
Cape May Geographic Society

Eleventh Annual Bulletin - June 1957

ACTIVITIES OF 1956

Every Saturday morning from June 30 to September 1 inclusive trips were arranged for the purpose of studying the birds, plants, shells and marine life, and points of historic and architectural interest in the vicinity of Cape May. Places visited included the oyster beds at Pierce's Point, Bennett Bog, Higbee's Beach, the salt marshes, Lily Lake at Cape May Point, the Victorian houses in Cape, May. On Friday, August 10, a boat trip was taken to observe the birds of the inland waterways back of Stone Harbor. An innovation in the program this year was a visit to the Cape May County Historical Society Museum in Cape May Court House where the Curator, Mr. Karl Dickinson, explained the collections on exhibit. Other leaders of the nature and historic trips during the season included Mr. Robert C. Alexander, Dr. Ernest A. Choate, Mr. David G. Fables, Jr., Mr. F. Russell Lyons, Dr. Thurlow C. Nelson, Dr. Horace G. Richards.

The following series of illustrated lectures was presented on Friday evenings at the Cape May High School Auditorium:

- July 27. Charles F. Kier, Jr. "Our Heritage." Archaeological exploration of Indian sites of Southern New Jersey. An exhibit of Indian artifacts was arranged by John J. Spencer, Jr.
- August 10. Esther Heacock. "From Birds to Blossoms." Adventures with nesting birds; lapsed time motion pictures of flowers.
- August 17. Horace G. Richards. "Old Cape May." Pictures of the seashore resort in its early days. In addition some recent photographs of East and West Berlin were shown.
- August 31. Ernest A. Choate. "Birds and Other Creatures." Colored photographs of the wild life of the region.

NOTES ON THE BIRDS

We were very glad to get reports from John R. Moore and Edward G. Reimann of the shearwaters off the coast around Five Fathom Light. On July 1 last year they observed about 400 Cory's shearwaters, four greater shearwaters and two sooty shearwaters. The picture of offshore bird life, is not very clear

for any time of the year. We hope this is the first of many records for this area.

The cattle egrets have returned to Cape May for the fifth straight year. A regular migratory pattern seems to be developing. For two years they have been seen as early as the middle of March. They remain in the area till around the middle of October. The bird has been found breeding in Florida. We are looking forward to finding a nest in Cape May.

Russell Fowler found the glossy ibis breeding in our county for the second straight year. Three nests were found in the colony in which were also seen American and snowy egrets, little blues, black and yellow crowned night herons, Louisiana herons and green herons.

On Christmas of '55 Lily Lake was frozen except for a small area about 25 yards in diameter. In spite of this there, were 17 different species of water fowl in the water and on the surrounding ice. The most numerous species was the baldpate or American widgeon. There were about 150 of them.

During the last week in December of '56 there were about the same number of species. While the shoveller and wood duck of the previous year were absent, there were a couple of snow geese and one European widgeon. This widgeon was in company with our own baldpates which were again the most numerous ducks on the lake. We had been on the watch for this European cousin of our baldpate for some time. It was first noticed on December 2. A few generally appear along our coast around Point Pleasant and stay throughout the winter if it is mild. If ponds freeze over they go south and return to the same ponds in the spring before going north. This species is common in Europe. It appears in the fall not only on our coast but in the Mississippi Valley. It is quite possible that it also breeds in the northern part of our continent. The European widgeon has a reddish side to its head and a bright yellowish crown. Our bird has a wide green stripe through the eye and a white crown which gives it the name of baldpate. It has a soft mellow three-noted whistle which is pleasant and in sharp contrast to the strident cackles of the Pekin ducks which some misguided person left in Lily Lake.

Two mute swans have been placed in the Lily Lake by the Women's Civic Association of Cape May Point. These, birds, as their name implies, are silent. They are hardy and have done exceedingly well in northern New Jersey and Long Island where they have established themselves in the wild state. The mute swan is a European species which was domesticated and used in private ponds. It is larger than our native swan, the whistling

swan. As an adult, the mute swan has a reddish bill while the whistling swan has a black one. Our pair is pinioned so that they cannot fly away. It is hoped they will breed on the island in the lake.

On the morning of October 8, 1955, about 100 royal terns flew south off Cape May Point. This was most extraordinary. David Fables in his *Annotated List of New Jersey Birds* published in 1955 says that the royal tern is "a rare straggler from the south. There are seven or eight records for the past three decades." On October 6, 1956, while it was raining too hard for land birding, a group of us stayed on the porch of the Chelsea Hotel and counted the royal terns going by. There were 364--an exceptional record. They passed by in twos, threes and ones. It was evidently a morning flight. Does this happen daily? Do the birds return to spend the evening on flats to the north? Every now and then a Caspian tern was seen. We counted 16 of this species.

As David Fables points out in his book quoted above, there are several records for the breeding of the blue grosbeak in our State. This southern species is probably extending its range. We were delighted to find a male and female and their two young about the Erma airport. They were seen from August 1 to 15. It is most likely that they bred in the immediate vicinity as the young were barely able to fly when the family was first located.

The clay colored sparrow again appeared at Cape May Point. During the first week in October, two individuals were seen feeding on the grass seeds on the lawns near the lighthouse.

ERNEST A. CHOATE

FOSSIL BIRDS OF NEW JERSEY

Some of the bird watchers who study the birds of Cape May and other parts of New Jersey might be interested to know that 15 species of fossil birds have been reported from the State of New Jersey. All of these species are apparently extinct, but most are related to present day forms. The following list has been adapted from "A Check-List of the Fossil and Prehistoric Birds of North America and the West Indies" by Alexander Wetmore (*Smithsonian Misc. Coll.* Vol. 131, No. 5, 1956).

Family PHALACROCORACIDAE (Cormorants)

Graculavus pumilus Marsh PALEOCENE: Hornerstown, N. J.

Graculavus velox Marsh PALEOCENE: Hornerstown, N. J.

Family SULIDAE (Boobies and Gannets)

Moris loxostyla (Cope) MIOCENE: "New Jersey."

(=*Sula atlantica* Shufeldt)

- Family TE'DRAONIDAE (Grouse)
 Tympanuchus lulli Shufeldt ?PLEISTOCENE: Monmouth County, N.J.
- Family MELEAGRIDIDAE (Turkeys)
 Meleagris celer Marsh PLEISTOCENE: Monmouth County, N. J.
 Meleagris superba Cope. PLEISTOCENE: Monmouth County and Malapan, N. J.
- Family GRUIDAE (Cranes)
 Grus proavus Marsh. PLEISTOCENE: Monmouth County, N. J.
- Family RALLIDAE (Rails)
 Telmatornis affinis Marsh. PALEOCENE: Hornerstown, N. J.
 Telmatornis priscus Marsh. PALEOCENE: Hornerstown, N. J.
 Telmatornis rex Shufeldt. PALEOCENE: Hornerstown, N. J.
- Family DIAT/RYMIDAE (Diatrymas; very large extinct birds)
 Baronis regens Mars-h. EOCENE: Squankum, N. J.
- Family SCOLOPACIDAE. (Snipe, Woodcock, Sandpipers)
Palaeotringa littoralis Marsh. PALEOCENE: Hornerstown, N. J.
Palaeotringa vagans Marsh. PALEOCENE: Hornerstown, N. J.
Palaeotringa vetus Marsh. PALEOCENE: Arneytown, N. J.
- Family-?-
 Laornis edwardsianus :Marsh. PALEOCENE (near Birmingham, N. J.)

HORACE G. RICHARDS

BUTTERFLY BANDING

We are all familiar with the science, of bird banding which has contributed much information about the paths followed and the distances covered by the migratory birds. Every fall a group of bird banders sets up a station near Lily Lake for this purpose. Residents of Cape May and visitors in September or early October are familiar also with the fact that the brilliantly colored Mon- arch butterfly migrates south in the autumn. The science of banding has now been extended to these butterflies. Dr. Freder- ick Urquhart, Director of the zoological museum at Toronto, re- ports that he has for 19 years made a study which proves that the Monarchs do migrate. He and his staff have been "tagging" butterflies since 1938. At first he encountered much difficulty because a label attached to a Monarch's wing interfered with flight. He has now developed a system of making little holes in the butterfly's wing and folding a waterproof label over and glu- ing it to itself instead of to the wing. In 1956 some 20,000 butter- Jlies were tagged and at the end of the year 125 had been found.

Another method sometimes used elsewhere is that of "branding" the butterflies' wings with a rubber stamp.

So next fall as you watch the beautiful flame-colored butter- flies gracefully fluttering around Cape May Point and resting on the bushes as they hesitate before taking the long flight across Delaware Bay, look at them closely and see whether you can find one with a tag attached to its wing.

M.A. R.

BLACK DRUM TIME

The trees by the roadsides and in the woodland: at Cape May wear a mantle of pale green in early May like a morning mist caught among their branches. Sassafras and highbush blue-berry are in bloom; clusters of scarlet keys dangle from the red maples; lilac bushes in the dooryards of houses long deserted are heavy with blossoms; and masses of delicate white flowers cover the otherwise bare branches of beach plum bushes growing at the edge of newly-ploughed fields and among the sand dunes on the shore of the Delaware Bay.

Boat yards that have been idle during the winter are alive with activity. Boats are waiting in the sheds and beside the wharves to be overhauled; boats on the railways are being scraped and caulked and painted. In the county offices, in the stores in the villages, at the boat landings and wherever men meet there is talk of fishing-of drum fishing. A few fishermen have been rushing on the drum beds every day since the middle of April.

When prevailing southerly winds bring warm water from currents in the south Atlantic into the bay in the spring, the clams bedded deep in the mud at the bottom of the bay work their way nearer the surface and the open water to feed. Clammers call it "holing." Then the drumfish know instinctively that conditions are favorable for them to return to the beds in the lower bay to feed upon the clams and other kinds of shellfish which they crush easily with powerful jaws and hard blunt throat-teeth.

Some old-timers say the drum return to the bed just before the first full moon after the time when the flowering dogwood comes into bloom. And already the dogwood has begun *to bloom!*

Patience and perseverance are rewarded. One day a fisherman catches the first drumfish of the season and the news spreads rapidly as if by magic throughout the county. The drumfish have returned to the lower bay. The drumfish are on the drum beds again.

Soon boats of all sizes and descriptions from the small rowboats propelled by outboard motors from the dozen or more rowboat liveries on the bay shore to the larger power boats from the marinas at Cape May and Wildwood are setting out for the drum beds. Every boat carries a full complement of fishermen; and even the smallest rowboat may contain two or three of them. The boats scatter on the drum beds individually and in small groups. Some remain anchored at one "fishing hole" while others move

from place to place in search of a spot where the luck might be better.

Most fishermen fish on the flood tide. But there are some who prefer ebb tide and some who fish all day on all tides. Surf clams are the most popular bait; shedder crabs are used too. A hook baited with a whole surf clam with a piece of shedder crab fore or aft is an irresistible attraction for any drumfish-according to some fishermen.

As the drumfish feed on the beds, they frequently make a grunting or drumming sound which often can be heard distinctly by the fishermen in the boats.

Late in the day when the world is filled with the brightness and stillness of twilight, one by one, the last boats leave the drum beds to return to-the landings. At each of the rowboat liveries on the bay shore, a small crowd has congregated to watch the boats come in.

At Town Bank where the high tide reaches up to the foot of the 12-foot embankment, the boats are put on a dolly running on a railway and pulled up to the top of the steep bank by a converted gasoline automobile engine at the top of the bank. At other places where the beach is wider, the boats run up on the shore.

As a rowboat approaches the small waves along the surf line, it waits for a wave larger than the others and, with its outboard motor speeding, surges forward on the crest of the breaker by which it is carried up on the beach until its bottom scrapes the sand and it is left high and dry by the receding water. The fishermen step out, haul the boat out of reach of even the largest waves and proceed to unload their tackle.

When the fishermen are numbered among the fortunate ones who have caught drumfish, the fish are removed from the boat with the utmost deliberation so that the desired effect will not be lost on the group of spectators who have left their automobiles and crowded around them. Amid admiring glances and complimentary exclamations, the fishermen display their catch; questions are asked and answered; and there is much discussion about the ways of fish and men.

There are several reasons for the popularity of drumfishing which makes the drum season the busiest time of the year for the rowboat liveries on the shore of the bay. The drumfish come to the lower bay early in the spring when fishermen are eager to discard the fetters of winter and to be outdoors again; fishing for drum presents a challenge to fishermen because it differs from fishing for any other kind of fish; and furthermore,

there is always a special thrill experienced by a fisherman who catches a *big* fish.

Young drumfish are silvery gray in color with several broad vertical black bands down their sides. Full grown ones are generally dusky though occasionally they have considerable silver or bronze on the head and the sides. They become darker and appear nearly black after they die.

Drumfish are esteemed as a food fish. Frequently the flesh is cut into steaks which have a distinctive flavor and are considered by many people to be a delicacy. A meal or two of drumfish steak is a rewarding experience for nearly everyone-but to no one as much as to the person who caught the fish!

When white daisies and blue vetches bloom in Cape May's meadows in early June, and mountain laurel blooms in the woodlands, and swamp azaleas bloom in the swamplands, the drumfish season draws near to an end.

Except for a few fish that remain nearby all summer, the drum leave the bay and large schools of them travel to the north, the east and the southeast in the Atlantic Ocean, sometimes going 50 miles or more out to sea. Then the drum fishermen are left only with memories of their experiences and a firm resolve for the future to catch a drumfish larger than the one caught on a hand line in the lower bay in 1948 which weighed 93 pounds six ounces, or perhaps even larger than the record fish caught on the coast of Florida which weighed 146 pounds.

But as long as conditions are favorable *Pogonias cromis*, the black drum, will return to the drum beds in the Delaware Bay off Cape May County to feed on the clams every year-as these fish have done for centuries-just before the first full moon after the dogwood blooms.

ROBERT C. ALEXANDER

Black Drum Cookery

We have secured recipes for cooking black drumfish through the kindness of Miss Lois G. Hamilton, of Cape May Court House, who assures us that drumfish, when properly prepared, have a taste and texture similar to veal and are nothing less than delicious. It seems to us, however, that an important instruction is lacking which might appropriately be prefaced to her recipes: "First, catch a black drumfish !"

Pan-fried Drumfish

Cut drumfish into serving pieces (steaks). In paper bag, shake a mixture of half flour and half bread crumbs, plus salt and pepper. Shake

drumfish pieces in paper bag to coat with the mixture. Have approximately 1/4. in h fat in frying pan. When at frying temperature, put coated pieces of fish into the fat. Brown slowly on either side.

A variation of this recipe follows :

After the fish is browned on either side, add one finely chopped onion to the fish. Cover the pan and allow to ,cook slowly until fil:lh is done. The onion flavor will permeate the fish.

Drumfish Italian Style

Put the drurnfish steaks in a small amount of olive,oil ina frying pan. Brown on either side. Make no attempt to keep them there long enough to cook the fish. Put the browned steaks in a casserole. Pour Italian tomato sauce on the steaks. Sprinkle Parmesan ,cheese over the top. Bake until fish is done, approximately 35 minutes in a 3'50-degree oven.

FOSSIL MAMMALS FROM THE NEW JERSEY COAST

Some 12,000 years ago great glaciers or ice sheets covered the northern parts of North America and Europe, while similar glaciers covered the extreme latitudes of the southern hemisphere. These ice sheets affected the earth in many different ways. For one thing, they caused the sea level to fall. The normal cycle which carried the rain water to the sea by streams and rivers, and then to the clouds by evaporation, was broken since the water was locked up in the form of land ice. The fall of sea level caused in this way has been variously estimated, but a figure accepted by most geologists is in the neighborhood of 300 feet. This would have caused the shoreline of New Jersey to have been some 90 miles further east than it is today; in other words, the sites of Atlantic City and Cape May would have been 90 miles inland.

While the glaciers crossed New Jersey on a line through Belvidere, Hackettstown, Dover, Morristown, Summit, Plainfield and Perth Amboy to New York City and did not reach the southern part of the state, the climate was undoubtedly cold as far south as Cape May. Considering the cold climate and the lowered sea level, it is not unreasonable to suppose that mastadons and other mammals wandered on what is now the bottom of the ocean off the New Jersey coast.

Fossil remains of some of these animals are occasionally dredged by fishermen from the sea floor and are always a source of considerable interest to the finder.

Probably the most common of these dredged fossils are mas-todon teeth which have been obtained from the bottom of the

ocean at various places between Sandy Hook and Cape May and as much as 75 miles offshore. Occasionally teeth or other parts of a mastodon are found washed up on the beach. Recently part of a leg bone of such a mastodon was found by 10-year-old John Hirschman of Haddonfield on the beach at Holgate (south of Beach Haven).

Last summer, Preston Hawk of Rio Grande, N. J., dredged the jaw of a fossil tapir—an extinct hoofed animal whose descendants now live in Central and South America—at Five Fathom Bank, off the coast of Cape May. This animal is not of Arctic distribution and does not fit too well into our idea of a cold glacial climate. Perhaps this fossil is older and may date from a warm interglacial stage.

More suggestive of a glacial climate are several specimens of walrus dredged off the New Jersey coast during recent years. Many years ago, several skulls were found on the beach at Ocean Grove and Long Branch and dredged from the sea floor off Sandy Hook, but until recently no fossil walrus remains had been found as far south as Cape May County. In 1951, a highly mineralized tusk of a walrus was obtained by Walter Kubel, who dredged it off the South Jersey coast, the exact locality not being recorded.

In the late fall of 1956 an unusually fine skull was obtained for study through the watchfulness of Dick Proud, captain of the clam dragger "M. S. Row," and Pete Erlandsen and Bob Brown, who also captain boats from Wildwood. They contacted Bill Taylor, a Wildwood resident interested in fossils, who in turn went into the present writer. The skull was dredged from an old clam bed about 18 miles east of Wildwood. It is very well preserved and is of the same species as the present-day walrus of more northern waters (*Odobenus rosmarus*).

Of course, we do not have to have a lowering of sea level to explain the findings of fossils of a marine animal like the walrus, although the fact that these specimens occur considerably south of its present distribution fits well into our idea of a late Glacial dating. Some would say that the mastodons and other land animals whose remains are dredged from the bottom of the ocean, did not actually live where their bones are found, but rather that the bones and teeth were carried out to sea on icebergs or by currents, and thus do not indicate a lowering of sea level. However, the finding of so many such specimens on the floor of the ocean over such a wide area between New York and South Carolina strongly suggests that at least some of these animals actually lived where their fossil remains are being found today.

Most of the specimens cited above are in the collections of the Academy of Natural Sciences of Philadelphia. It is hoped that additional fossil mammal bones will be dredged from the sea floor off Cape May, or found washed up on the beach, and that these will shed further light on the life of the Pleistocene or the Great Ice Age. Among the animals whose fossil bones or teeth may be looked for are the ground sloth, one bone of which was found on the beach at Long Branch in 1883, the mammoth, sabre toothed tiger and the bison.

HORACE G. RICHARDS

Fossil Crabs Found Off Cape May

In connection with the bones and teeth of fossil mammals dredged off the New Jersey coast described above, it might be well to mention several very interesting specimens of fossil crabs dredged off Cape May. By far the best of these specimens was presented to the Academy of Natural Sciences in late 1956 by Thomas Bradshaw of Wildwood, N. J. It is a very fine specimen of a male Blue Crab (*Callinectes sapidus*) preserved in a greenish sandstone found at the bottom of the ocean. While it is impossible to determine the exact age of the fossil, it is probable that it, like the mastodon teeth, dates from the Pleistocene or Ice Age, and therefore is about 12,000 years old.

H. G. R.

AMERICAN INTERNATIONAL POLITICS IN THE 1600's

Most of us know that the early settlements of the Dutch, Swedish and English along the Delaware River and Bay were related to a good many things going on in Europe at the time. It has generally escaped our attention, however, that our forebears were also on the fringes of "international" politics among the Indians whose continent this had been for an indeterminate number of centuries.

The term "nations" to describe Indian groups is confusing. All the Indians of America are much more closely related than are the nations of Europe. The "Five Nations" who came to figure with great reality in the drama of European politics being played out on American soil were the Mohawk, Oneida, Onondaga, Cayuga and Seneca tribes. But the "nations" were

and, like the present version of NATO, not all the powers of the period were included in their remarkable experiment in multiple-group government. Perhaps it is reasonably accurate to say that in the whole area comprising the present United States there were eight major groups such as the Iroquois. In the Middle and North Atlantic States and most of the Middle West there were only two of these—the Iroquois derivatives and the Algonkin derivatives. Thus, one of the enemies of the "Five Nations" was the Algonkins.

Since the Algonkins included the Delawares or Lenni Lenapes of Cape May's history, as well as that of the whole Delaware Valley region, this means that the "Five Nations" who were friends of the English colonists rather than the French, were at the same time natural enemies of William Penn's special proteges, the Lenni Lenapes. But international relations are never simple—especially among peoples who have a long series of contacts with each other, some bad and some good. Here, along the Delaware, those relations were further complicated by a distant-cousin branch of the Iroquois: the dreadful "back country" tribes who lived along the Susquehanna, and bore its name. However unconscious of the fact the colonists may have been, they were rubbing elbows with peoples who had troubles of their own. Various royal governors including Penn were not a little aware of these complications and acted accordingly.

To go back to the general background of "Indian affairs" up to say 1600, let us use the description of the Bucks County historian, J. H. Battle, who wrote during the nineteenth century: "The tribes with which the whites first came in contact on the Delaware Bay and River were radically different from those who occupied the interior. They were mostly independent tribes of the Algonkin family living on the tributaries of the Delaware, probably a tribe every 10 or 20 miles ... The Algonkins were one of two great families of the Indian race which the earliest explorers found in possession of the Great Lakes and the St. Lawrence region on the north and the Chesapeake and Potomac on the south. The Iroquois were the other. They were the first to reach this region in the course of their migration from the west, and settled in the lake district. Subsequently the Lenni Lenape, the great head of the Algonkin family, found their way hither and fixed upon what the English were to call the Delaware River, as their national center. Of the Algonkins only three branches appear to have crossed the Alleghenies. The Iroquois extended from New York southward and divided the Algonkins with a wide swath of mountainous country. Interestingly, the Algonkins both

east and west of the mountains stayed at relatively low altitudes. The powerful Iroquois probably took the more glamorous as well as profitable piece of woodland, which produced the furs treasured as items of trade. With the land contours as they were, the Iroquois holdings also included a splendid north-south waterway

-the Susquehanna.

"For a time the two great families (Algonkin and Iroquois) lived on terms of friendly intercourse, but hostilities eventually broke out which, by means foul or fair, resulted in the humbling of the Delaware. The relations of the story differ, as told by the dominant and subject peoples. It appears however that the Algonkins were at first successful and threatened extinction of their rivals."

The strength gained by the very well organized League of the "Five Nations" undoubtedly was in part responsible for this success. It also-and this was of great import for every white settler from Burlington to Cape May-made possible the "harrying and wearing down" of the bad boy branch of the family, the Susquehannocks. Thus the "Iroquois were exercising almost unquestioned authority over the aboriginal inhabitants of the country east of the Mississippi and as conquerors of the different tribes, claimed absolute ownership of the vast territory. Until the coming of the Europeans they maintained their supremacy by a polity not unlike that of the Romans. Warlike tribes were divided and kept employed in further conquests or in reducing the refractory nations, while all were placed under close surveillance and some kind of tribute." The most numerous of all the tribes in the army of allies, according to Conrad Weiser, their contemporary and student of their affairs, was a group from north of Lake Huron, who fitted well into the Roman scheme of using barbarians as shock troops. These were known even to the tribes of the reigning Five by a term which in translation means "The Wild People." They were described among the Iroquois as "those who do not sow but journey from place to place."

Then having hit upon classic methods of warfare and empire, another advantage was placed in the hands of the Iroquois. About the middle of the seventeenth century they acquired, in quite friendly trade with the Dutch, a new weapon in the shape of guns. In rapid succession they broke up rival aggregations, including the Hurons in 1647, and the Eries in 1653, parts of these being transported to live, as displaced persons, among the Iroquois. The more scattered Algonkins-our Lenni Lenapes-withstood longer, and retained considerable integrity as a group, because of an unplanned advantage: the advanced tribes of the

lake regions lived in large palisaded towns, and were disposed of rdmmost en masse. The Lenni Lenapes, "scattered along with a settlement almost all along the river to Cape May, every 10 or 20 miles," could not be handled so easily.

The whole situation to which the English fell heir in this vicinity is described by Woodrow Wilson (*History of the American People*, 1900) : "In 1675, six years before Mr. Penn got his charter, the formidable Susquehannocks¹¹ once masters on the Delaware, had turned their faces to the south, beaten and in retreat before the implacable hatred of their kinsmen of the Five Nations at the north, and had gone to harry the borders of Maryland and Virginia. There were now none but Algonkins to be dealt with in Mr. Penn's province, men who paid their tribute right promptly to the masterful Iroquois. who had driven the Susquehannocks out, accepted them as masters, and dared not lift a hand against the English, whom the Iroquois received and fought for as friends and allies."

In recalling the nearly (not quite) bloodless reign of the "Delawares" in the Cape May vicinity, we may well hear the echoes of melodramatic tugs of war which went on almost within earshot. The South Jersey cape was on the farthest outskirts of the fray. Surprisingly to us, whose frontier was for over two centuries to the west, this cape was in a sense a frontier. The extremity of New Jersey was, in this role, one of those outposts where the crowded ways of life-even as today-did not cross very noticeably.

But the "shore" was nevertheless very much on the map of the Lenape's awareness. The records of shell heaps tell a side of Lenape life much more within our experience: of seasonal trips "to the shore" from many miles inland, down the network of Delaware tributaries, and return trips laden with "oysters, clams, scallops, mussels, lobsters and crabs" (Alanson Skinner). Great piles of these shells at appropriate intervals inland, mark the stops for feasting on homeward-bound trips-with delicacies more likely to be good today than tomorrow, during at least half of the year. And one does not doubt that, with some of the spell of sand, sea and sun, some of the coastal Algonkins may have had the fleeting thought that the Iroquois in their mountain fastnesses were, after all, missing something.

MILDRED D. HIERS

SOME NOTES ON WAMPUM

"Indian shell piles" are to be seen at intervals all along our coast line. While they indicate an aboriginal taste for shell fish, they are also the monuments of a primitive industry that played a vital part in the early development of our country. Certain shells, notably the hard shell clam or quahog (*Venus mercenaria*) and the channelled pear conch (*Busy con canaliculatum*) were the raw materials from which the natives made their white and black beads, known as wampum. White beads were made from the inner column of the conch, and dark ones (with a value double that of the white) came from the dark purple edge of the hard shell clam. They were laboriously pierced and ground to a cylindrical shape with crude implements, then strung on sinew or made into belts to be worn or used ceremonially.

When the first Europeans landed in America, they learned to their dismay that the gold and silver money they had brought with them had little value in dealing with the natives. This was a serious matter, as food was scarce, and the winters were severe. However, the Indians did prize wampum, and were happy to exchange food and pelts for it. It became legal tender and made possible the establishment of the fur trade which in turn opened up the far reaches of the country for colonization.

There was a limited amount of wampum in circulation and, because of the time and labor involved in making it, its value remained at the standard established. Then Yankee ingenuity, armed with grindstones and metal awls entered the picture. Farm families, especially in slack seasons, gathered the shells and began turning out "money." There is a record that around the middle of the eighteenth-century Jacob Spicer of Cape May advertised to barter goods for all kinds of produce and commodities, and particularly for wampum, offering five dollars reward to the person making the largest amount of it. The account goes on: "He succeeded in procuring a quantity of the wampum, and before sending it off to Albany and a market, weighed a shot bag full of silver coin and the same shot bag full of wampum, and found the latter most valuable by ten per cent."

Possession of tools by the Europeans whereby they could turn out the wampum in quantity had two results. The Indian, realizing his mechanical disadvantage, and not recognizing the virtue of labor anyway, gave up the struggle and became a customer for, instead of a producer of wampum. Next, with the

great increase in production its value depreciated until finally it was no longer acceptable as currency among the whites, although it was still used in bartering with the natives.

As the Indians were pushed westward, John Jacob Astor and other fur traders became the middlemen in the business, advancing into the wilderness, buying furs with wampum, and selling them for cash. By the middle of the nineteenth century the Campbell Brothers of Park Ridge, N. J., had established a factory and practically monopolized the market. They devised two ingenious machines, each of which would drill six shells at a time, introducing mass production. As the country became settled the demand for wampum declined until the only customers were a few western tribes whose purchases were for ceremonial purposes. Finally in the last year of the last century the last piece of wampum was turned out. The doors of the factory were closed, and the business was given back to the Indians.

WILLIAM J. BAILEY

INDIAN JOURNEY

The Indian left the Jersey shore,
Coming back again no more.
White man stole his land away,
So brave man went away to stay.

Squaw, with papoose, went along,
Tied *upon* her back so strong.
Tomahawks and arrows too
Were stowed away in birch canoe.

They wandered up the Delaware Bay To
find a place where they could stay.
Beneath a tree, beside a stream
They found the answer to their dream.

They met a man so kind and good,
Who taught them all the things he could.
He smoked a pipe and said a prayer
And treated them with gentle care.

And so true many Indian stories
Are full of pain, but full of glories.
Brave and white man now are friends,
And so my little story ends.

A.G. R.

ANNUAL BUSINESS MEETING

The annual business meeting was held immediately after the concluding program of the season, on Friday, August 31, 1956. Reports on activities of the past season and the finances of the Society were presented. Officers to serve for the two-year period, 1956-1958, were elected as listed below. Resolutions were adopted in appreciation of the services of the retiring President, Mr. F. Russell Lyons, and the retiring Secretary, Mrs. J. Sidney Mather.

FINANCIAL REPORT

September 2, 1955 - August 31, 1956

RECEIPTS	DISBURSEMENTS
Cash on hand, Sept. 2, 1955 \$454.28	Annual Bulletin _____ \$184.65
Dues _____ 331.00	Lectures _____ 100.00
Sale of books, etc. _____ 60.75	Hall expenses _____ 10.00
Lectures, boat trip _____ 76.00	Supplies, postage, etc. ___ 53.65
922.03	348.80
Balance, August 31, 1956 _ 573.73	

OFFICERS

President, Mr. William J. Bailey
 Vice-president, Dr. George A. Clark

Treasurer, Mrs. G. Norman Acker
 Secretary, Mrs. Harry W. Bell

COMMITTEES

Advisory

Dr. Horace G. Richards
 Mrs. Glen Sefton Hiers
 Mrs. Thomas Shea

Auditing

Mr. Joseph Irish
 Mrs. Joseph Irish
 Mrs. Samuel M. Schellenger

Bennett Bog

Mr. Robert C. Alexander
 Dr. Ernest A. Choate

Lecture

Dr. George A. Clark
 Dr. Ernest A. Choate
 Dr. Horace G. Richards

Membership

Mrs. J. Sidney Mather
 Miss Sarah A. Thomas
 Miss Mabel Warner

Nature Walks

Mr. Joseph A. Cuza

Publications

Miss Marie A. Richards, Editor
 Mr. Robert C. Alexander
 Mrs. William J. Bailey

Publicity

Miss Evelyn Dutton

*Membership in the Cape May Geographic Society includes
subscription to the Bulletin. Annual dues one dollar.*

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