. The Rhode Island Supreme Court ruled against these shore claims in 1898.

In the 1920s and 1930s, increasing numbers of non-Indians began to attend the August meetings. To accommodate this interest, the Naragansetts held public pow-wows, allowing non-Indians to share in some of the traditions that the tribe had quietly kept through difficult times. In these public displays, the Narragansetts and other tribes in the region incorporated some Plains Indian dress and regalia. The tribe published a monthly magazine, Narragansett Dawn, to provide information about Indian history, traditions, and current events. In the 1940s, the Narragansetts constructed a council chamber and social center, the Narragansett Longhouse.

In 1975, the Narragansetts, led by Eric Thomas and Ella Sekatau, filed suit in federal court for the return of tribal lands. The Tribe and the State of Rhode Island settled this case out of court three years later. In this historic settlement, the Narragansetts reclaimed some of their land, 1800 acres of woodland and wetlands in the town of Charlestown once again became the Narragansett homelands. In 1978, the remaining tribe members petitioned the federal government to recognize the Narragansett Tribe and, in 1983, the federal Bureau of Indian Affairs on behalf of the United States formally recognized the Narragansett Indian Tribe.

A century after detribalization, Rhode Island's first inhabitants reclaimed their heritage. Today, there are more than 2400 Narragansetts living in Rhode Island.

The end of King Philip's War had brought immense changes to the lives of Indian people in Rhode Island. For some people these changes were so grave and threatening that they left the region, but others stayed and attempted to find a way of coexisting with the larger community while preserving their own Indian identity. The centuries since King Philip's War are only a small part of the long continuum of Indian history in Rhode Island, which stretches back thousands of years. At a State House ceremony in 1985 to celebrate the return of some of their lost lands, the Narragansetts' Tribal Medicineman, Lloyd Wilcox (Running Wolf) spoke of the feelings evoked by this history:

....we have reversed the process wherein the Indians must always lose the most valuable thing there is, and that's their small portion of the mother earth. It is a sacred thing when you walk the land, and you drink from a spring, and you hunt in a forest, that for a thousand or two thousand years or more your direct ancestors have done this.

The centuries since King Philip's War are only a small part of the long continuum of Indian history in Rhode Island, which stretches back thousands of years.

FIG 34 For the detribalization hearings in 1880, the State of Rhode Island made a map of Narragansett Indian lands. Some of this land was returned to the tribe in 1978.


THE HILLS
Lily Pond
Cedar Swamp
Pond
Little Wash Pond
Wash Pond
Porch Cove
Porter
Whalebone Pt
Cem
Fresh Pond
Matunuck Sch.
Matunuck Beach
Sycamore Cove
Meadow Pt
Ram Pt
Gardner Island
Sand
Segar Cove
Seaweed Cove
Scally
Succotash
EAST MATUNUCK STATE BEACH
Matunuck
Matunuck Pt
Deep Hole
Tidal Flat
Goose Isla
Jerusalem
Breakwater
South Harbor
N

HOW ARCHAEOLOGISTS WORK

Archaeologists study past cultures and societies, trying to reconstruct ways of life that have disappeared. Archaeologists recover knowledge about people of the past by studying the objects they made and used. Often those objects are buried underground.

Archaeology is sometimes portrayed as an adventurous search in remote locations for objects of value and beauty. It is true that there have always been treasure hunters, people who dig up and collect valuable things.

But real archaeology is not a treasure hunt. It is a well defined scholarly discipline, a scientific exploration of the past. Archaeologists excavate objects from underground, but modern archaeologists have moved beyond the search for beautiful or valuable things.

They study, observe, record, experiment, and analyze all kinds of things from the past, working to understand the part played in past cultures by a wide variety of objects. For a modern archaeologist, the value of an object is not its beauty or its material worth but its ability to help tell a story about the people who lived here before us.

Even the focus on objects has changed as archaeology has become more scientific. Where once the archaeologist began his search into the past with the examination of an object, professional archaeologists now focus on the relationships of objects to one another and their relationship to our questions about the past. The search for the past may begin with an object, but it is just as likely to begin with a question about past people—how did people get their food, shelter their families, make war, trade with each other? What did they think about their place in the physical world, their relationship to other communities? An archaeologist will value an object because it helps to answer questions like these.

Archaeology is still full of exciting discoveries, but its findings are now based on careful consistent planning, meticulous excavation of sites, and painstaking scientific analysis in the laboratory.

Archaeologists pay special attention to the study of the physical environment because their understanding of ecological systems helps to answer many important questions about the past, such as what did people eat? what plants and animals were available? what was the climate like? what kind of shelters could be provided? where was the water supply?

Archaeological sites are located all over Rhode Island, but they are not evenly scattered across the land. Some areas have denser concentrations of sites than others. An important part of an archaeologist's job is studying the relationship of these sites to each other—this "geography of sites" helps the archaeologist understand the way people used land in the past and also helps in predicting where sites are likely to be found in the future.

FIG 35 (opposite) National Register archaeological districts have been established throughout Rhode Island. One is located around Potter Pond in South Kingstown. Identifying these areas is one way to help protect important sites from destruction. The solid black line marks the boundary of the National Register district. These boundaries were determined by testing sample areas (indicated by the numbered black squares) within the project study area (indicated by the hatched line). Each sample area is 50 x 50 meters square and contained up to sixteen shovel test pits.

FIG 36 (above) An archaeologist from the Public Archaeology Laboratory works on a shell feature at the Lambert Farm site in Warwick. The shell is visible in this photograph as white specks in the dark soil matrix. The soil and shell are carefully removed in layers and sifted, and the locations of artifacts are recorded.

Understanding the land use patterns of the past is critical to archaeological thinking. While the study of a single site can help us understand what people were doing in a specific place and time, broader studies and efforts to relate sites to each other can help us understand how early people used entire regions and how their use of the land changed through time.

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The earliest people in Rhode Island, as we have seen, were migratory hunters. They lived in small bands and followed moving herds of the animals which were their main food. Their environment did not provide stable food sources, such as fish runs or shellfish beds. They crossed the land leaving little evidence of their presence. Archaeologists infer that this area of New England was a relatively unattractive place for the earliest people. Before Narragansett Bay and its estuaries and coastal ponds had formed there was little reason to settle here, and people were more likely to live in larger river valleys and along the shores of glacial lakes to the west and north of what became Rhode Island. Archaeological sites from this period are few and far between.

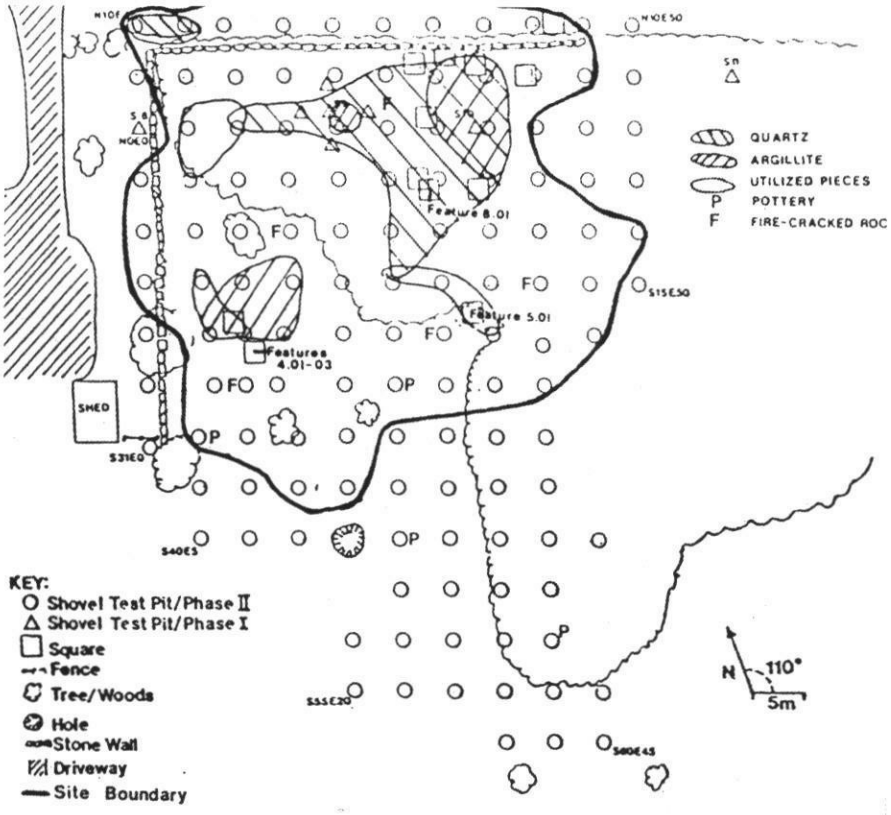
In the long period before Europeans arrived, the environment changed and so did the ways people used the land. A warmer climate, more stable and diverse plants and animals, and predictable food sources meant that people could settle in a specific territory and make use of all the resources of a particular area.

Archaeological work at the salt ponds, the Great Swamp, and the Narrow River of South County; in upland areas such as Coventry, Exeter, and West Greenwich; and along the coast of Warwick, East Greenwich, and Tiverton, all demonstrate that people used different parts of our region for different purposes, at different times of the year.

Between 4000 and 2500 years ago, summer settlements were located on

FIG 37 (left) Archaeologists from Rhode Island College use remote sensing equipment to find subsurface features. This non-invasive approach is useful in determining the location of features such as burials. Probes are used to send a weak electrical charge through the soil. Alterations in the flow of the electrical current, sometimes caused by buried archaeological features, are detected and mapped.

FIG 38 (above right) Archaeological map of the Joyner site, Conanicut Island. Excavations placed at regular intervals across the site enable archaeologists to determine the size of the site, significant artifact groupings, and, by inference, how different parts of the site were used.



the shores of Narragansett Bay. Winter settlements were located in sheltered valleys and swales, slightly away from the coast. Some people lived in these places year-round, while others moved with the seasons. Hunting and trapping areas were located along streams inland to the uphill areas. Special places, such as stone quarries and plant gathering areas, were a focus for activity. Given this pattern of land use, archaeologists expect sites from this period to document more specialized use, depending on their location and their proximity to the bay or a river.

While understanding land use patterns from the past is a fundamental goal for archaeologists, it is never simple. The relationship of an environment and the people who live in it is both complex and dynamic, and archaeologists work to understand the environments of the past, how they shaped the cultures of past peoples, and were, in turn, reshaped by human activities. Such understanding allows archaeologists to better interpret individual sites and to see how they fit into an overall pattern.

This is a special challenge in southern New England where most archaeological sites are not deeply buried; indeed, the physical remains of most Indian activity remain in the top foot or two of soil. It is a fragile resource. Archaeological sites are disturbed by plowing, by soil erosion, by the freezing and thawing of the ground, and by construction and mining activities.

Even under the best circumstances, an archaeological site is always a fragment of what was once a more complete record of a people's activities at a particular place. If we imagine a Narragansett Indian settlement about 1400 AD on the shore of a salt pond, what would we see? The village includes several families, their wigwams, and their gardens of corn, beans, squash, sunflowers, and tobacco. Nearby are the cooking hearths and platforms, food drying racks, fire pits for pottery-making, and a large flat stone used as an anvil for breaking beach cobbles into tools. Away from the living area is a midden—a trash heap—containing shells, animal bones, plant remains, broken pots, chips of stone, broken tools, and other household refuse. Fishing nets are hung out to dry. A burial area, marked out by stone piles and grave offerings, is nearby.

Of all these things made and used by the Indian villagers, which would remain for archaeological study now, 600 years later? Nothing would remain above ground level. The wooden frames of the wigwams and the drying racks are gone, removed or rotted away. All the wooden objects and much of the bone material has decayed. The stone grave markers, the stone anvil, the other large stone objects such as pestles and abrading stones were removed by later farmers clearing fields, set aside or used in stone walls. The shell garbage heap was leveled and used to sweeten the soil.

The remains of the cooking hearth might be present under the plowed top layer of soil. Where the wigwam posts decayed, an archaeologist might find small circular organic stains in the soil. In the remnants of the shell heap, the archaeologist might find shells, small bits of fish and animal bones, a few charred plant remains, stone chips, and broken pots and tools. Near the anvil, stone chips and broken tools would still identify the place where tools were made. Even though its markers are gone, the burial ground would probably remain, the people buried deep enough to escape the farmer's plow.

In short, only a few clues remain for the archaeologist to piece together the story of the village and the people who lived there. But those clues can be enough if they are undisturbed and if a careful professional excavation is performed by trained archaeologists.

To understand how an archaeologist works, we should imagine our village again—but this time we must imagine

that the village we see in 1400 AD is not the first settlement on this site. People have lived on the site at different periods of history, creating layers of objects below ground (layers which archaeologists call the "stratigraphy" of the site). How is the archaeologist to sort out the meaning of all of these objects, the bits of stone, plant material, the broken pots? An archaeological site is a jigsaw puzzle with many pieces missing—and it is a puzzle which must be put together in three dimensions.

As one archaeologist has described it, a site is a "complicated package" which must be "carefully opened and meticulously recorded." When archaeologists excavate a site, they record (in writing, in photographs, in drawings) each of their actions and each object as it is removed. Every object is recorded by itself and also in relation to all the other finds. This scrupulous care in the recording of small details is the hallmark of professional archaeology. Careless excavation can destroy a site as surely as a bulldozer.

Archaeologists often begin their examination of a site by "testing" a place. A grid is laid out over an area, so that the test units can be accurately mapped, and small exploratory excavations are made at regular intervals. These test excavations help the archaeologist to determine the probable extent of the site in two dimensions—how far down is useful material to be found? and where are the edges of the site?

The archaeologist is looking for artifacts, features, and other materials. Artifacts are objects made or altered by human beings, such as tools or implements. Features are components of architecture, such as walls, foundations, storage pits, hearths, and the like. In addition, the archaeologist will look for other objects which can help interpret the artifacts and features, such as seeds, pollen grains, stone, and charcoal.

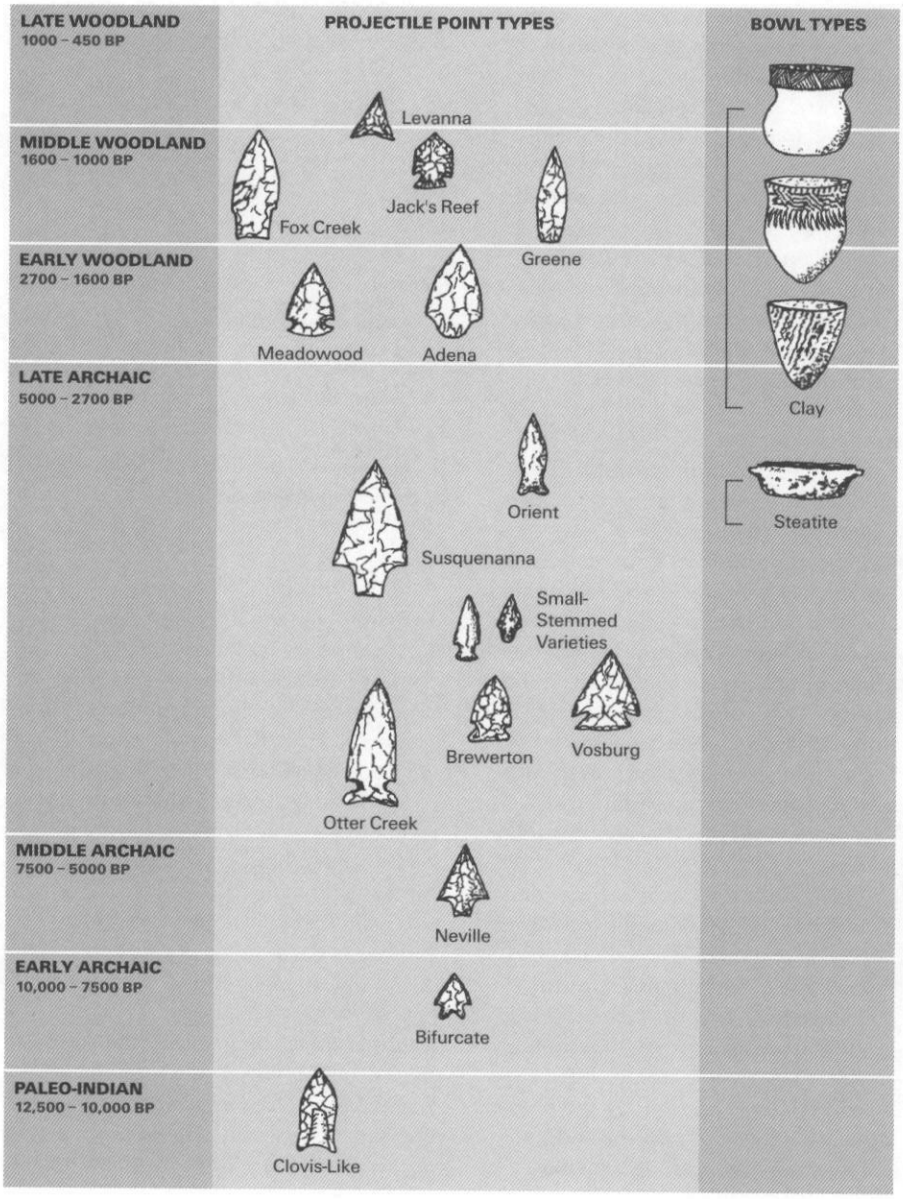
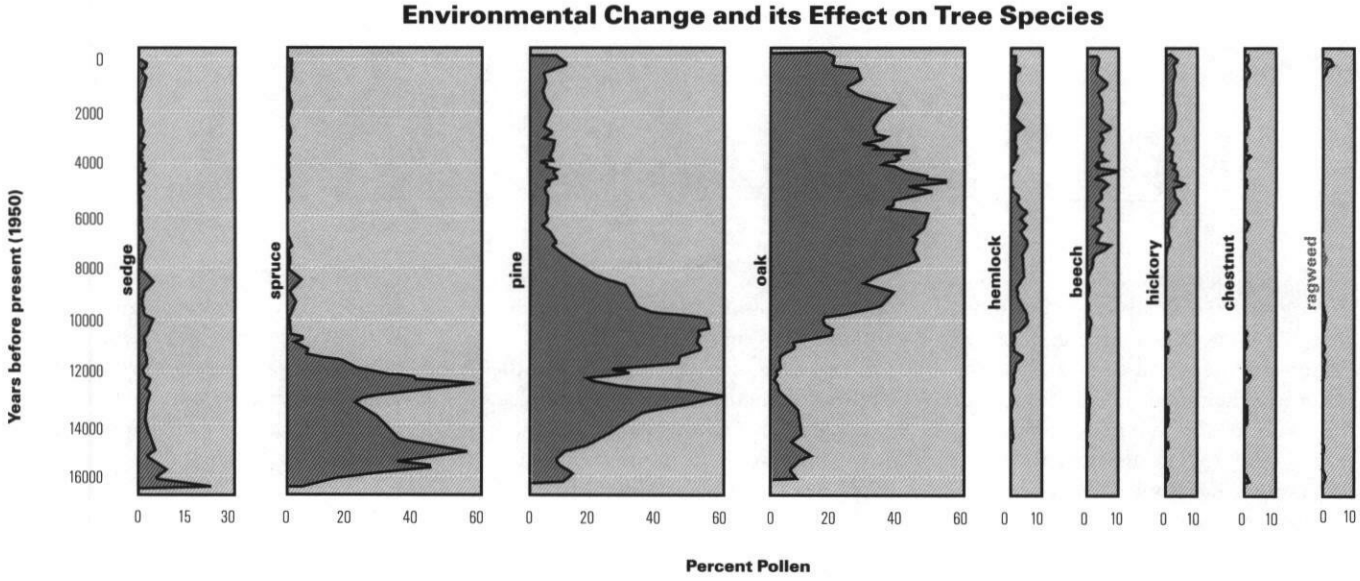


FIG 39 (above) Many archaeologists divide Indian history into broad time periods that correspond roughly to changes in measurable attributes of stone projectile points and clay pottery.

FIG 40 (opposite) To see how the landscape has changed since the last glaciation, palynologists from Brown University examined microscopic pollen grains in soil cores from Winneconnet Pond in nearby Taunton, Massachusetts. Their analysis indicated that the environment has changed from an open tundra-like landscape (sedge) to spruce and pine forests, followed by an oak forest with smaller and various amounts of other deciduous trees. The appearance of ragweed may signal European settlement.



The actual excavation of a site is carried out in a methodical and systematic fashion. Soil is carefully removed from the excavation area using either the squares created by the grid or long trenches. The soil in the upper (and more disturbed) levels may be removed by hand with shovels and trowels; finer work is carried out with even smaller tools.

As each feature or artifact is excavated, the archaeologist tries to determine the shape of the object, how it was constructed, how it was used (and perhaps re-used), and how it was filled in (or around) after it was abandoned.

Soil samples are taken from each layer of soil. These samples are analyzed by a process called "flotation"—the sample is mixed with water and passed through a series of fine screens so that even the smallest object will not be missed.

At every stage of the excavation, written records are made; photographs are taken; drawings and maps are made. Each object removed from the excavation is numbered and cataloged so that it will be clear during future study where the object came from and how it related to all the other objects at the site. The measurements are so carefully kept that it should be theoretically possible to completely reconstruct the site.

Some objects (such as wood, bone, leather, textiles, and baskets) are fragile; they may be treated for preservation on the spot at an excavation. Most objects are returned to the laboratory for analysis. There special conservation techniques may be needed to preserve pottery, metal, or glass artifacts.

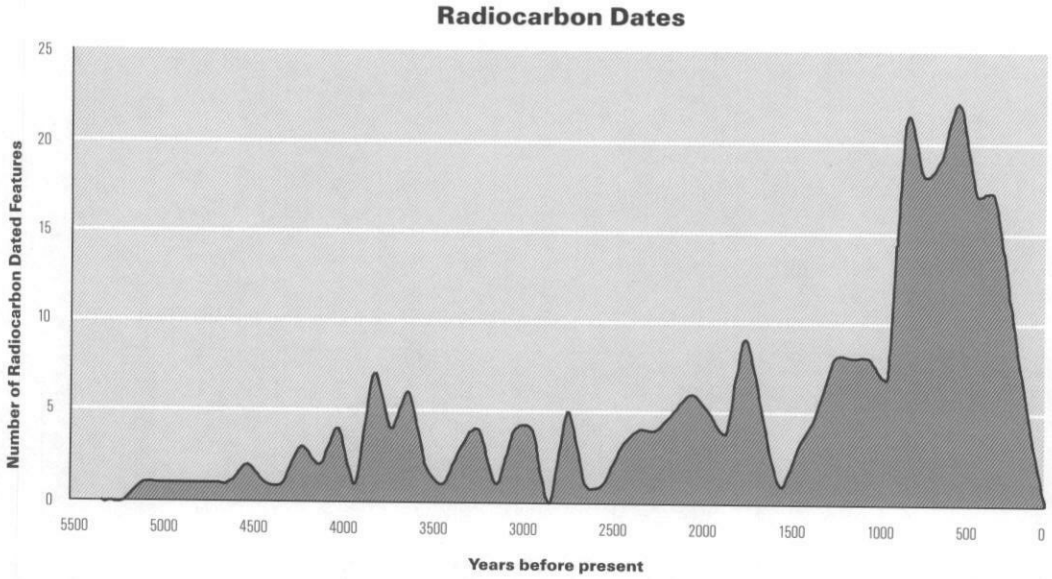
Throughout the process of excavation and later study, the archaeologist formulates hypotheses about the objects and their patterns, attempting to understand what they mean and how they can answer questions about the past. He or she compares the objects and features found with what is already known and with finds from other sites as well.

Deeply buried features, such as hearth pits, storage pits, cache pits, and trash pits, are the mainstay of archaeology in our region. Hearths may contain charred bits of plants and animal bones, which help the archaeologist determine what people ate and how they prepared their food. Trash pits contain the refuse of household and community activities. Cache pits contain tools and raw materials stored for later use.

Plant and animal remains can be used to help determine the seasons in which an area was occupied; if the archaeologist knows the life-cycle of the plants and animals whose remains are found at the site, he or she can determine the season of the year they were used at the site.

Bits of charcoal, bone, and shell can be used to help determine when the site was occupied, using a specialized technique called radiocarbon dating. The technique of radiocarbon dating measures the extent to which the radioactive carbon present in all living organisms has decayed, yielding an estimate of time since the organism's death.

The arrangement of the site as a whole also contains important information.



A large site with extensive communal areas may suggest a sizable community. Features which seem to be near each other may help address questions about the location of different activities in a settlement—such as the way food processing (like grinding, chopping, cooking) is related to food storage areas. Conversely, if all of the objects found relate to a single activity, such as hunting or tool-making, the archaeologist may surmise that the site was not a permanent or long-term location.

When interpreting a site, the archaeologist studies relevant written documents as well as the site itself. If the site dates from a period when documents are available, they may help interpret, perhaps even guide, the excavation. The living descendants of the people who created a site are another important source of information. They may have the ability to interpret a site since they may understand its meaning as part of their own oral traditions.

Archaeologists sometimes simulate and re-create the actions of past peoples to understand the artifacts they find. By actually making a projectile point using ancient tools, for example, the archaeologist learns about the process and the artifacts the process produces.

The archaeologist often calls on the expert knowledge of other specialists. Zoologists and ichthyologists can provide information on bone and shell fragments, botanists can identify charred seeds, and palynologists can identify pollen grains. Geologists who understand the mineralogy of the area identify stone and clay materials and can help determine if the people who lived at a site used local materials or if they dealt with others to get valuable products from far distant areas. Climatologists can assist the archaeologist in assessing the physical environment of the past. Metallurgists help to interpret objects of metal, and textile experts aid in the understanding of fabrics and basketry.

Finally, archaeologists share their findings with others. The writing of reports on excavations is an important part of the professional's work. The archaeologists describe what has been found, offer interpretations of the findings, and publish their reading of the site, so that others benefit from the materials.

The artifacts recovered from a site are carefully stored and preserved, along with their records, so that other archaeologists may use them in the future, to reinterpret the same site, to help explicate other sites, or to carry out a study of several related sites.

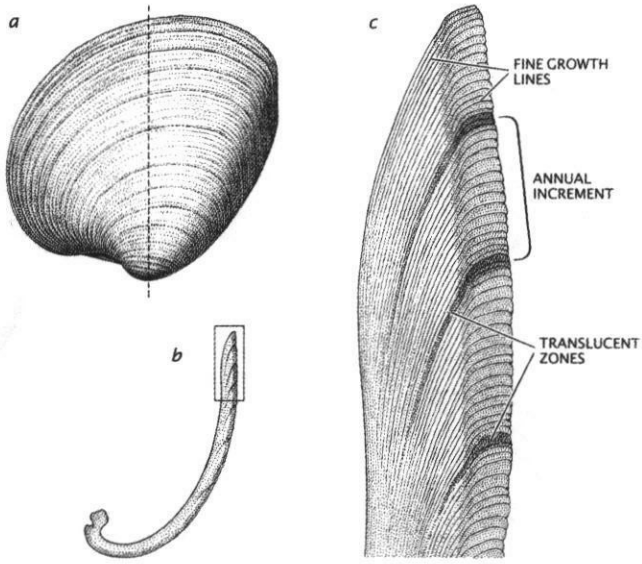
Rhode Island's archaeological sites are a special treasure, and the responsibility for their preservation is shared by property owners, by federal, state, and local governments, by archaeological professionals, and by all those who care about the state's history.

Archaeological sites are threatened by natural causes, such as soil erosion; by excavation for new construction and for gravel and sand; and, occasionally, by the digging of untrained and unsupervised avocational archaeologists.

Excavation by amateurs can destroy or limit the usefulness of a site. No matter how well meaning, non-professionals can do serious damage. State law requires that excavations on state-owned land can take place by permit only; the Rhode Island Historical Preservation & Heritage Commission issues such permits only to well planned excavation projects. On other lands, however, damaging digs are unregulated. There are opportunities for an avocational archaeologist to participate in professional excavations. If you have an interest in archaeology and would like to join a team which is excavating a site, contact the archaeologists at the Rhode Island Historical Preservation & Heritage Commission. They can help you find an appropriate way to share in the real excitement of archaeological discovery.

Important archaeological sites are protected in part by the National Historic Preservation Act (1966).

FIG 41 (above) When the number of radiocarbon dates (about 300 dates from 75 sites) is graphed, considerable fluctuations are evident. These fluctuations suggest that the number of people in Rhode Island varied over the centuries and millennia. A dramatic increase in the number of dated features around 900 years ago is evident. This may correspond to population growth from new people moving into the area.



Section 106 of this law requires that federal agencies which fund or license activities that could destroy important sites must consider the impact of their actions on those sites. In Rhode Island, a state law also requires this review of actions by state agencies. And some towns and cities also require review for archaeology before building permits are issued or subdivision plans are accepted.

These laws have ensured that consideration has been given to the preservation of archaeological sites during the construction and repair of roads, the laying of sewer and utility lines, and the construction of some new buildings. During the planning stages of federal or state projects, professional archaeologists are called in to examine proposed building areas so that they can identify potential sites. They study the records of other nearby sites and may excavate a series of shovel test pits to determine if a site exists, to find out how large it is, and whether it is an important one.

If a site cannot be avoided by adjusting the project, then it may be excavated before construction takes place. Because even the most careful and professional excavation destroys a site, it is always preferable to change the proposed project, if possible, rather than excavate. This "conservation ethic," the preference for leaving a site alone rather excavating it, is an important guide for archaeologists. The decision to excavate a site is always carefully made and is reserved for special cases.

In deciding whether to excavate a site, archaeologists consider whether there is a reasonable alternative to excavation. Archaeologists and government planners balance the feasibility of alternatives to the destructive project, and also evaluate whether the excavation will produce answers to significant questions about the past.

Among the most important questions still unanswered in Rhode Island archaeology are these:

- What was life like for the early settlers of Rhode Island? The first settlers to arrive after the retreat of the glacier seem to have left little evidence of their lives, but we may not yet have discovered their sites. Perhaps some of their sites are underwater.
- Was there a real increase in population and numbers of settlements around 900 AD? There seems to be a relatively large number of sites from this period. Were people

Important archaeological sites are protected in part by the National Historic Preservation Act (1966). Section 106 of this law requires that federal agencies which fund or license activities that could destroy important sites must consult with the RIHPHC about the impact of their actions on those sites.

FIG 42 (above left) Much of the work of archaeologists is done in the laboratory. In this photo, a textiles specialist is examining and cleaning a fragment of a seventeenth-century wool blanket recovered from RI 1000, a Narragansett burial ground in North Kingstown.

FIG 43 (above right) Scientists make thin sections (a,b) of quahog shells in a laboratory to help determine what time of the year people were living at different places. Growth lines in the shell indicate what season of the year the shellfish died and presumably was harvested and consumed. The growth lines are translucent in the winter and opaque in the warmer months (c).

FIG 44 Many archaeological sites are destroyed by construction projects. With adequate planning, sites can be identified before construction and preserved for future generations.

moving from areas to the west into what is now Rhode Island? Perhaps this apparent movement is related to the introduction of corn as a food. The state's salt ponds, coves, and estuaries are important areas for sites from this period.

- Can we make a more complete picture of the Indian use of coastal and upland areas since 3000 BP. Archaeologists think that Indian settlements after this time were probably spread over large areas, but they have not yet had the chance to excavate a complete settlement to see how it is arranged and how it changed through time.
- How did Indian people respond to the problems and disruptions which came with European settlement? This was a critical time for Indian people and, while some important sites have been excavated, more work is needed for a fuller picture of this difficult time.

Sometimes excavation is opposed by descendants of those whose objects and communities are buried underground. Many modern Indian people have strongly held beliefs about excavating Indian sites, especially those which may contain human remains. While it is sometimes necessary to relocate burials to insure that they are not disturbed, excavating graves for archaeological study is inappropriate in nearly all circumstances.

Rhode Island was one of the first states in the country to encourage reburial of Native American grave materials and to discourage the archaeological study of burials. The federal government has also adopted this policy—the Native American Graves and Repatriation Act (1990) requires museums and other depositories to inventory Native American human remains, sacred objects, and objects owned by tribes and to offer to return these to recognized tribes.

Archaeologists routinely confer with representatives of local Indian tribes. The Narragansett tribe has a Tribal Historic Preservation Office, and tribe members frequently monitor archaeological projects. Other tribes in the region include Wampanoags, Nipmucs, Pokanokets, and Pequots.

Archaeology is the study of peoples' lives hundreds or thousands of years in the past. Properly conducted with professionalism and sensitivity, archaeology is an enlightening and inspiring endeavor. It provides unique knowledge of the past; it can reach back to the earliest human culture, yet its insights deal with basic questions faced by men and women throughout time: survival, subsistence, environment, and belief. Understanding Rhode Island's archaeology and preserving archaeological sites has value for us all.

LISTING ARCHAEOLOGICAL SITES IN THE NATIONAL REGISTER

The National Register of Historic Places is the federal government's official list of properties which are significant in American history and worthy of preservation. In Rhode Island, eligible properties are also listed on the State Register.

Properties listed in the National Register include buildings, districts, objects, and archaeological sites. Properties may be listed in the Registers as individual sites or they may be listed as districts which include several sites located near each other.

The stringent eligibility criteria for the National Register mandate that candidates for registration be both well preserved (with minimal changes from their important period) and significant (with the ability to document an important part of our history).

The benefits of registration to the owner of an archaeological site include recognition of the property's importance and assurance that a professional evaluation of the site has taken place; eligibility for certain financial incentives to preserve the site, such as easement donations; and assurance that the site will not be altered or demolished by state or federal action without careful consideration.

Archaeological sites are listed in the National Register when they are associated with important events or with the broad patterns of American history. Some of these patterns are identified in the preceding essay (such as the development of agriculture, the change from nomadic to settled living patterns, and the like), and sites which relate to these themes may be eligible for listing.

Sites are also listed in the National Register because they are associated with individuals who have been important in our past. We do not know the individual people who were important in Native American history before the arrival of Europeans, but for the centuries since many individuals have played important roles in the history of Indian life in Rhode Island. Sites which are illustrative of such a person's life are eligible for the National Register.

Some sites may be listed in the National Register because they represent in a special way the human expression of culture or technology—they embody many of the distinctive characteristics of a particular time or kind of construction. Clusters of sites which are related to each other, such as the buried remains of an early settlement, are entered on the National Register as archaeological districts.

Most of the archaeological sites listed in the National Register are eligible because they have the potential to reveal important information about the past lives of people in Rhode Island. Sites can provide answers to important questions about the past. Sometimes this information is the only way we have of knowing about important parts of our past; even when written sources are available, an archaeological site may provide additional information which can confirm or challenge the written sources or answer questions which cannot be addressed by written sources.

Many individual archaeological sites are already listed in the National Register, and many more are eligible for listing, including those in the inventory of this report. Several archaeological districts are listed in the National Register. In addition, several districts are listed as both historic and archaeological districts because they contain both above-ground resources, such as buildings, and buried archaeological resources.

INVENTORY

The list which follows identifies and describes some of Rhode Island's most important archaeological sites related to the history of Native Americans. The sites are listed alphabetically by town or city and are identified by a name and site number. The site name may reference a geographic feature or the name of a modern landowner; the site numbers are assigned in order of discovery or identification. Dates are sometimes noted as BP (before the present). If you would like to know more about any of these sites, please call the office of the Rhode Island Historical Preservation & Heritage Commission and ask to speak with a staff archaeologist.

Many of these sites are listed in the State and National Registers of Historic Places or have been demonstrated to be eligible for listing.

Barrington

Johannis Peninsula Site (RI 1716)
Located on the edge of a salt marsh along the Palmer River, the Johannis Peninsula site was studied first in 1987 by archaeologists from the Public Archaeology Laboratory, and excavated further by Cultural Resources Specialists of New England in 1992. The site contains a variety of artifacts including stone tools and projectile points (Brewerton Eared-notched, Squibnocket Triangle, Orient Fishtail), steatite fragments, and clay pot fragments (described as Vinette 1). The major use of the site appears to have occurred between 3200 and 2700 years ago. The presence of steatite fragments and clay pottery in the same excavation level at the same site is rare and suggests that with further study, this site could further our understanding of the transition from stone bowls to ceramic vessels. The site is considered eligible for listing on the National Register of Historic Places.

Mouscochuck Creek Site (RI 750)
Excavated in the 1990s by the Narragansett Archaeological Society, the Mouscochuck Creek site contains the well preserved remains of several unusual crescent-shaped stone features. Most of the stone artifacts recovered from the site are thought to date between 3700 and 2700 years ago. Two radiocarbon dates obtained from charcoal in two of the features were 800 +/- 50 BP and 860 +/- 50 BP. Nearby, on a Rhode Island Country Club fairway, Indian burials were disturbed during landscaping in the 1920s. The unusual, perhaps ceremonial, nature of the features and the presence of a nearby burial area suggested to the Rhode Island Historical Preservation & Heritage Commission that human burials or other sacred areas could be disturbed during the excavations. In 1995, out of respect for these concerns, the Narragansett Archaeological Society stopped excavations. The site remains preserved on country club land.

Bristol

Mount Hope
Metacom (King Philip), chief sachem of Pokanoket and leader of the Wampanoag during King Philip's War, was killed here near Cold Spring in July, 1676. Since at least the 1920s, Indian people have visited Mount Hope to commemorate Metacom and to conduct ceremonies celebrating the continuation of their culture and traditions. Some of these ceremonies are held at King Philip's Chair, a massive quartz outcrop where Philip is thought to have held council meetings. Mount Hope is the site of Brown University's Haffenreffer Museum of Anthropology. Brown archaeologists have found evidence of Indian use at Mount Hope from colonial times to well before 5000 years ago. The area is recommended for listing on the National Register of Historic Places.

Burrillville

In several places, archaeologists have found small sites, containing a few chipped stone tools, presumably left by hunting or trapping parties. At other places, near ponds and lakes, nineteenth- and twentieth-century artifact collectors found pestles, projectile points, and other stone tools, indications of more substantial settlements. In the nineteenth century, Nipmuc people from Webster, Massachusetts, erected their wigwams near Wallum Pond, as they probably had done for centuries; several ancient burial places are also recorded within the town limits.

Archaeologists from the Public Archaeology Laboratory expose a large surface of the Phenix Avenue site in Cranston. By doing this the layout of features such as hearths and tool-making areas can be readily seen and mapped.

Central Falls

Located along the Blackstone River, the major transportation corridor for people moving between Narragansett Bay and the interior, Central Falls undoubtedly was the location of many Indian settlements. There seems to be no record of any site within the city, due perhaps to the early industrial development. Sites may still exist, however, preserved beneath urban and industrial fill. During King Philip's War, on March 16, 1676, Narragansett warriors led by Canonchet attacked a company of colonial soldiers as they forded the Blackstone River at the falls near Roosevelt Avenue. Many of the colonists were killed in this attack, called Pierce's Fight, while others were captured and executed in Cumberland at the spot now known as Nine Men's Misery.

Charlestown

Foster Cove Site (RI 16)

Evidence of several hundred years of shellfish gathering is present at this site on Ninigret Pond. The site was examined by archaeologists from the Rhode Island Historical Preservation & Heritage Commission in the 1970s and was found to contain at least four separate shell deposits including oyster, quahog, scallop, soft-shelled clam, mammal bone, native ceramics, and lithics including jasper, chert, and quartz. A radiocarbon date of 1120 +/- 80 BP was obtained from a sample of oyster shell. The site was listed on the National Register of Historic Places in 1980.

Fort Ninigret (RI 15)

This palisaded fort, located on Ninigret Pond, was constructed in the first half of the seventeenth century. It served as a defensible settlement and trading center in the polity of the Eastern Niantic Sachem Ninigret, who was one of the most influential leaders in southern New England from the 1640s to his death in 1679. The large number of wampum beads and the quantities of wampum-making debris found at this site suggest the important role that Ninigret's people played in the wampum trade in southern New England. Today the site, which is owned by the state and listed on the National Register of Historic Places, is maintained as a small park.

Charlestown Hills

North of Route 1, in the Charlestown hill country, are many archaeological sites from the years following King Philip's War. These sites include small eighteenth- and nineteenth-century farmsteads, represented in some cases by the foundations of houses and outbuildings and in others by less visible depressions marking the places where dwellings once stood. The sites are located along dirt cartpaths and roads such as King's Factory Road, Prosser Trail, and Narragansett Trail that mark the course of more ancient Indian paths and trails. Before the eighteenth century, Indian people used this hill country periodically for hunting and gathering. In the years after the war, however, as much of the best farming land and fishing places were sold by the Ninigrets, many families moved into this less desirable area on a more permanent basis. Many of these sites lie within the boundaries of the historic Narragansett Indian reservation, established by agreement between Ninigret II and the colony in 1709. A small part of this old reservation is listed on the National Register of Historic Places.

Coventry

Moosup River Site (RI 1153)

A small site on the Moosup River presumably used by a hunting or trapping party, RI 1153 was discovered in 1984 by archaeologists from the University of Connecticut at Storrs. The site is less than 1/10 of an acre in size. Charcoal from a feature was radiocarbon dated at 5000 +/- 150 BP. Artifacts included stone projectile points (Neville and "Stark-like"), bifacial and unifacial tools, and flakes. Most of the tools were made from locally available quartz and quartzite. The site was listed in the National Register of Historic Places in 1987.

Carbuncle Hill Archaeological District

(RI 1072 through 1079)

Carbuncle Hill contains numerous quartz and quartzite outcrops and boulders. People came to this area in Rhode Island's upland interior to obtain the stone which they used to make tools such as knives, scrapers, and projectile points. At some locations, waste material from quarrying and tool-making was found; at other locations completed and partially completed tools were recovered. Several of these Carbuncle Hill locations were listed in the National Register of Historic Places in 1985; together they comprise the Carbuncle Hill Archaeological District.

Cranston

Oaklawn Soapstone Quarry (RI 47)

In western Cranston, above the Furnace Hill Brook, are the remains of an ancient soapstone quarry. Soapstone is a soft material, easily carved, which was used by native peoples to make stone bowls, pipes, and other objects. The Oaklawn quarry is located along a lengthy band of talc that runs from northern New England into the Carolinas. In some places this formation occurs on the surface; the Oaklawn quarry is one such place; another is found in Johnston. Soapstone bowls were made between 3700 and 2700 years ago, when they were replaced by pots made from fired clay. Soapstone pipes and decorative objects are still made by local Native American artists. Now surrounded by houses, the site was the object of at least six decades of collecting and study by avocational archaeologists. The most thorough of these investigations was undertaken in the 1960s by the Narragansett Archaeological Society. Directed by William Fowler, the Society was able to radiocarbon date one episode of pipe making to approximately 731 AD. Soapstone items were traded among Indian communities throughout the eastern United States. Chemical analysis of the stone enables archaeologists to determine the quarries that provided the stone for some of these objects. The results of one study suggested to William Turnbaugh at the University of Rhode Island that a soapstone pipe found at an archaeological site in Indiana was made from Cranston soapstone. The Oaklawn quarry was listed in the National Register of Historic Places in 1980.

Cumberland

Sassafras Site (RI 55)

Located along the Blackstone River, this small quarry site was used between 5000 and 3000 years ago. The site includes outcrops of high quality quartz and quartzite, surrounded by stone artifacts reflecting the quarrying of this lithic material and the production of small triangular projectile points called "Squibnocket Triangle" points. The site was studied in 1980 by archaeologists from Harvard University and was listed in the National Register of Historic Places in 1984.

East Greenwich

The South Stream Sites

(RI 1699, 1701)

In 1993 and 1994 the Public Archaeology Laboratory studied an area along the upper reaches of the Fry Brook drainage area. They identified two places with archaeological evidence of several thousand years of use. The earliest artifact is a single projectile point dating to perhaps 7500 years BP. Most of the South Stream area, however, was used much later with the great majority of recovered artifacts and features - stone tool making areas, pits and hearths (containing a variety of food remains), and tools for working with wood and animal hides - dating to between 3300 and 500 years ago. This finding typifies the general trend around Narragansett Bay where fairly permanent settlement areas developed as the coastline assumed essentially modern conditions by 3000 years ago. The people who lived along the South Stream also made other settlements within the Greenwich Cove drainage area at places like Lambert Farm, Potowomut, and at Greenwich Cove (see inventory entries for Warwick). This drainage area and its various sites and settlement areas are like many of the other small drainage areas around Narragansett Bay where large and expansive settlements grew and flourished until European colonization in the seventeenth century.

East Providence

Kettle Point Site (RI 1731)

Located on Watchemoket Cove, a shell midden, hearths, and trash pits mark the location of a small settlement used around 500 years ago. The site was partially excavated by archaeologists from the Public Archaeology Laboratory in 1987. One of Rhode Island's finest examples of decorated, shell-tempered Native American pottery was recovered in one of the trash pits. The site is recommended for listing on the National Register of Historic Places.

Walker Point Site (RI 653)

Located on a high bluff above the Seekonk River, the Walker Point site was examined in 1981-82 and 1994 by archaeologists from Public Archaeology Laboratory, and in 1996 in a collaborative effort by the Rhode Island Historical Preservation & Heritage Commission and the Narragansett Archaeological Society. The site contains some of the earliest evidence of human occupation found in Rhode Island, spanning the period from around 7000 to approximately 1400 years ago. Excavations revealed pit and hearth features, lithic workshops, a shell midden, a cache of quartz bifaces, and Stark,

Squibnocket Triangle, and Jack's Reef projectile points. The site lies in the path of the proposed Waterfront Drive and was studied as part of the environmental review required by this federal and state highway project. The site was determined eligible for listing on the National Register of Historic Places in 1984.

Exeter

Queen's Fort (RI 408)

Located on the crest of a wooded hill in the northeast portion of Exeter, Queen's Fort is a seventeenth-century Narragansett Indian fortification consisting of dry-laid stone walls (now in disrepair) set between groups of glacial boulders. Although difficult to see, the structure includes "a semi-circular bastion and a sharp flanker, features which conform to seventeenth-century principles of European engineering" (Malone 1991:75) and may have been built or designed by a Narragansett, whom the English called Stonewall or Stone-layer John. An alternative interpretation was suggested by James Mavor and Byron Dix, who observed that the northeast bastion and the "spiral-shaped" enclosure on the southwest side aligned to the winter solstice. They suggested that the site was "a sacred place, signalled by stone rows and a solar alignment." Mavor and Dix's interpretation is compelling and certainly plausible. The site's location is, as they point out, indefensible. Moreover, the preferred location for forts during the seventeenth century was in large swamps, out of reach of most colonial soldiers. The site is named for Quiapen (Matantuck), the Narragansett sachem who lived in the Exeter area. She was killed by Connecticut troops during a massacre of over 100 women, children, and old men in the Nipsachuck Swamp in Smithfield in the waning days of King Philip's War. Queen's Fort was listed on the National Register of Historic Places in 1980.

Foster

Breezy Hill Site (RI 957)

Located in the western section of Foster, the Breezy Hill site is a small family settlement located in 1984 by archaeologists from the Public Archaeology Survey Team, University of Connecticut at Storrs. The site is small, covering about 1200 square feet, and of that area only about 30 square feet was excavated. Radiocarbon dated to 1230 +/- 220 years ago, the site is extremely well preserved. Unlike most archaeological sites in Rhode Island, which have been plowed for farming to a depth of eight to twelve inches, this site is unplowed. Quartz and quartzite chipping debris, a quartzite cutting tool, and bifacially flaked tools were present. Also recovered were several pieces of grit-tempered pottery. The small size of the site and the variety of artifacts recovered suggests that it was used for a short period of time by a small group, perhaps a family. The Breezy Hill site was listed on the National Register of Historic Places in 1985.

Glocester

Cherry Valley Site (RI 279)

Located in the state's upland interior region, along Route 102 near Cherry Valley Pond, is a small hunting camp used by Indian people between 3000 and 5000 years ago. Archaeologists from Harvard University excavated a small portion of the site in 1978 and recovered flaked stone tools, including a Beekman projectile point. The site was listed on the National Register of Historic Places in 1984.

Hopkinton

Tomaquag Rock Shelters (RI 226)

Located in the Tomaquag Valley are more than two dozen rock shelters, or small caves in a rock ledge. One of these was examined by archaeologists from Eastern Connecticut State College and Brown University in the late 1950s who found evidence of Indian use from around 4000 years ago to perhaps 900 years ago. Limited excavation found a variety of knives and projectile points, as well as hearths containing charred bone and wood. These materials suggest that the shelter was used periodically by small groups of hunters. Other artifacts, including a "Broad Point," suggest that the caves were also used for ceremonial purposes. The site was listed on the National Register of Historic Places in 1977. In 1982, in recognition of the high archaeological and cultural value of the rock shelters, the land was given to the State of Rhode Island by Nathan Kaye to preserve for future archaeological research.

Jamestown

Joyner Site (RI 706)

Located south of Eldred Avenue, the Joyner site was a substantial settlement. Some of the site was used 4500 years ago; other parts perhaps 3300 years ago; and some as recently as 2000 years ago. The site was studied prior to the construction of the new Route 138 by Binghamton University, John Milner Associates, Public Archaeology Laboratory, and the Narragansett Indian Anthropological-Archaeological Committee. The site contained the remains of circular wigwams, fire pits, trash pits, cutting implements fashioned from white quartz and argillite, tools for grinding nuts and seeds, hearths with the remains of deer and passenger pigeons, and stored caches of finished tools, paint stones, and other objects used in village life. The site was listed on the National Register of Historic Places in 1984.

Jamestown Archaeological District

In 1979, a study by archaeologists from Rhode Island College defined an area in the central portion of Conanicut Island, bounded by the Watson Farm to the north and Narragansett Avenue to the south, that contains many archaeological sites. Within this district are examples of Indian settlements including house remains, shell middens, and human burials. The largest Indian cemetery recorded by archaeologists in New England is located in this area. The modern village of Jamestown grew around and within this large Indian cemetery, the boundaries of which are uncertain. Named the West Ferry Site (RI 84) by William Simmons who studied a small portion of the site in the 1960s, the cemetery contains cremation burials dating to at least 3300 years ago; also present are more recent Narragansett Indian interments from the seventeenth century, perhaps earlier. The presence of human burials in the same place for such a long period of time provides a tangible underpinning to the Narragansett sachem Pessicus's statement in 1644 that his people had lived in the area since "time out of mind." It also suggests why the Narragansett sachems Scuttop and Quequaquenuit disagreed with colonial assertions in the 1650s that the land had been sold to the colonists. To these sachems the land had not been sold, rather the colonists had simply been granted rights to use the land. The Jamestown Archaeological District was listed on the National Register of Historic Places in 1989.

Johnston

Ochee Springs Site (RI 231)

Located in the southeastern section of Johnston is the site of a soapstsone quarry where native people made stone bowls. The site was studied in 1878 by F.W. Putnam, curator at the Peabody Museum at Harvard University. Putnam removed "300 cartloads" of material including completed bowls, bowl fragments, soapstone debris, quartzite picks, abraders, and hammerstones. These artifacts were scattered among several museums, including the Peabody, the Smithsonian Institution, and Brown University's Haffenreffer Museum in Bristol. The Ochee Springs quarry is located along a band of talc that runs beneath the ground surface from northern New England into the Carolinas. In some places this formation occurs on the surface; the Ochee Springs quarry is one such place, another is found in Cranston (see Oaklawn soapstone quarry). Talc, or soapstone, is a soft material, easily carved, and was used by native peoples to make stone bowls, pipes, and other objects. Soapstone items were valued highly and were traded among Indian communities throughout the eastern United States. The Ochee Springs Site was listed on the National Register of Historic Places in 1978.

Lincoln

Twin Rivers Site (RI 165)

Located in the southwestern corner of Lincoln, near the Wenscott Reservoir, the Twin Rivers Site was excavated by the Narragansett Archaeological Society in the early 1950s. Artifacts spanning about 9000 years were recovered including a fluted point made from quartzite, one of the oldest artifacts ever found in Rhode Island. Refuse pits, hearths and fire pits, a dog burial, woodworking tools, stone drills, knives, and scrapers, and hammerstones were also found. The society reported that a cache of "clam shells in which occurred a broken white clay pipe of early make" was also present. Most, if not all, of the Twin Rivers Site was excavated by the Narragansett Archaeological Society.

Little Compton

Sakonnet Rocks

A Wampanoag story explains the origins of a rock formation in the waters off Sakonnet Point. According to the story, a giant named Maushop lived with his family on Martha's Vineyard. Angry with his wife, Maushop threw her into the water. She fell near Sakonnet Point and in time changed to stone. She stood for many years, the story continues, but when the English came some of them broke off her arms and head. Disgusted with the English, Maushop went away and, at least at the telling of the story to an Englishman in 1792, had not returned.

Wilbour Woods (RI 98, 99)

This area is reputed to be the settlement of Awashonks, sachem of the Sakonnet Indians. She was allied with her cousin Metacom, but before war's end petitioned the English for peace. She survived King Philip's War and may be buried here or nearby. Much of the area thought to be the Sakonnet settlement has been mined for gravel. Systematic archaeological investigations would be necessary to determine if anything remains of what would be an important archaeological site.

Middletown

Gardiner Pond Shell Midden (RI 101W)

Located near Gardiner Pond, this shell midden was studied by archaeologists from the Public Archaeology Laboratory in 1984. The site is one of the largest shell middens in Rhode Island, covering 3/4 acre. In some places the midden is nearly three feet deep. A sample of shell from a depth of 28 inches provided a radiocarbon date of 1860 +/- 70 BP. The shell included quahog, oyster, and whelk and within the shell were the remains of deer, birds, and fish. Artifacts within the midden included projectile points, cores, flakes, ground stone, and grit-tempered ceramics. The site was entered in the National Register of Historic Places in 1985.

Narragansett

Pettaquamscutt (Narrow) River

In 1983 the Public Archaeology Laboratory conducted an archaeological survey along the Pettaquamscutt River. Many sites, with dates ranging from 4020 +/- 100 BP to 390 +/- 60 BP, were located, most of which were along the Narragansett side of the river. Pollen cores indicate that salt water did not move into the river until about 2000 years ago and that the river's modern salt marsh conditions were not established until 600 years ago, much later than most other locations around the bay. The archaeological evidence reflects the lateness of the formation of estuarine conditions. Of the fifteen sites located by the Public Archaeology Laboratory, only one, the Freeman site (RI 1038), contained strong evidence that estuarine resources were used. At this site a shell midden contained the remains of whelk, periwinkle, quahog, grapes, acorns, deer, bird, and fish. Some shell from the Freeman midden produced a radiocarbon date of 390 +/- 60 BP. Smaller shell deposits were also found at the Campbell site (RI 114), along with storage and fire pits, projectile points, clay pot fragments, and food processing tools. One feature, radiocarbon dated to 1100 +/- 145 BP, contained several charred grains of wild rice. Sections of the Pettaquamscutt River are recommended for listing on the National Register of Historic Places.

RI 110

A large Narragansett Indian village and burial area, dating to 1010 AD to 1690 AD, is located on the northeastern side of Point Judith Pond. Between 1993 and 1995 archaeologists from the Public Archaeology Laboratory, working with Narragansett tribal members from the Narragansett Indian Archaeological-Anthropological Committee, located the remains of structures, shell middens, refuse pits, and hearths, indicating a major settlement area covering approximately 40 acres. Evidence of maize cultivation was recovered in several of the pits, providing the best archaeological evidence in Rhode Island thus far of the use of corn prior to European settlement. This site is one of the most significant in the state. The landowner, the town, and the Narragansett Indian Tribe, the State of Rhode Island, and others are working together in an attempt to preserve the area for future education and recreation.

Narragansett Indian Tribal Reservation

After King Philip's War, the Niantic sachems controlled 135,000 acres in the southern part of the colony. In 1709, colonial officials pressured the the Indians to yield title to some of this territory, reaching an agreement to reserve 40,000 acres to Ninigret II within the present day bounds of Charlestown. Today, the federal government holds in trust approximately 1900 acres of the original 40,000 acre reservation, centered around the Indian Cedar Swamp and Schoolhouse Pond. The trust lands contain many places and sites that exemplify Narragansett history, before and after the establishment of the 1709 reservation. Archaeological remains of settlements as old as 5000 years were located in a 1990 survey by archaeologists from the Narragansett Indian Archaeological-Anthropological Committee and Public Archaeology Laboratory. In addition sites of the school house (about 1740), many small farms and dwellings (now abandoned), and burial places are present. A system of trails and cartpaths connect these abandoned farmsteads and burial grounds with the Indian Church and the August meeting grounds.

New Shoreham

Great Salt Pond Archaeological District

This archaeological district surrounds the Great Salt Pond and comprises an area of approximately 1670 acres. The district contains over 30 archaeological sites, recorded during surveys by Rhode Island College in 1985 and the University of Connecticut at Storrs in 1986 and 1987. Most of the sites were occupied between approximately 2200 years ago and the 1600s AD, and show use of the maritime resources offered by the pond and the nearby sound and ocean. One of these sites, RI 1428, was the location of a village occupied year-round, about 2200 years ago. This site is the earliest evidence of a permanent year-round settlement discovered in southern New England. There, archaeologists from the University of Connecticut at Storrs discovered post mold patterns suggesting the presence of several houses. The village midden with large amounts of seal and sturgeon bones was also identified. At Fort Island (RI 118), archaeologists recorded the outline of a fort used by the island's native inhabitants between c. 1660 and King Philip's War in 1675-76. The Great Salt Pond Archaeological District was entered in the National Register of Historic Places in 1990.

Newport

Old Quaker Meeting House Site (RI 1224)

In 1969, archaeologists from Brown University, assisting with the restoration work at the meeting house, found that it had been constructed on top of a Native American site. Substantial portions of this site were preserved intact beneath the floor boards in the northern and central sections of the original building. Shell middens, storage pits, fire pits, hearths, refuse pits, and post molds were found containing a wide range of artifacts indicating Indian use of the area over a period of several thousand years. Small stemmed points, Squibnocket Triangles, and Levanna points were recovered. One pit contained the remains of two dogs and was radiocarbon dated to 1150 AD +/- 110 years. It is likely that more of this village site remains on the grounds of the meeting house.

North Kingstown

Hoskins Park and South Wind Sites (RI 1006, 1007)

Located along Mill Creek, the Hoskins Park and South Wind sites were discovered by archaeologists from the Public Archaeology Laboratory in 1985. The sites, located a few hundred feet apart, contain a long record of Native American use, starting around 8000 to perhaps 10,000 years ago through the first part of the seventeenth century. At the South Wind site, a fluted felsite projectile point and associated chipping debris were recovered. The projectile point was broken, probably during its manufacture. Fluted points were used between 9000 and 10,000 years ago; at that time the site would have been on the shore of a glacial lake. Later, as oak-hickory forests developed and Narragansett Bay was formed, Indian people used the area more frequently and in greater numbers. Evidence of nut processing and roasting at 3870 +/- 60 BP was followed in later years by the use of maritime resources such as shellfish and finfish. The largest part of the site, represented by an extensive shell midden containing household refuse, was used between 450 and 600 years ago. The presence of European trade goods in some of the domestic features indicates that Native Americans continued to live in the area after Roger Williams and Richard Smith built their trading houses across the cove in the 1630s. The site has been determined eligible for listing in the National Register of Historic Places.

hearths and fire pits, and post molds, were found. The variety of plant and animal remains was similar to those at the Greenwich Cove Site (see Warwick): deer, rabbit, turtle, fish, duck, raccoon, oysters, quahogs, soft-shelled clams, hickory nuts, and many plant species were found in the features. In addition, bone tools for making fiber baskets and mats, many broken clay pots, and stone tools were recovered. The Providence Covelands site was determined eligible for listing on the National Register of Historic Places.

Shaded Seekonk Site (RI 1876)

On the grounds of Butler Hospital, above the Seekonk River, archaeologists from the Public Archaeology Laboratory found evidence of several Native American settlements used between 5000 and 3000 years ago. Most of the excavated portion of the site is about 3000 years old, as indicated by many small-stemmed and Squibnocket Triangle projectile points made from white quartz. When these tools were made thousands of small quartz flakes were produced. Many of these flakes had been swept together, placed in a small depression, and then buried, perhaps to keep the living area clean and free from the sharp-edged stone debris. Only a small part of the site was excavated, so the remains of wigwams and other structures associated with this site may still remain preserved. The site has been determined eligible for listing on the National Register of Historic Places.

Richmond

K.G. Ranch Road Site (RI 1298)

A small site located along the Wood River, RI 1298 was found by archaeologists from Rhode Island College during a survey for the town of Richmond in 1984. Stone tools and flakes including several Levanna projectile points, burned bone, and charcoal were recovered, suggesting to the archaeologists that the area was a winter hunting campsite. A radiocarbon date of 610 +/- 60 BP was obtained from the charcoal.

Scituate

Double L Site (RI 958)

Located near an unnamed stream in northern Scituate, the Double L site was discovered by archaeologists from the University of Connecticut at Storrs in 1982. Covering about 1/4-acre, the site contains abundant evidence of quartz stone tool production, as well as finished Levanna projectile points, dentate-stamped pottery, charcoal, and beaver bone. The pottery is similar to ceramics on other sites that have been radiocarbon dated to between 200 and 600 AD. Red jasper, presumably imported from the Saugus quarries in Pennsylvania and found on many sites in southern New England during this period, was also recovered. The presence of stone tools, pottery, charcoal, and bone suggests that the site contains the remains of one or more family settlements. The site was listed on the National Register of Historic Places in 1985.

Smithfield

Woonasquatucket River Site (RI 163)

Located at the headwaters of the Woonasquatucket River is a small campsite used by Indian people between 4500 and 3600 years ago. Limited excavations by archaeologists from the Public Archaeology Laboratory in 1981 recovered a small-stemmed projectile point made from quartzite. Quartz flakes and chert flakes were also found. Many similar small sites are located in the upland areas of the state; this site is a well-preserved example. The site was listed on the National Register of Historic Places in 1984.

South Kingstown

Potter Pond Archaeological District

The land around Potter Pond contains many Native American sites including clusters of wigwams, and places where Indian people established their summer gardens. Shell middens, stone tool making areas, and burial places are also present in the district. One of the sites, named the Potter Pond Site, was identified by the Narragansett Archaeological Society in 1950. Others were located by archaeologists from Rhode Island College in 1983. Together these sites represent many of the ways Indian people used the land around the pond beginning around 4000 years ago when Potter Pond and the other salt ponds in southern Rhode Island formed. Based on the Rhode Island College survey, a 481-acre area containing at least sixteen sites was listed on the National Register of Historic Places in 1987.

Great Swamp and Worden's Pond

Worden's Pond is what remains of a glacial lake that covered an area at least as large as what is now the Great Swamp. On the edges of the swamp and pond and along the Pawcatuck River are numerous archaeological sites from all periods of Native American history. A rare fluted point, representing the earliest inhabitants, is present in one artifact collection from the area. Sites of all kinds, including small lithic manufacturing sites and large village sites, have been located in the area. The Great Swamp is best known, however, as the site of a massacre, committed by invading Puritan soldiers against the Narragansett in December, 1675. Before the war, Indian people, drawn by the natural richness of the lake and wetlands, had used the area extensively for many millennia. The Great Swamp and Worden's Pond area is recommended for listing on the National Register of Historic Places.

Tiverton

Sapowet Point-Almy Brook Area

One of the most important archaeological areas in the state, this part of Tiverton contains many archaeological sites dating to the years following the establishment of salt marshes around 4000 years ago. This was the homeland of the Pocasset, who were led in the second half of the seventeenth century by Weetamoo, wife of the Narragansett sachem Quinapin. More than forty sites have been recorded in the area, one of which contains the earliest evidence of shellfish use in Narragansett Bay at 4000 +/- 100 BP. Other sites include large and small burial areas, shell middens and deposits, and wigwam clusters. During King Philip's War, a skirmish between Pocasset warriors and a group of colonial soldiers led by Benjamin Church took place in the southern part of the area in what was known as the "pease field." The Sapowet Point-Almy Brook area is recommended for listing on the National Register of Historic Places.

Warren

Burr's Hill/Sowams

Burr's Hill was the location of a large cemetery near or perhaps within the principal Pokanoket settlement called Sowamsett, or Sowams (now Barrington and Warren). This cemetery was gradually destroyed in the nineteenth and early twentieth centuries by mining operations. Although it is possible that some graves remain on the fringes of the site, most of what was a major burial place for people living at Sowams and to the south at Mount Hope, is now a landscaped town park, reclaimed from the earlier mining area. In the spring and summer of 1913, the Warren town librarian, Charles Read Carr, undertook systematic excavations at the site, removing 42 burials, and recording information about burial items and the posture and orientation of the body. Based on Carr's work, it appears that the cemetery was used by Indian people from the late sixteenth century into the first quarter of the eighteenth century. Most of the burials, however, were made during the sachemships of Wamsutta and Metacom, or approximately 1660 to 1676. Wamsutta and Metacom were sons of Ousamequin, or Massasoit, the principal sachem of the Pokanokets who befriended the Pilgrims at Plymouth in 1620 and later provided refuge for the banished Roger Williams during the winter of 1635/36. The matter-of-fact, casual attitude toward both the unintentional (mining) and intentional (Carr's attempts at archaeology) removal of burials contrasts with the preference of many people today to leave graves undisturbed. One of the excavators who worked with Carr later explained to Karl Haffenreffer, "I asked permission to dig into the bank where they were not digging and they said it would be all right. So I borrowed a shovel and started to dig."

Scrabbletown Brook Site (RI 670)

Located north of Scrabbletown Brook, RI 670 was completely excavated in 1985 by archaeologists from Rhode Island College prior to the construction of the new Route 4. Excavations revealed eight storage pits, each between three and four feet across and about three feet deep. Charred remains of nuts, mostly hickory with small amounts of acorns and hazelnuts, were found in the pits. These subterranean containers were constructed about 2000 years ago and held baskets filled with nuts. When Roger Williams arrived he described similar features, what he called "barnes," where the Narragansetts stored dried chestnuts so the food would be available year-round. The Scrabbletown Brook Site was determined eligible for listing on the National Register of Historic Places.

RI 1000

Located in the west-central portion of North Kingstown, RI 1000 was the site of a Narragansett cemetery used primarily from 1650 into the 1670s. A backhoe operator accidently disturbed several graves in this unmarked cemetery in June, 1982. Endangered by a private construction project, the cemetery was excavated by a team of archaeologists from the Rhode Island Historical Preservation & Heritage Commission and Brown University, in consultation with the Chief Sachem and Tribal Council of the Narragansett Indian Tribe. In the cemetery were the skeletal remains and grave offerings of fifty-six people: men, women, and children, ranging in age from three to more than sixty years. All were buried in a flexed or "fetal" position; all were placed on their sides; and all were placed in the grave with their heads pointing to the south or southwest. The position of the body in the grave symbolized Narragansett beliefs about the afterlife and the importance of Cauntantowitt, the creator. Most of the grave offerings (things such as brass kettles and rings, glass bottles and beads, clay pipes, bone-handled iron knives, latten-plated spoons, and bells) were obtained from European traders and colonists. Native American offerings such as wampum, shell and bone beads, clay pots, stone pestles and whetstones, and graphite nodules and molds were also present. Some of these objects were the worldly belongings of the deceased; others were gifts from friends and relatives and were meant to accompany the person on the journey to the afterworld. Skeletal analysis indicated that many of these people suffered from tuberculosis and dental disease. These diseases, although present before European colonization, became more of a problem for Indian people after colonization because of changes in diet and living conditions. RI 1000, listed on the National Register of Historic Places in 1983, was removed from the Register following its excavation.

Cocumscussoc, Smith's Castle (RI 375)

Richard Smith's garrison house, burned in 1675 by Narragansett warriors during King Philip's War, thought also to be the locale of Roger Williams's trading post, built about 1637. Excavations since 1989, directed by Brown University archaeologist Patricia Rubertone, have recovered artifacts from the early part of the seventeenth century but have not definitively established the site as Roger Williams's. Most of the artifacts and features date to the years after the war, when Smith rebuilt and began to develop a large farm. The area given to Williams had been used by Indian people for thousands of years as indicated by the projectile points and other lithics found during the excavations. Recovery of a brass projectile point (presumably manufactured by native people from a European kettle or sheet brass) provides material evidence of the interaction between the Narragansett and Smith and other Europeans. The site is listed on the National Register of Historic Places and in 1993 was named a National Historic Landmark.

North Providence

RI 2042

Archaeologists from Rhode Island College, working near the Wenscott Reservoir in 1981, located a small site containing stone tools and flakes. At this site people made tools from locally available quartzite and quartz, and sharpened tools (of chert and felsite) they had brought with them as they traveled along the West River. Apart from this site, most of which remains unexcavated and preserved on town property, the only other recorded archaeological find in North Providence is a stone bowl, discovered during foundation excavations on Lexington Avenue, and now cared for by the Narragansett Archaeological Society. It is likely, however, that additional sites remain in the town, especially along the West River and Woonasquatucket River, important transportation routes for people moving between Narragansett Bay and the interior uplands.

North Smithfield

RI 151

Located along a branch of the Woonasquatucket River, RI 151 was discovered by archaeologists from the Public Archaeology Laboratory in 1979. Archaeologists recovered several kinds of stone tools, including bifaces, projectile points, a hammerstone, and a scraper. A wide variety of stone types were used: quartz, quartzite, argillite, rhyolite, and felsite. One feature with a small amount of calcined bone was also located. The range of stone types and the presence of a Squibnocket triangle projectile point suggest that the site was used between 4500 and 2500 years ago. Less than one percent of the site was studied and without additional work it was difficult to determine what, other than stone tool manufacture and food preparation, occurred at the site. The site was listed on the National Register of Historic Places in 1984.

Pawtucket

Pawtucket was a major settlement area for Indian people. The falls at Main Street were a fishing area into the eighteenth century and three major Indian transportation routes—the Moshassuck, Blackstone, and Ten Mile Rivers—pass through the city. Jenks's forge, established in 1671 at the Pawtucket Falls, was burned by Indian warriors in 1675 during King Philip's War. Industrial and urban development have destroyed much of the archaeological record. Rhode Island Historical Preservation & Heritage Commission files make only cursory mention of artifacts found in two places in the city. It is possible, however, that settlement and fishing areas, especially along the rivers, may be found sealed beneath nineteenth- and twentieth-century fill deposits, or in relatively undeveloped city parks.

Portsmouth

Pine Hill Site (RI 655)

Located on Prudence Island, the Pine Hill site (about 1000-1600 AD) is a large shell midden that covers about one-half acre. A small portion of the site was excavated in 1980 by archaeologists from Brown University and the University of Massachusetts at Boston. The midden contained quartz flakes, Levanna projectile points, stone tools, pottery sherds, fire-cracked rock, and charcoal, as well as oyster, quahog, soft-shelled clams, scallops, whelk, deer, bird, fish bone, and a gun flint. Prudence Island was obtained from the Narragansett sachems in 1638 by Roger Williams and John Winthrop, Sr. The sachems agreed to allow the colonists to use the island but reserved fishing rights. The midden's contents may contain evidence concerning how this agreement between the Narragansett and the colonists was put into practice. The Pine Hill site was entered on the National Register of Historic Places in 1983.

Providence

Providence Covelands (RI 935)

The Providence train station sits on what once was the edge of a salt pond. At the head of Narragansett Bay, the pond formed between 3800 and 2700 years ago when the rising salt water met the fresh water from the Woonasquatucket and Moshassuck Rivers. The pond was filled during the eighteenth and nineteenth centuries as Providence grew. In 1983, archaeologists working for the Federal Railroad Administration, the Federal Highway Administration, and the Rhode Island Department of Transportation used heavy machinery to remove approximately six feet of urban fill covering the shore of the pond. Underneath the fill, on the north shore and on what was called Carpenter's Point, archaeologists found the tools, refuse, and cooking hearths of people who had lived around the pond from the time it had formed to the coming of English people in the seventeenth century. At the head of Narragansett Bay, trails led east to Boston and Plymouth, west to Hartford, south to Cocumscossoc and Pequot Country, and north along the Blackstone River. Here, at the Providence Covelands, these trails converged and a major Indian settlement was established around 900 AD. At the north shore and Carpenter's Point, 115 features, including garbage pits, storage pits,

Warwick

Greenwich Cove Site (RI 193)

On Greenwich Cove, a large shell midden was excavated by archaeologists from the Rhode Island Historical Preservation & Heritage Commission, Rhode Island College, and Brown University in 1979 prior to its destruction by the construction of a house. The site contained the remains of a wide variety of animal and plant remains representing, for the most part, the diet and subsistence practices of people who lived in the area between roughly 2700 and 300 to 350 years ago. Detailed analysis of the midden by David Bernstein indicated that seven species of mollusks, ten species of terrestrial mammals, two species of reptiles, five species of saltwater fish, three species of birds, and two nut species were used by people at various times during the site's history. Studies of sea level change and estuary formation show that the oldest levels of the Greenwich Cove site correspond to the time when sea levels had stabilized and the salt marsh and mud flats had formed. This new environment offered a rich abundance of terrestrial and maritime resources that, in time, enabled Indian people to establish permanent year-round settlements around the coves of Narragansett Bay.

Lambert Farm Site (RI 269)

Located along Cowesett Avenue near a small spring was a major settlement area within the larger Cowesett homeland. The site was excavated by archaeologists from Rhode Island College and the Public Archaeology Laboratory, first in 1980, most recently in 1990. The site is now a housing subdivision. A variety of artifacts and features were found. Within a shell mound were the remains of a communal ritual, presumably a feast, including the articulated remains of two dogs, pottery, local and non-local lithics (jasper and chert), mica, and a steatite (soapstone) platform pipe. Radiocarbon dates suggest that the site was used most intensively around 850 years ago. When the site was threatened by housing development, the Rhode Island Historical Preservation & Heritage Commission and the Public Archaeology Laboratory, with the cooperation of the developers Arnold Brier and George Pepe, organized an emergency excavation program. The work was performed by Alan Leveillee and Jordan Kerber, of the Public Archaeology Laboratory, and over 300 volunteers, who salvaged information from the 2.5-acre site. The Lambert Farm site was entered on the National Register of Historic Places in 1983. Although most of the site was destroyed by the housing project, the area surrounding the site, some of which is still undeveloped, presumably contains significant archaeological features and materials associated with the site.

Potowomut Neck and Meadows Archaeological District (RI 253)

Potowomut Neck (like the Lambert Farm Site, once part of the Cowesett homeland), was surveyed by archaeologists from Binghamton University in 1980 and again by Brown University in 1983 and 1984. These surveys located settlement areas, dense shell middens, tool making and sharpening sites, and a pottery-making place. The surveys found little evidence of Native American settlement and use prior to around 2000 years ago, about the time the salt marshes along the river were established. The Meadows Archaeological District, located in the south-central part of the neck, contains outstanding examples of Cowesett settlement areas and shell middens as well as the pottery manufacturing area. The Meadows Archaeological District was listed on the National Register of Historic Places in 1983.

Sweet Meadow Brook (RI 191)

A large settlement and burial area was located on the top of a sand bluff just north of West Shore Road near Apponaug Cove. The site was excavated in 1954 and 1955 by the Narragansett Archaeological Society. The society recovered numerous artifacts including stone pipes, clay pots, projectile points, and bone tools. In 1979 the area was surveyed by the Rhode Island Historical Preservation & Heritage Commission and found to have been completely destroyed by sand mining operations.

Pomham's Fort (RI 696)

In 1643 the Shawomet sachem Pomham left the Narragansett confederacy and declared his support of the Puritans at Massachusetts Bay. He asked the United Colonies to build a fort for protection against the Narragansett. Traces of this fort, presumably palisaded with earthen embankments, can still be seen on an undeveloped lot on the eastern shore of Warwick Cove. The site is recommended for listing on the National Register of Historic Places.

West Greenwich

Big River

In the upper and southern headwaters of the Pawtuxet River drainage, along the Big River and Carr River, are more than 50 well-preserved archaeological sites including large and medium-sized settlement areas, small hunting camps, and rock shelters. These sites range in age from 7000 to 500 BP; most were located by archaeologists from the Rhode Island Historical Preservation & Heritage Commission and the Public Archaeology Laboratory during survey work in advance of the proposed Big River Reservoir. These investigations were designed to locate sites and gather preliminary information about size and contents. With further study much could be learned about the lifeways of native people who used this part of the state's near-interior region.

West Warwick

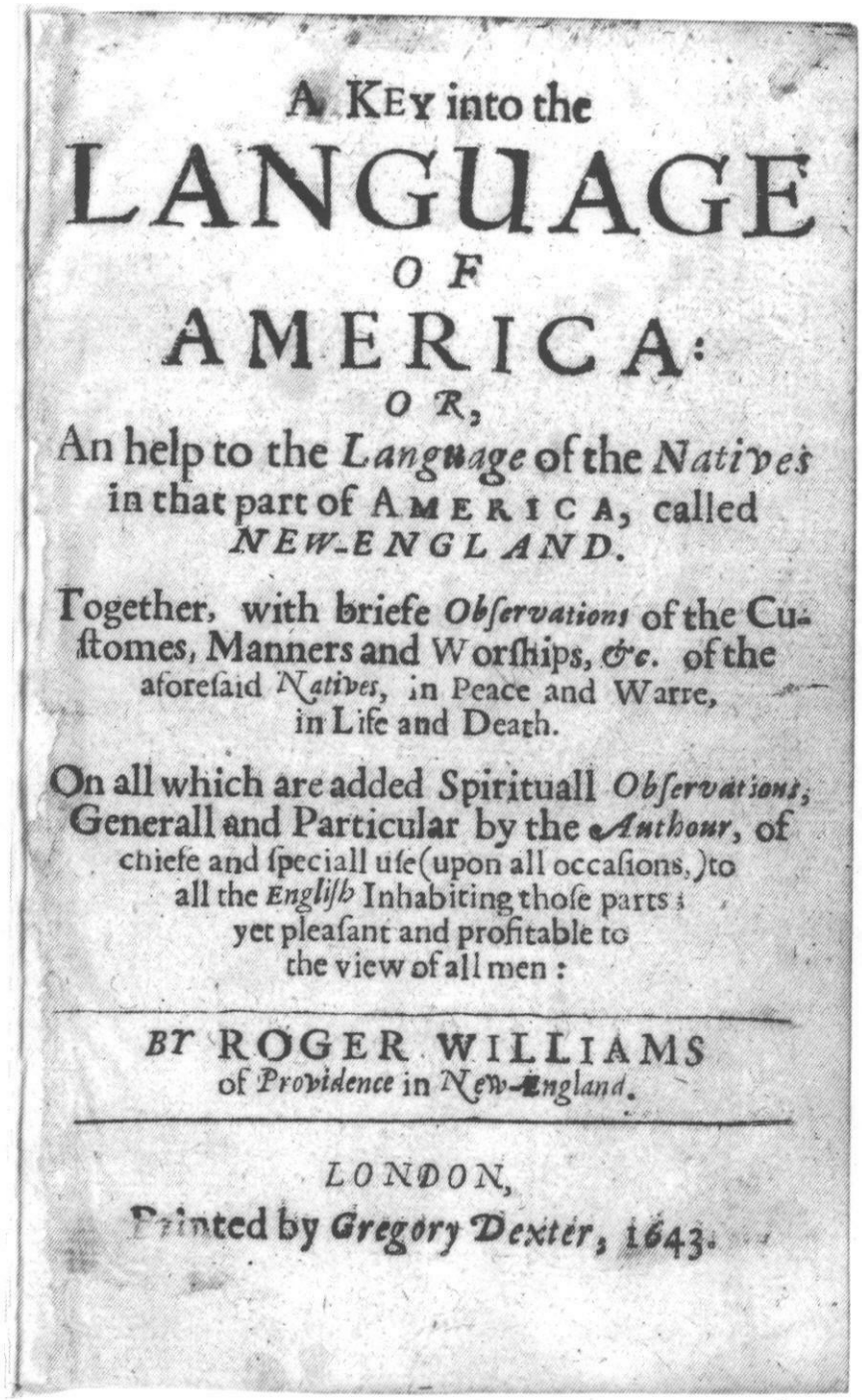
In the 1920s and 1930s avocational archaeologists Carl Congdon and the Hudson brothers collected artifacts from several places in town. A variety of projectile points indicating Indian use of the area from perhaps 7000 years ago to 1000-1500 AD were recovered. The Hudson collection is housed at Rhode Island College; the Congdon collection is at the Narragansett Indian Tribal Historic Preservation Office.

Westerly

Very few archaeological studies have taken place in Westerly, and those that have were preliminary. One survey, along Mastuxet Cove, located a variety of flaked stone, including chert, felsite, argillite, and quartizite. More work at this site, named the Grey Heron Site (RI 1132) by the Public Archaeology Laboratory, is required to determine how this area was used. A variety of projectile point types are included in collections such as a rare fluted point (about 9000 BP), and bifurcated points, thought to date to around 8000 BP. Westerly's location, at the mouth of the Pawcatuck River, and its salt ponds and wetlands suggest that many important sites are located in the town, but they have yet to be located by systematic archaeological survey.

Woonsocket

In the 1960s, Dr. Alton Thomas, an avocational archaeologist, described several locations in the city where he had found evidence of archaeological sites. In these places—Globe Park, Sylvester Pond, and Woonsocket Pond—he found flaked tools and projectile points. Other sites, generally small and presumably representing small upland-interior hunting or gathering campsites have been found by other avocational archaeologists and by archaeologists from Rhode Island College and the Rhode Island Historical Preservation & Heritage Commission. One of these (RI 215), a rock shelter located above Mendon Road, contained campfires, bone, shell, and pottery estimated to have been made around 800 AD.



A KEY into the

LANGUAGE OF AMERICA:

OR,

An help to the *Language* of the *Natives* in that part of AMERICA, called *NEW-ENGLAND.*

Together, with briefe *Obſervations* of the Cuſtomes, Manners and Worſhips, *&c.* of the aforeſaid *Natives*, in Peace and Warre, in Life and Death.

On all which are added Spirituall *Obſervations*; Generall and Particular by the *Authour*, of chiefe and ſpeciall uſe (upon all occaſions,) to all the *Engliſh* Inhabiting thoſe parts; yet pleaſant and profitable to the view of all men:

BY ROGER WILLIAMS of *Providence* in *New-England.*

LONDON,

Printed by *Gregory Dexter*, 1643.

BIBLIOGRAPHIC ESSAY

This book is based on the work of many archaeologists, historians, and other specialists in related fields. Presented here is a brief discussion of some of the more accessible sources for readers who are interested in learning more about various topics. There is also a large body of unpublished reports. Most of them are not available in public libraries. These reports have a limited circulation out of a concern for protecting the locations of archaeological sites from those who would damage them. Some of the more important reports used in this study are discussed. For the most part, however, we have listed published books and articles that are available in many public and university libraries.

GENERAL OVERVIEW

The best summary of southern New England Indian archaeology is Dena F. Dincauze's "A Capsule Prehistory of Southern New England," in *The Pequots in Southern New England*, Laurence M. Hauptman and James D. Wherry, editors, University of Oklahoma Press (1990). *The Narragansett*, by William F. Simmons, Chelsea House (1989) and *The Wampanoag*, by Laurie Weinstein, Chelsea House (1989) deal primarily with the years after European contact but contain brief overviews of earlier periods.

THE FIRST PEOPLE

For a discussion of the geology of the early post-glacial period see an essay by Denise C. Gaudreau, "The Distribution of Late Quaternary Forest Regions in the Northeast: Pollen Data, Physiography, and the Prehistoric Record," in *Holocene Ecology in Northeastern North America*, George P. Nicholas, editor, Plenum Press (1988).

The arrival of people in North America is a subject of much controversy among archaeologists as well as between Native Americans and archaeologists. An article in the October 1997 issue of *National Geographic* by Rick Gore, "The Most Ancient Americans," provides a concise account of the discussion among archaeologists. See *Native North America* by Larry J. Zimmerman, Little Brown and Company (1996) for a balanced discussion of the archaeological evidence and the belief held by many Native Americans that they did not emigrate from Asia, but rather have been here since the beginning of time. For a Native American perspective see Vine Deloria, *God is Red, A Native View of Religion*, North American Press (1992). Information from Rhode Island archaeology is presented in Alan Leveillee's *Archaeology at the Hoskins Park and South Wind Sites, North Kingstown, Rhode Island*, Educational Department Occasional Publications, Public Archaeology Laboratory, Inc., Pawtucket (1991).

Title page of the first edition of *A Key into the Language of America*, by Roger Williams. Published in London in 1643, the *Key* is an indispensable source for the study of Narragansett Indian history.

PEOPLE SETTLE IN TO STAY

A concise discussion of rising sea levels and the formation of Narragansett Bay, based on the work of Robert L. McMaster, professor of oceanography at the University of Rhode Island, is presented in "A 9,000 Year View of Narragansett Bay" in the February, 1983 issue of *Maritimes*, published by the Graduate School of Oceanography of the University of Rhode Island. For a detailed report on the village site at Lake Assawompsett see *Wampanucket: An Archaeological Report*, by Maurice Robbins, Massachusetts Archaeological Society (1980). An excellent discussion of the Indian use of soapstone at sites in Rhode Island and the northeast is presented in an essay by William A. Turnbaugh, Sarah P. Turnbaugh, and Thomas H. Keifer, "Characterization of Selected Soapstone Sources in Southern New England," in *Prehistoric Quarries and Lithic Production*, J. Ericson and B. Purdy, editors, Cambridge University Press (1984). For a discussion of the cremation burials found on Conanicut Island, see William S. Simmons, *Cauntantouwit's House: An Indian Burial Ground on the Island of Conanicut in Narragansett Bay*, Brown University Press (1970). Two unpublished reports contain information on the Joyner site: *The Joyner Site: Late Archaic-Early Woodland Adaptations and Cultural Dynamics in Conanicut Island, Rhode Island*, by Robert G. Kingsley and Billy R. Roulette, Jr., John Milner Associates (1990) and *A History Written in Stone: Six Thousand Years of Native American Land Use in the Narragansett Bay Region*, by Alan Leveillee, Public Archaeology Laboratory (1999). Both reports were prepared for the Rhode Island Department of Transportation and the Federal Highway Administration and are on file at RIDOT and the Rhode Island Historical Preservation & Heritage Commission.

SETTLEMENTS AROUND THE BAY

The intensification of food gathering and growth in population is discussed in David J. Bernstein, *Prehistoric Subsistence on the Southern New England Coast*, Academic Press (1993). Bernstein uses archaeological evidence from Greenwich Cove. See also Paul A. Robinson, "A Narragansett History from 1000 BP to the Present," in *Enduring Traditions: The Native Peoples of New England*, edited by Laurie Weinstein, Bergen & Garvey (1994). The magnificent effort of volunteers and others in excavating the Lambert Farm site before it was destroyed by development is presented in Jordan E. Kerber's *Lambert Farm: Public Archaeology and Canine Burials Along Narragansett Bay*, Harcourt Brace & Company (1997). Kerber directed the project with Alan Leveillee at the Public Archaeology Laboratory. See also Alan Leveillee, "Eastern Woodland Mortuary Practices as Reflected in Canine Burials at the Lambert Farm Site, Warwick, Rhode Island," in *Bulletin of the Massachusetts Archaeological Society*, Volume 54 (1993). One of the oldest permanent, year-round Indian villages in New England was on Block Island. The work of Kevin McBride in documenting this site is presented in an article by Carol Jaworksi, "Discovery on Block Island: 2,500-year-old Village Predates Agriculture," *Nor' easter* volume 2 (2), 32-37, (1990). The use of local lithics is discussed by Alan E. Strauss in "Narragansett Basin Argillite: Lithology, Chronology, and Prehistoric Tool Manufacture," *North American Archaeologist*, Volume 10 (1989).

Several exemplary unpublished reports inform the text of this chapter: Russell Handsman's *A Homelands Model and Interior Sites: A Phase II Archaeological Study of Rhode Island Site 2050, Phenix Avenue, Cranston, Rhode Island* (1995); E. Pierre Morenon's *Archaeological Sites at an Ecotone: Route 4 Extension, East Greenwich and North Kingstown, Rhode Island* (1986); Alan Leveillee's *Phenix Avenue Bridge Replacement, RI 2050 Locus 2: A Steatite Workshop in the Furnace Hill Archaeological District* (1999). These reports were prepared for the Rhode Island Department of Transportation and the Federal Highway Administration and are on file at the Department of Transportation and the Rhode Island Historical Preservation & Heritage Commission. Of additional interest is a report by Janice Artemel and others, *Providence Covelands Phase III Report* (1984), prepared for the Federal Railroad Administration and the Federal Highway Administration, on file at the Rhode Island Historical Preservation & Heritage Commission. A recent master's thesis by Joseph N. Waller, Jr., *Late Woodland Settlement and Subsistence along the Point Judith Pond of Southern New England*, University of Connecticut at Storrs (1998), suggests that maize agriculture had a prominent role in Indian society prior to the arrival of Europeans.

CONTACT BETWEEN NATIVE PEOPLE AND EUROPEANS

Kathleen J. Bragdon's *Native People of Southern New England, 1500-1650*, University of Oklahoma Press (1996) provides an excellent description of the social, economic, and political circumstances of contact between Europeans and Native people. Robert S. Grumet's *Historic Contact: Indian People and Colonists in Today's Northeastern United States in the Sixteenth Through Eighteenth Centuries*, University of Oklahoma Press (1995) is a comprehensive treatment of the period that includes references for much of the unpublished literature. See also Simmons (1989) and Weinstein (1989).

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Many primary accounts written by Europeans are available. For Rhode Island, the most important and informative on Indian life are the writings and letters of Roger Williams. *A Key into the Language of America*, The Roger Williams Press, (1936 [1643]) contains descriptions of many aspects of Narragansett Indian life; Williams's letters contained in Glenn W. Lafantasie's *The Correspondence of Roger Williams*, University Press of New England (1988), with Lafantasie's very fine notes on Indian matters, is indispensable.

A discussion of the wampum trade and its importance in the colonial and Indian economies is found in Paul A. Robinson, "The Wampum Trade in 17th-century Narragansett Country," in *What a Difference a Bay Makes*, Albert T. Klyberg, Margaret Shea, and Deborah B. Brennan, editors, Rhode Island Historical Society and Rhode Island Department of Library Services (1993). The Fort Island site is discussed in Kevin A. McBride, "The Source and Mother of the Fur Trade: Native-Dutch Relations in Eastern New Netherland," in Weinstein (1994).

An overview of the RI 1000 Narragansett Indian burial ground project is presented in Paul A. Robinson, Marc A. Kelley, and Patricia E. Rubertone, "Preliminary Biocultural Interpretations from a Seventeenth-Century Narragansett Indian Cemetery in Rhode Island," in William Fitzhugh, editor, *Cultures in Contact: The European Impact on Native Cultural Institutions in Eastern North America, AD 1000-1800*, Smithsonian Press (1985). More detail on specific aspects of the site is in William A. Turnbaugh, *The Material Culture of RI-1000, a Mid-17th Century Burial Site in North Kingstown*, University of Rhode Island (1984); Marc A. Kelley, "Ethnohistorical Accounts as a Method of Assessing Health, Disease, and Population Decline Among Native Americans," in Donald J. Ortner and Arthur C. Aufdeheide, editors, *Human Paleopathology: Current Syntheses and Future Options*, Smithsonian Press (1991); Patricia E. Rubertone, "Archaeology, Colonialism, and 17th-Century Native America: Towards an Alternative Interpretation," in R. Layton, editor, *Conflict in the Archaeology of Living Traditions*, Unwin Hyman (1989).

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LIFE IN AN OCCUPIED LAND

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FIGURE AND PHOTOGRAPH CREDITS

COVER Photograph by Salvatore Mancini.

TITLE PAGE Chris Bene, photographer; Rhode Island Historical Preservation and Heritage Commission

FIG 1 Charlotte Taylor, Rhode Island Historical Preservation and Heritage Commission

FIG 2 Photograph by Salvatore Mancini.

FIGS 3,4 Adapted by Charlotte Taylor, Rhode Island Historical Preservation and Heritage Commission, from Robert S. Grumet, *New Jersey Paleo-Indian Context*, Office of New Jersey Heritage and the National Park Service, 1990.

FIGS 5,8 Courtesy of Frank H. McClung Museum, The University of Tennessee. Thomas R. Whyte, artist.

FIG 6 Adapted by Charlotte Taylor and Gail Brown, Rhode Island Historical Preservation and Heritage Commission, from Janice G. Artemel, *Providence Cove Lands Phase II Report*, De Leuw Cather/ Parsons, Federal Railroad Administration, 1983.

FIG 7 Reprinted from *The New England Indians*, copyright 1978, by C. Keith Wilbur with permission from the Globe Pequot Press, Guilford, CT, 1-800-962-0973, www.globe-pequot.com

FIG 9 Adapted by Murphy and Murphy from Maurice Robbins, *Wapanucket*. Courtesy of the Massachusetts Archaeological Society.

FIG 10 Adapted by Murphy and Murphy from Robert G. Kingsley and W.R. Roulette, *The Joyner Site: Late Archaic-Early Woodland Adaptations and Cultural Dynamics on Conanicut Island, Rhode Island*. John Milner and Associates, Federal Highway Administration.

FIG 11 Charles C. Willoughby, *Antiquities of the New England Indians*, Peabody Museum of Archaeology and Ethnology, Harvard University, 1935.

FIG 12 Adapted by Murphy and Murphy from Russell J. Barber, *Sassafras Site*, National Register of Historic Places Nomination Inventory Form, 1981.

FIG 13 Courtesy of the Providence Journal Company, Bob Selby, artist.

FIG 14 Courtesy of Timelines, Inc., Elaine Chamberlain, artist.

FIG 15 Photograph by Salvatore Mancini.

FIG 16 Curtiss Hoffman, *A Handbook of Indian Artifacts from Southern New England*, 1991. William Fowler, artist. Courtesy of the Massachusetts Archaeological Society.

FIG 17 Photograph by Salvatore Mancini.

FIG 18 Photograph by Mary Lynn Rainey. Courtesy of the Public Archaeology Laboratory.

FIG 19 Rhode Island Historical Preservation and Heritage Commission.

FIG 20 Drawing by Charlotte Taylor, Rhode Island Historical Preservation and Heritage Commission.

FIG 21 Photograph by Charlotte Taylor. Courtesy of David Gregg, the Haffenreffer Museum of Anthropology, Brown University.

FIG 22 Drawing by Charlotte Taylor, Rhode Island Historical Preservation and Heritage Commission.

FIG 23 Drawing by Charlotte Taylor, Rhode Island Historical Preservation and Heritage Commission; photograph from the Rhode Island Historical Preservation and Heritage Commission slide collection.

FIG 24 Photograph by Gail Brown, Rhode Island Historical Preservation and Heritage Commission.

FIGS 25, 26 Adapted from drawings by Gail Brown, Rhode Island Historical Preservation and Heritage Commission

FIG 27 *The Entertaining History of King Philip's War...*, Boston, 1716. Courtesy of The John Carter Brown Library.

FIGS 28, 29 Photographs by Salvatore Mancini.

FIGS 30, 31 Ezra Stiles, *Extracts from the Itineraries and other Miscellanies of Ezra Stiles*, 1755-1794, pages 131,132,155, Yale University Press, 1916.

FIG 32 Courtesy of the Charlestown Historical Society

FIG 33 Chris Bene, photographer; Rhode Island Historical Preservation and Heritage Commission

FIG 34 Courtesy of the Rhode Island Historical Society, #Rhi X3 2070

FIG 35 Drawing by Gail Brown, Rhode Island Historical Preservation and Heritage Commission. Based on E.P. Morenon, *Environmental Diversity of Salt Ponds and Prehistoric Adaptation: A Comparative Study of Trustom and Potter Ponds*, Rhode Island College, 1983 and Paul A. Robinson, *Indian Use of the Salt Pond Region between 4000 B.P. and 1750 A.D.*, National Register of Historic Places Multiple Property Documentation Form, Rhode Island Historical Preservation and Heritage Commission, 1987.

FIG 36 Courtesy of the Public Archaeology Laboratory.

FIG 37 Rhode Island Historical Preservation and Heritage Commission slide collection.

FIG 38 Nina M. Versaggi, *Phase I and II Cultural Resource Management Report for the I-895 Project, Rhode Island*. The Public Archaeology Facility, Binghamton University, 1982. Wilbur Smith and Associates for the Federal Highway Administration and the Rhode Island Department of Transportation.

FIG 39 Adapted by Murphy and Murphy from Peter A. Thomas and Lauren A. Kelley, *An Archaeological View of Vermont's Past*, u.d. Divison for Historic Preservation.

FIG 40 Diagram by Paige Newby; pollen counts by Suzanne Suter. Courtesy of the Pollen Laboratory, Brown University.

FIG 41 E.P. Morenon, *Was There a Cultural Revolution 900 Years Ago*, Department of Anthropology and Geography, Rhode Island College. Courtesy of E. Pierre Morenon.

FIG 42 Rhode Island Historical Preservation and Heritage Commission slide collection.

FIG 43 Drawing by Tom Prentiss in "The Indian Neck Ossuary" by Francis P. McManamon and James W. Bradley, Scientific American, volume 256, no. 5, page 102. Courtesy of Nelson H. Prentiss.

FIG 44 Rhode Island Historical Preservation and Heritage Commission slide collection.

INVENTORY Courtesy of the Public Archaeology Laboratory

BIBLIOGRAPHIC ESSAY *A Key Into the Language of America*, London, 1643. Courtesy of The John Carter Brown Library.

Rhode Island
Historical Preservation &
Heritage Commission
The Old State House
150 Benefit Street
Providence, Rhode Island 02903
TEL 401.222.2678
FAX 401.222.2968
WEB www.rihphc.state.ri.us

The Honorable
Lincoln C. Almond
Governor

Frederick C. Williamson
Chairman and
State Historic Preservation Officer

Edward F. Sanderson
Executive Director and
Deputy State Historic Preservation Officer

Project Team

Paul Robinson
Principal Historic Preservation Specialist
(State Archaeologist)

Charlotte Taylor
Senior Historic Preservation Specialist
(Archaeologist)

Pamela Kennedy
Supervising Historic Preservation Specialist

Ann Angelone
Historic Preservation Aide

Murphy and Murphy
Design & Layout

E.A. Johnson Company
Printing