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our vanishing shoreline

THE SHORELINE

THE SURVEY

THE AREAS



A REPORT
BY THE
UNITED STATES
DEPARTMENT OF THE
INTERIOR
NATIONAL PARK SERVICE

ON MICROFILM

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A REPORT ON

our vanishing shoreline

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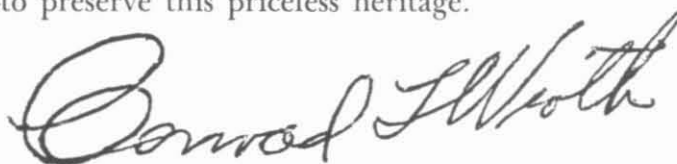


Foreword

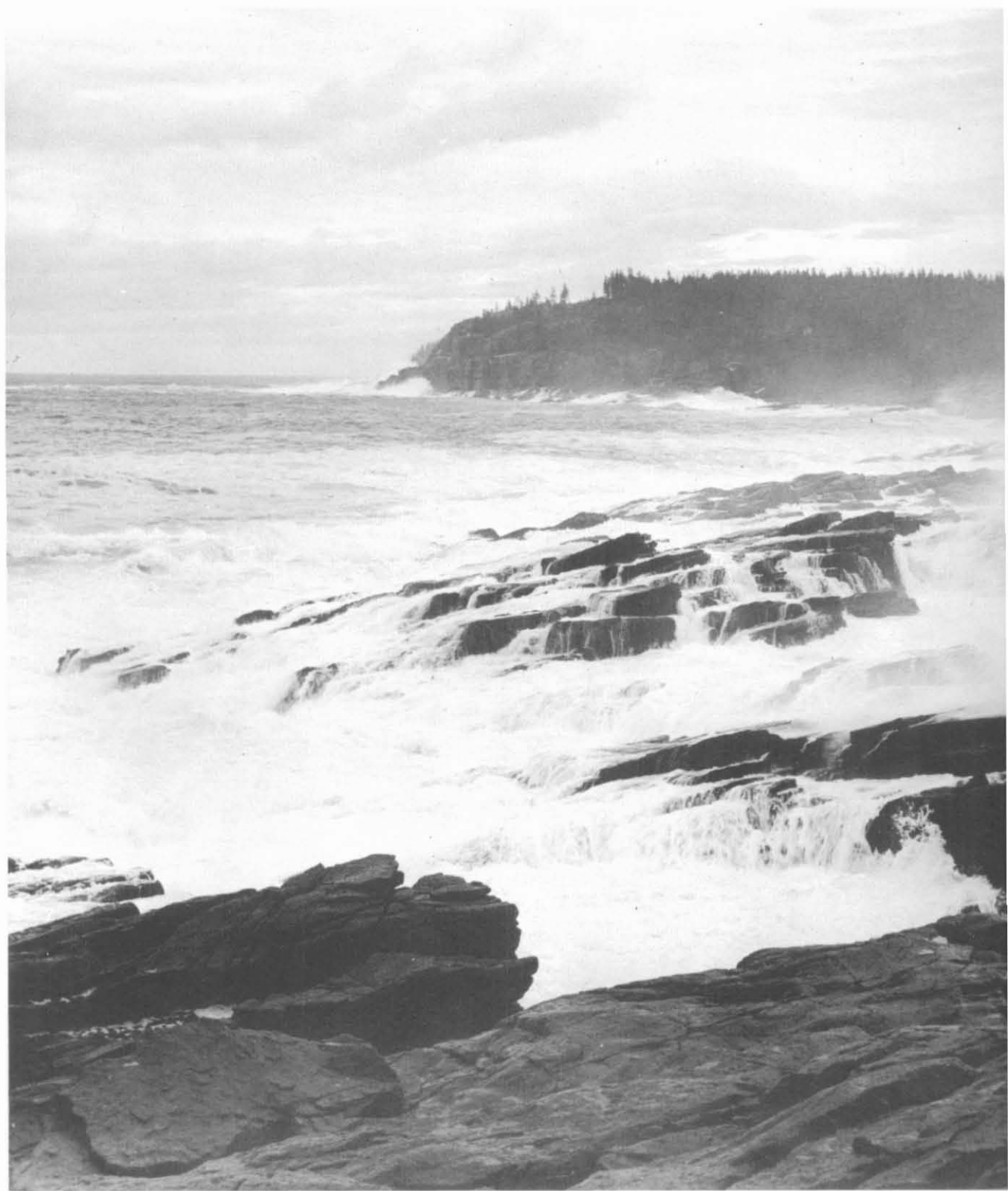
One of our greatest recreation resources—the seashore—is rapidly vanishing from public use. Nearly everyone seems to know this fact, but few do anything to halt the trend.

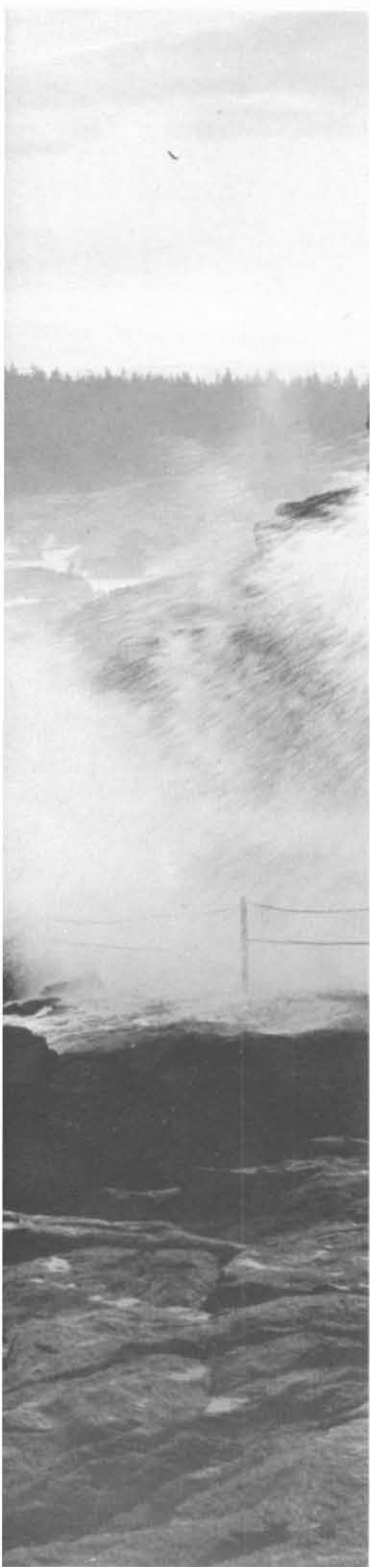
In 1954 a friend of the National Park Service provided funds to take the first step—a survey of the Atlantic and Gulf coastline. This booklet is the story of that survey and an accounting of what is left of desirable seashore that may be saved for public enjoyment.

The facts uncovered by the survey are alarming. However, the purpose of this booklet is not to alarm, but to inform. It will have served its purpose well if public-minded citizens and local, State, and Federal governments are stirred to take necessary steps—before it is too late—to preserve this priceless heritage.



CONRAD L. WIRTH, *Director*
National Park Service





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the seashore





seashore fever

"Private Property"

"No Trespassing"

"Subdivision: Lots for Sale"

These are the signs of the times today along America's eastern coast.

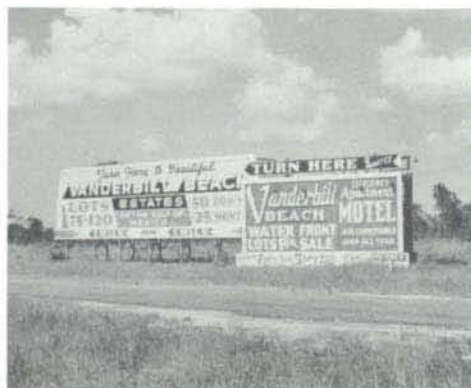
Travel where you will along the shore, from Canada to Mexico, and these are the signs you will see mushrooming in countless numbers.

Signs like these are storm warnings. They mean just one thing: Almost every attractive seashore area on our Atlantic and

Gulf coasts has been pre-empted for commercial or private development. Only a fraction of our long seacoast is left for public use, and much of this small portion is rapidly disappearing before our eyes.

A generation or two ago, only the most farsighted of men could have guessed that this problem would so suddenly confront the Nation. Vast stretches of unspoiled and undeveloped beach then lined our coast, within easy reach of even the largest coastal cities.

Fifty years ago, for example, a boy could go five miles from the populous city of Boston, spend the day combing the beach or digging mud clams in the estuaries, and





seldom see another human being within shouting distance.

On the unforgettable crescent of gleaming white sand that stretched from Winthrop to Nahant one passed only a few venturesome cottages before finding himself alone with the sea. Old Orchard Beach, below Portland, boasted a little summer hamlet near the railroad station, but at its reaches was an expanse of wilderness. Virginia Beach was much the same.

Even around New York City, greatest center of population of the country, if a man did not like the hurly-burly of Coney Island he could have his fill of wilderness communion by exerting himself a bit. Miles of the sand-spit front of Long Island were his for the asking.

Fashionable interest in the seashore was dotting the coastline with colonies of "summer folks," but these were mere specks on a far-flung seascape. It seemed then incredible that there would ever be starvation where all one could see was inexhaustible riches.



Along the 3,700 miles of shoreline stretching from Canada to Mexico are treasured scenes of charm and beauty like these which show a sheltered cove at Block Island, R. I., surf, sand and pines of Florida's Gulf Coast and the undisturbed shoreline of Everglades National Park.





As late as 1935—just two decades ago—the National Park Service made a survey of the Atlantic and Gulf coasts and found plenty of unspoiled seashore areas suitable for public recreation. It recommended that 12 major strips, with 437 miles of beach, be preserved as national areas. These were superb tracts. There were plenty of others, only a little less desirable, suitable for State and other reserves.

Only one of the 12 was actually acquired as a national seashore. All the others, save

one, have long since gone into private and commercial developments.

The real boom that has created such a problem for those interested in seashore conservation began after World War II. It is in part a product of postwar prosperity, and its spectacular acceleration in only a decade is nothing short of a business phenomenon.

The market for seashore property has become so active that inaccessibility is no longer a bar. Isolated islands are being sub-





divided, roads and streets constructed and buyers found while the islands are still accessible only by boat. Most of the 5,000 lots in one large island development 150 miles from the nearest population center have been sold

at constantly increasing prices although all attempts to secure a bridge have failed.

Under such pressure, beachfront holdings respond to the inevitable law of supply and demand. The supply of such land is fast dwindling; the number of persons seeking to acquire property is skyrocketing—and so is the price.

◀ Fabulous Miami Beach, Florida, where all was solitude and wilderness less than half a century ago.

The march of progress and people's hunger for a cottage by the sea rapidly consumes the gleaming stretches of unoccupied beach that seemed almost inexhaustible only a few decades ago.





The seashore has become Big Business. Longer vacations, higher wages, and better roads make seashore trips possible for millions today.

An undeveloped area 30 miles long recommended as a national seashore in 1935 could have been purchased then for \$260,000, about \$9,000 a mile. Today only nine miles remain undeveloped, and they would bring \$110,000 a mile—an increase of 1100 percent in 20 years.

It would be difficult today to purchase an attractive 100-foot lot fronting on the

ocean for less than \$3,500, and most sites would range far higher.

The seashore has become Big Business. Extensive and costly developments now line mile after mile of shore which before World War II was uninhabited. The big resort centers are steadily expanding their capacity to meet demands, and smaller resorts are mushrooming throughout the length of the coast. Plans on drawing boards call for large-scale centers to occupy remote beaches as yet undisturbed by the blade of a bulldozer.

More and more people are getting the seashore habit. Many who were once satisfied with an occasional visit to the beach now want to build a cottage and stay there all summer—perhaps all year.

The Army, Navy, and Air Force are acquiring coastal land for military purposes. Mineral resources of the seashore attract oil wells and mining operations. With each acquisition, the amount of available beach for all other purposes is reduced.

Is it difficult to predict what the consequences of these changes will be to the future of the seashore?

Many types of developments, including oil wells and mining operations, take long stretches of beach from recreation use.

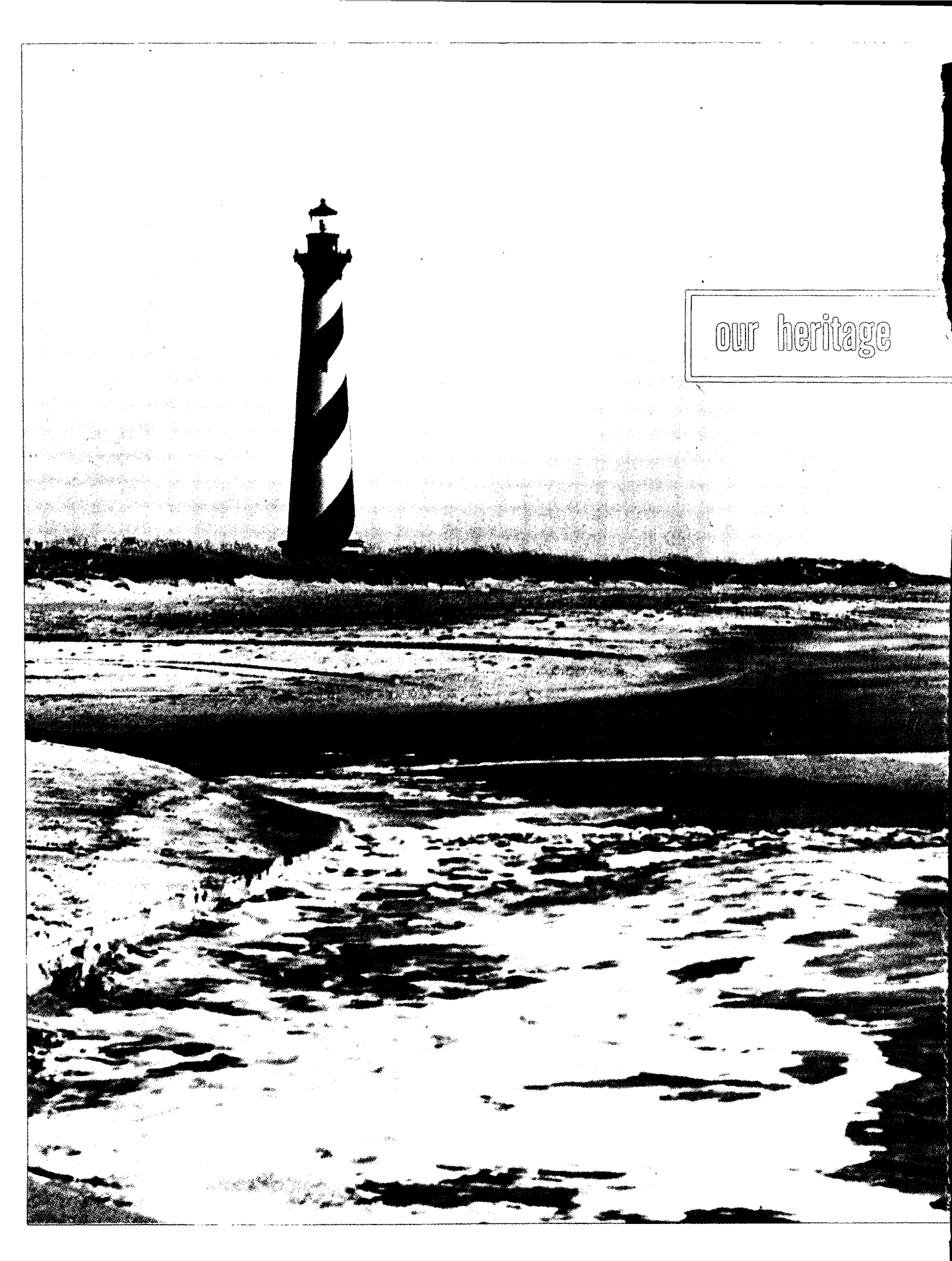




Man-made attractions add to the age-old lure of the sea itself.



Comparatively few scattered resort areas, like this one at Virginia Beach, formerly met ocean vacation demands of a less populous and less prosperous Nation.

A black and white photograph of a lighthouse on a beach. The lighthouse is tall and cylindrical with dark and light diagonal stripes. It stands on a grassy dune. In the foreground, there is a sandy beach with waves breaking onto it. The sky is bright and overexposed.

our heritage



a people's heritage is threatened

Why should anyone be concerned about this problem?

Why do conservationists express alarm that the undeveloped and unspoiled seashore is rapidly disappearing?

The answer is simple.

The seashore is a priceless scenic and scientific resource for which there is no sub-

stitute. Once subdivided and developed it is lost forever.

It is entitled to better treatment as a part of the natural heritage of the Nation.

Preservation of a suitable part of this resource, for use of all the people, involves a broad range of problems extending from erosion control and recreation to the protection of biological and historical values.

◀ Cape Hatteras, N. C.—As the lighthouse guards the coast, so must the American people take prompt action to guard their priceless heritage of seashore before what little remains is lost to public use.

Take a brief look at some of these problems:



CONSERVATION

The seashore lives in precarious and delicate balance at all times, constantly vulnerable to the action of wind and tide. Under normal circumstances the sand dunes—familiar symbol of the shore—remain stabilized by a strategic cover of sea-oat or beach grass. Even after the battering of mountainous waves and hurricane winds, the coastal plain adjusts itself to new conditions.

Not so when man intrudes. When he alters the delicate balance at any point he can never be quite sure of the result.

Some developers are unfamiliar or unconcerned with the need for retaining natural barriers to storms and currents. They cut into the dunes and destroy the vegetation

in order to build closer to the water. The consequences may be spectacular cases of erosion, heavy property damage, and permanent loss of precious seashore.

All too often the damage is not confined to the despoiled area. Sand dunes, once released from the restraining grasp of vegetation, are implacable rovers. They have been known to move great distances, smothering trees and buildings and burying valuable farm land.

No one expects that all beach development should cease because of the threat of erosion. But the conservation-minded citizen believes that there should be reserved a fair number of spots where the equilibrium is left undisturbed, or is affected as little as possible.

Nature, undisturbed, is an excellent conservationist. Strategically she covers the vulnerable sands with confining vegetation.





Sparse as they may seem, these wisps of grass and bush fight a successful war against wind and wave.



Ceaseless pounding of the sea assaults the shoreline just as it batters this old fort. Conservationists know that indiscriminate development of seashore may bring costly losses.

Ocean storms shaped these live oaks. Unrestrained dunes, pushed by the same winds, would travel for miles, burying farm land and buildings.





Protected by law, Florida Key deer feed unafraid. More areas are needed to extend such protection.

WILDLIFE PRESERVATION

When Old World man first came to America, five clearly distinguished plant-animal communities lived along our seashores. Each was characterized by its own forms of life . . .

. . . the *marine* community by the seaweeds—red and brown algae—the whales, the dolphins, 200 species of fish . . .

. . . the *salt marsh* community by cordgrass and seaside goldenrod, redwing blackbirds and migratory waterfowl, muskrats and fiddler crabs . . .

. . . the *sand dune* community by sea-oat and beach grass, sand crabs and tiger beetles . . .

. . . the *shrub* community by bayberry and beach plum to the north and wax myrtle and yaupon to the south . . .

Scientists urge additional wildlife sanctuaries along the shore, like this North Carolina refuge abounding in royal terns.



Far too few examples of natural plant-animal communities remain undisturbed along the coast. Even these few are rapidly disappearing.

... the *forest* community by evergreens and oaks, and by an abundance of mammals and birds and insects and reptiles.

Each of the hundreds of organisms in these communities played its role in the drama of life. A harmonious, cooperative balance resulted—the balance of nature.

Since Europeans came on the scene, this native life has been sharply disturbed, often destroyed, and the balance of nature upset.

The few remaining examples of natural plant-animal communities along the seacoast should be zealously preserved and protected from further modification. Biologists should have an opportunity to study these types of communities, that occur nowhere except along the seashore. Who can say that at some future time such studies might not result in discoveries of great benefit to the human race?

Nature is a very efficient conservationist, if left alone. Even at this late hour we can save some of our native seacoast life if areas can be given permanent protection.



Each creature fits an interdependent role in the balance of nature. When the balance is disturbed, native life suffers. This egret is fishing in the surf.



Myriads of holidayers swarm over commercial and publicly-operated beaches. Already inadequate, these beaches face intolerable overcrowding unless added recreation areas are provided.

RECREATION

A holiday weekend in summer finds the Long Island parkways massed with traffic moving toward Jones Beach State Park, Coney Island, or Rockaway Park. Similar endless lines of cars stretch along U. S. 1 in Connecticut, Rhode Island, New Hampshire, and Maine; along U. S. 6 on Cape Cod; and roads to the shore in every other coastal State.

The enchantment of the sea lures new millions every year. This rush to the seashore is constantly abetted by higher incomes and shorter working hours. Ever-improving road systems steadily bring additional areas and populations within commuting range of the shore.

Present facilities are already inadequate and will be smothered by increased attendance unless additional recreation areas are provided.

Proof? The evidence is spectacular. In 1934 only 5,000,000 persons visited New York State Park beaches. Just 20 years later, in 1954, attendance had vaulted to 61,000,000.

And rapidly increasing population promises anything but relief. Today we number 165,000,000. Within 20 more years, says the Census Bureau, we will number 200,000,000—six persons for every five living now. And by the year 2,000 we will have reached the fantastic total of 300,000,000. Our population will have doubled in less than a lifetime.

Only a program of tremendous vision and bold execution will save all recreation facilities from being buried under the avalanche.

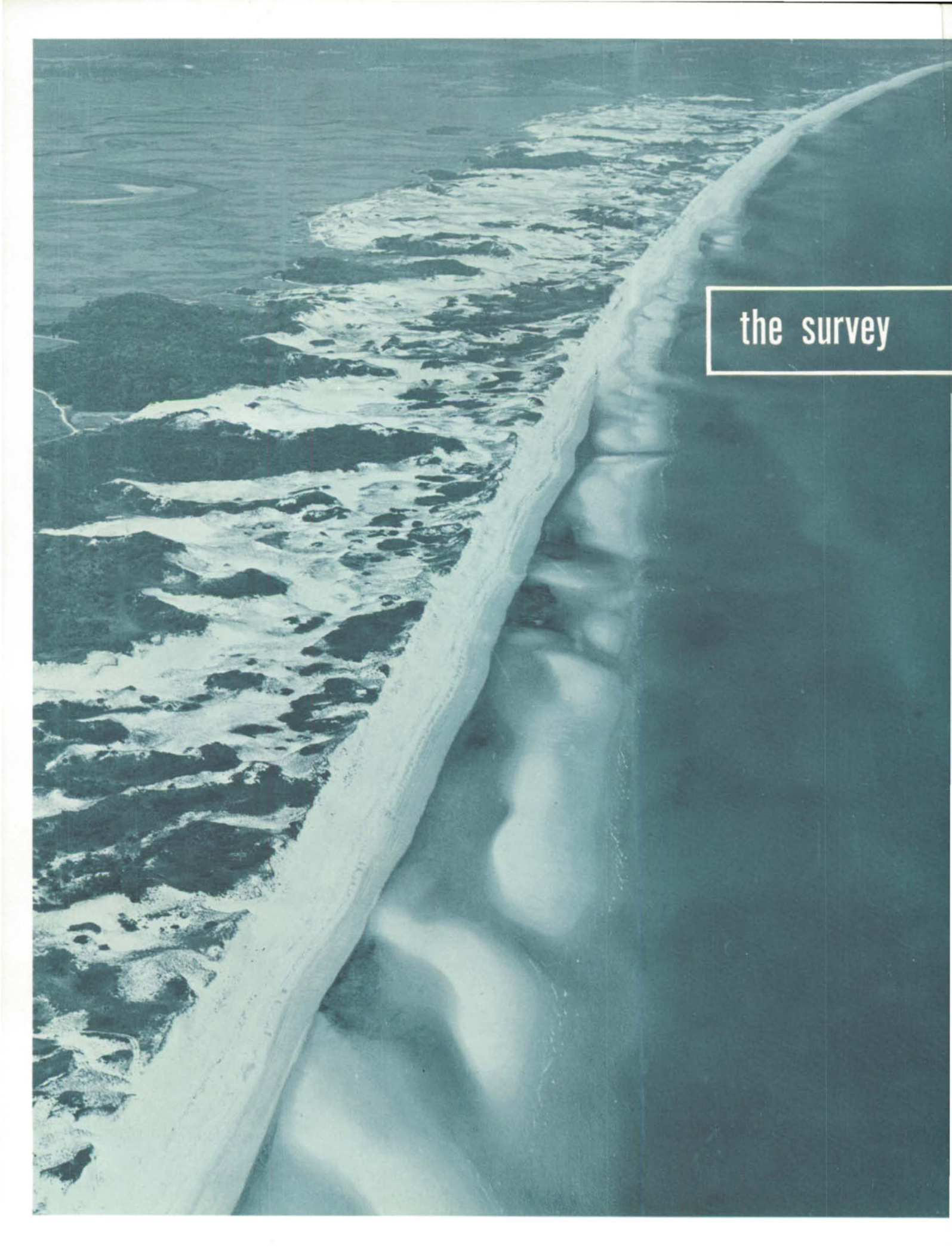
Local governments sometimes express fear that they will lose revenues when beach property is acquired for public use and removed from tax rolls. However, experience shows that money spent by visitors to public recreation areas results in much greater return to the community than would be received from private development of the same land.

Consider, for example, what happens to a mile of seashore when converted into 100-foot building lots. Recreation—and tax revenue—are limited to 50 families.

But when that mile of seashore becomes a public beach, it meets recreational needs and lures the spending power of perhaps 5,000 persons.

Rapidly expanding population and ever-increasing popularity of shore life bring new multitudes to the water each year. As an example, New York public beaches served 5,000,000 people in 1934, and 61,000,000 in 1954.



An aerial photograph of a coastal landscape. A prominent, light-colored sand dune runs diagonally from the bottom left towards the top right. To the left of the dune is a dark, vegetated area. To the right is the ocean, with white-capped waves breaking against the shore. The overall color palette is muted, with greens, browns, and blues.

the survey



how the survey was run

Nearly 3,700 miles of general shoreline* stretch along the Atlantic and Gulf coasts, from Calais, Maine, to Brownsville, Texas.

How much of this area has already been developed or spoiled?

How much is left, and how much is suitable for public use?

That's what the National Park Service set out to learn in 1954 when a generous donor provided funds for a seashore recreation area survey of this far-flung coastal strip.

It was obvious that time and resources would permit only a reconnaissance. But within that limit the study was thorough. It covered the entire 3,700 miles of general shoreline, including all the 18 States with Atlantic or Gulf frontage.

As we have noted, there was a 20-year old report available for comparison. For the

most part it represented the ghosts of departed opportunities, yet it did serve as a valuable reference point.

From the outset the survey party had generous assistance from other organizations: transportation from the U. S. Coast Guard and advice and help from directors of State parks, universities, museums, libraries, historical societies, the U. S. Fish and Wildlife Service, and various other Federal and State agencies.

Generous assistance from the U. S. Coast Guard enabled the National Park Service to inspect many off-shore islands during the survey.



* Various methods are used for measuring coastline. "General shoreline," as defined by the U. S. Coast and Geodetic Survey, means the general outline of the seacoast including bays and harbors to a point where they narrow to a width of 30 minutes of latitude. For the purpose of this report, however, the important Connecticut coastal area has been included as part of the general shoreline, although Long Island Sound actually narrows to a point where it would be excluded under the above definition.



From surface craft, helicopter and amphibious plane, the survey party examined the entire Atlantic and Gulf coasts, spotting and photographing the scattered areas remaining undeveloped.

The survey staff, including among others a biologist, a historian, and two landscape architects, first examined the entire coast from helicopter and amphibious plane. They made aerial photographs and spotted undeveloped areas on U. S. Coast and Geodetic Survey charts.

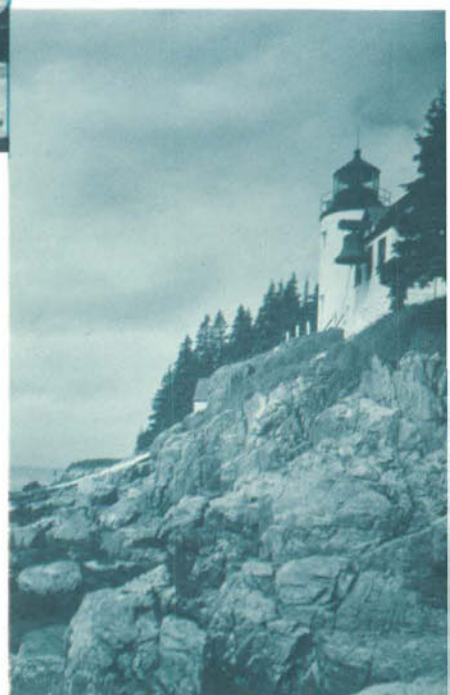
Then followed ground reconnaissance, by power wagon, jeep, and patrol boat, of 126 areas spotted on the maps.

In considering the many spots visited, the survey party worked from this checklist of points of desirability: location, area, access, regional population, beach condition, fishing, vegetative cover, biological values, dunes, insect problem (such as mosquitoes), historical and archeological values, and difficulty of acquisition.





With patrol boat, power wagon, and jeep, the survey party carried out ground reconnaissance of the areas spotted from the air. It found 54 areas suitable for public recreation use and still undeveloped. These include 640 miles of beach, or about 17 percent of the total shoreline.



From Maine's rockbound coast to Florida's sands and to the long stretches of Texas on the Gulf, 18 of our States maintain footholds on the sea. Only 6½ percent, or 240 miles, of this 3,700-mile shoreline is owned by the people as a whole. The National Park Service recommends public ownership of at least 15 per cent for recreation, conservation, and wildlife.

A full-page photograph of a person fishing in the ocean. The person is silhouetted against the bright water and sky, standing in shallow waves and holding a long fishing rod. The sky is filled with large, textured clouds, and the sun reflects off the water's surface. The overall tone is serene and atmospheric.

the results



what the survey found out

Foreboding is the only word that adequately describes the situation so clearly pictured by the survey.

In summary, the findings show that almost every attractive seashore area from Maine to Mexico that is accessible by road has been developed, has been acquired for development purposes, or is being considered for its development possibilities.

The few accessible and undeveloped beach sites left are scattered sparsely along the coast. They are small—and they are going fast. Inaccessible beach sites, including offshore islands, are almost the only hope for preservation today. Even many of these are being purchased by real estate interests for subdivision purposes.

A few statistics sharpen up the picture:

1. Of the 3,700 miles of general shoreline constituting the Atlantic and Gulf coasts, only 6½ percent, or 240 miles, are in Federal and State ownership for public recreation uses.

2. Within these 240 miles are 39 areas in 14 States: two national parks, one national

seashore recreation area, and 36 State seashores. In addition there are eight national wildlife refuges, plus a few small keys and islands, with ocean beaches that are not primarily used for public recreation. A few counties and municipalities own and operate public beaches.

3. More than half of the 240 miles is contained in the Cape Hatteras National Seashore Recreational Area (North Carolina) and in Acadia and Everglades National Parks (Maine and Florida). Neither of the national parks contains much beach frontage suitable for seashore recreation.

4. The seashore survey identified and reported on 126 undeveloped areas. Of this total 72 were eliminated from present consideration because they lack recreation potentialities or are unavailable for public use.

5. The remaining 54 areas are believed to be of interest to local, State, or Federal agencies as possible public seashores. These 54 areas, containing about 640 miles of beach and comprising 17 percent of the shoreline of the Atlantic and Gulf coasts, constitute the major remaining opportunities for conservation of seashore resources. (Happily, States



are already negotiating for portions of eight of the 54 areas.)

6. There is a striking parallel between this recreation survey and the two-year inventory of the wetlands of the United States conducted by the Fish and Wildlife Service. Of the 54 most desirable areas listed by the recreation survey, all but six had been rated in the wetlands inventory as possessing high or moderate value for birdlife.

7. Of the 54 areas most suitable for public seashore recreation, six of the areas and one-third of the total beach mileage are in Texas.

8. Within the most densely populated section of the seashore, between Massachusetts and Delaware, lie 18 undeveloped areas containing 118 miles of coastline. The extreme importance of acquiring additional seashore in this region is vividly emphasized by the conclusion of the recent Yale University City Planning Survey: that the entire 600-mile area of the eastern seaboard from Portland, Maine to Norfolk, Virginia, can be designated as a single, linear city containing one-fifth of the Nation's population.

9. The 54 undeveloped stretches of seashore selected by the survey range in size from one mile long to 100 miles. Some are located within three hours driving time of our greatest population centers. All are within one-day travel distance of hundreds of thousands of people.

10. At least two and possibly five of the areas may be of significance to all the people

Black areas on these maps (and on pages 30-31) show the 16 choicest areas still available for public recreation. Many other fine areas that were available 20 years ago have long since gone into private hands.



of our Nation for seashore recreation. Five of the areas are of considerable historical importance, and four more may be of national significance for wildlife conservation purposes.

Within this small booklet it would not be possible to review the details of all the shoreline locations found by the survey to be desirable for public use. Several areas, however, are specially suitable; a brief picture of three of these will add flesh and blood to the statistical bones we have just considered.

1. Cumberland Island in southeast Georgia is considered by the survey to be the best of its type—the low-lying lands separated from the mainland by stretches of marsh and rivers or estuaries.



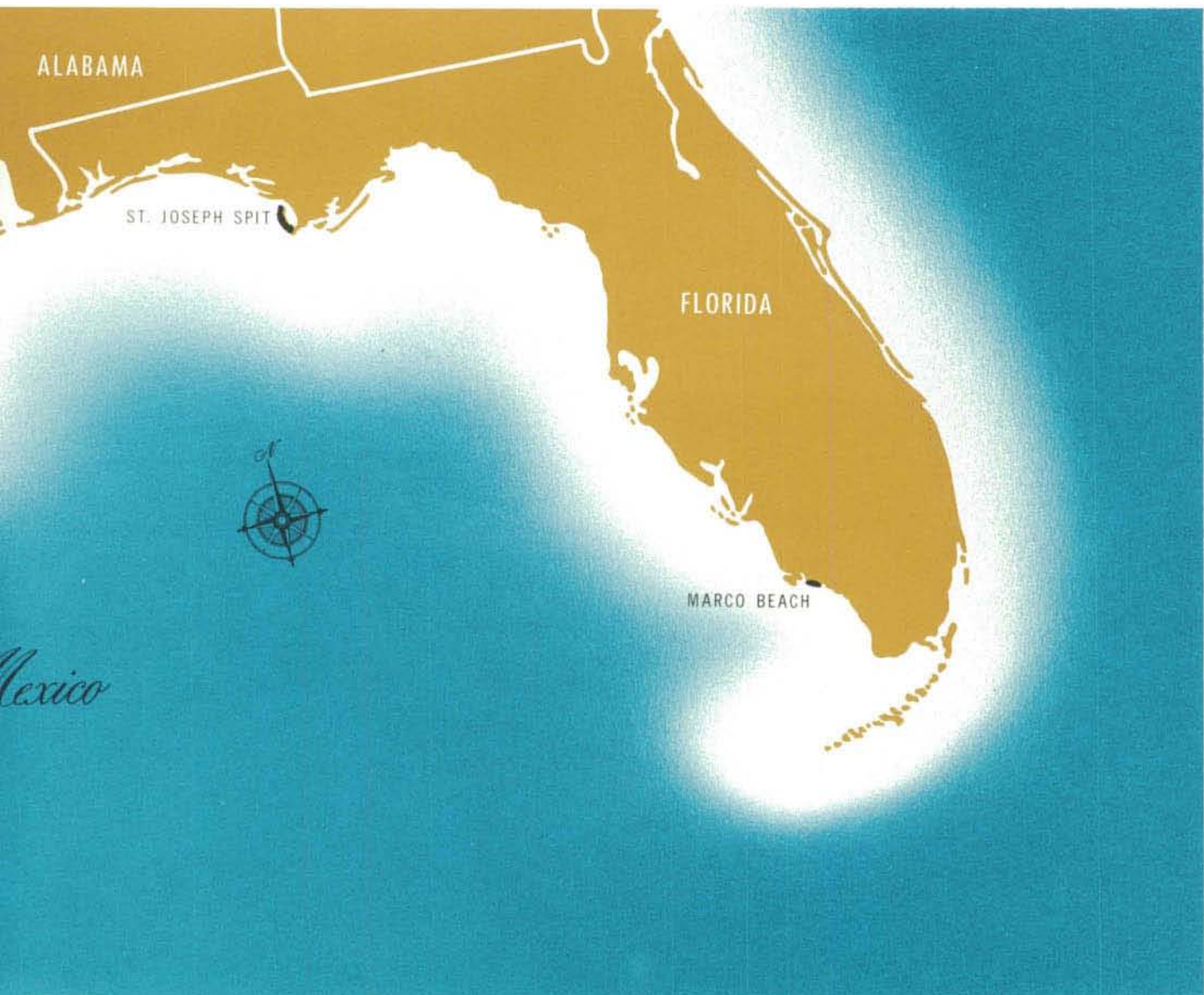
Brilliant sands lined with palmettos, moss-draped live oaks, and white shell roads help make Georgia's Cumberland Island one of the most attractive of the 16 prime areas.



each other for the friendship of the Indians: along this coast Spanish and English colonizers fought each other. A Spanish armada of 50 ships and 2,000 soldiers sailed from Havana in 1742 and attacked the British fortification on the island. Archeological exploration may well uncover here facts of considerable historical meaning.

The possibilities of developing Cumber-

Cumberland boasts extensive fresh water ponds as well as magnificent beaches.



land Island for public recreation and cultural enjoyment are considered to be exceptional.

2. The south shore of Long Island, New York is the most convenient seashore recreation area for the largest population center of the United States. Within a small geographical radius are grouped not less than nine million people. The State, of course, has done much to provide facilities for satisfying the yearning for a day at the ocean edge, but already overloaded conditions are to be observed at such places as Jones Beach, Gilgo and Captree State Parks. The western end of Fire Island is occupied by Fire Island State Park, but the opportunity exists, according to the survey, to make public use of that part of the magnificent 32-mile barrier beach that is still relatively undeveloped.

The Fire Island area is a long, narrow stretch of sand reef, varying from several hundred yards to a mile wide. The beach is wide, clean, and gently sloping, insuring safe and enjoyable swimming in most places. The dunes are imposing and usually well stabilized by vegetation. Only at the unique Sunken Forest is there any considerable growth of trees, but this forest is a gem of its kind: dominated by American holly trees, some several hundred years old, with an accompaniment of sassafras, shadbush, red cedar, and pitch pine.

Elsewhere the vegetation consists of beach grass, bayberry, beach plum, winged sumac, reindeer moss, and some pitch pine. In places along the bay there is a fairly good growth of eelgrass, providing food for wild-fowl.

Because of the tempering influence of the Atlantic Ocean, the climate of Fire Island is mild for its northern position. It is one of the few beach areas on the Atlantic which face the sun throughout the day.



Some 32 miles of the Fire Island area of Long Island could still be developed for public use within easy reach of millions.

The extent of this seashore makes it well-suited for concentrations of pleasure seekers, and also for those who delight in a degree of isolation. Historically, the whole stretch of coast here is rich in sea adventure.

3. When Gosnold, in 1602, cruised along the outer arm of the peninsula we now call Cape Cod and named it for the vast schools of fish he encountered in those waters, he landed on what he described as a "white, sandy and very bold shore." The French explorer Champlain saw it later and called it Cape Blanc for its gleaming sand dunes. Finally, on a November day in 1620, the Pilgrims of the Mayflower turned back into a harbor, now Provincetown, fearing the dangerous breakers and shoals, and later found what seemed a better haven at Plymouth.

None of these adventurers were seeking fine beaches and a shoreline for recreational purposes. Three hundred years and more were to pass before the survey party was to speak of this strip of 30-odd miles in these terms:

"There is no longer any comparable area in the New England region that exhibits all the outstanding values desirable and suitable for extensive seashore recreation. For these reasons alone, the Great Beach area of Cape Cod merits preservation as a major public seashore of the North Atlantic coast."

Here is an area not more than 300 miles distant by highway from all six capitals of the New England States and metropolitan New York.

Great Beach contains, in its shoreline and the adjacent land, practically every feature desirable for preservation for ordinary recreational purposes and for the additional use of historical and nature study. In spite of its ready accessibility, it has the priceless

feeling of remoteness. It is the longest stretch of beach in the New England shoreline.

Along the northern part of Great Beach the surf is occasionally too powerful and the slopes too abrupt for the best swimming. But other sections with long gradual slopes provide bathing for those who do not find the water too cold.

Along parts of the shore, cliffs rise as high as 150 feet; behind them spread forests and shrubs with many fresh-water lakes. Dunes on the north end are spectacular, some more than 60 feet high.

Sea, shore, and land birds, together with an interesting community of animals, offer a perpetual source of delight to lovers of the wild.



Cape Cod's Great Beach area—longest beach in New England—offers every desirable feature for recreation and nature study.

Cape Cod is noted as one of the ten most popular salt-water sport-fishing locations in the United States. Occasionally whales are seen off shore. Many of the city dwellers of New England and New York who have suffered under the humid blanket of a "hot spell" are familiar with the refreshing sea breeze of this shore.

There is little opportunity along the New England coast for exploring undis-

turbed or remote areas of beach, dunes, and forests in search of enjoyments other than physically recreational. If the Great Beach area had the status of a major public seashore, it would unquestionably attract increasingly large numbers of people from the Country at large and from Canada, besides those who would come from New England and metropolitan New York. At the same time it would preserve a representative part of a unique land-and-sea-scape.

recommendations for action

As a result of the survey, the National Park Service makes these six recommendations:

1. That at least *15 percent* of the general shoreline of the Atlantic and Gulf coasts be acquired for public recreation purposes to be administered by Federal, State, and local agencies. If the public agencies acquire *half* of the suitable undeveloped seashore land remaining, they would then have, including their existing areas, the recommended 15 percent.

2. That *prompt* action be taken to acquire available beach sites before the best of such areas are acquired for private or commercial development. The critical situation deserves the attention of all persons and organizations in a position to give aid—women's clubs, chambers of commerce, historical societies, service clubs, universities, conservation groups, etc.

3. That the acquisition of areas should be related as directly as possible to the dis-

tribution of population except where biological, historical, or other values supersede.

4. That ample quantities of hinterland of marsh and swamp, which provide a valuable habitat for a large and interesting variety of bird and animal life, be acquired in connection with beach property. Where such areas can provide a fresh-water habitat the variety will be greatly enhanced.

5. That plant-animal communities of great ecological interest found along the seashore be acquired and preserved regardless of the desirability of the adjoining beach; and that consideration be given to such communities now in a modified condition which might return to a more natural condition if permitted to remain undisturbed.

6. That further land use studies be made of selected coastal areas of unusual importance, giving consideration to proper boundaries and long range planning for the best use of recreation values.

APPENDIX

Here is a breakdown of the seashore lands in each of the Atlantic and Gulf States, with an indication of the areas selected by the survey as especially suited to public use.

MAINE

There are 228 miles of general shoreline in the State of Maine, and many hundreds of islands off the mainland. Selection of suitable sites included the following: a representative island group area containing 12 miles of shoreline; two sites of considerable historical importance; and three mainland areas between Bath and Wells with a total shoreline of about 14 miles.

NEW HAMPSHIRE

This State has 13 miles of general shoreline, all major portions of which are developed. A salt-water area in the general vicinity of Portsmouth possesses resources for public recreation but is not usable in its present condition.

MASSACHUSETTS

The general shoreline extends for 192 miles, including the offshore islands of Nantucket and Martha's Vineyard. Between Newburyport and Plymouth are two areas with 11½ miles of beach, portions of which are now open to the public. On Cape Cod two areas of over 40 miles are of superior quality and off the mainland are 10 miles of shoreline readily adaptable for recreation. On the mainland between Waquoit and Westport Point, two areas, with a total of two miles, are desirable for public recreation.

RHODE ISLAND

There are 40 miles of general shoreline in this State. Between Point Judith and Watch Hill are 5 miles of seashore most suitable for public recreation.

CONNECTICUT

The shoreline in Connecticut is developed most fully between New London and the New York State line. In the short space between the Rhode Island State line and New London, two areas with a shoreline of 3½ miles possess some of the desirable features for public seashore.

NEW YORK

There are 127 miles of general shoreline in New York State, nearly all on Long Island. Along the southern shore of Long Island, two areas were selected with a shoreline of 23 miles. Off the mainland an island was chosen which possesses about four miles of ocean front. These areas would afford excellent recreation opportunities to the greatest concentration of population along the Atlantic coast.

NEW JERSEY

This State has 130 miles of shoreline, the great majority of which is intensively developed. The 13 miles of shoreline within the Sandy Hook Military Reservation is one of the longest stretches of unbroken seashore of excellent quality to be found in this zone of great population concentration. An area north of Atlantic City is well suited for wildlife refuge purposes, and an area south of Ocean City, with about 2½ miles of undeveloped beach, is adaptable to public recreation.

DELAWARE

About one-half of the 28 miles of general shoreline in Delaware is in State ownership; nearly all of this is available to the public for recreation. An area now occupied by Fort Miles, adjacent to State property, and a second area in the south-central portion of the State were selected for consideration.

MARYLAND

The 31 miles of shoreline in Maryland is contained in portions of two islands, Fenwick and Assateague. The former is fully developed and the same conditions will soon prevail on the Maryland portion of Assateague.

VIRGINIA

No areas were selected along the mainland of Virginia's 112 miles of coast line, but two offshore islands, one in the northern portion and the other in the central portion, were listed for consideration. The two areas have a combined total of over 20 miles of excellent beach and a luxuriant growth of vegetation.

NORTH CAROLINA

The 301 miles of general shoreline in North Carolina contains several undeveloped stretches of

coast of value as public seashore. The six areas selected are offshore, with three accessible from the mainland by improved roads. They lie along the coastline from about the central portion of the State to near its southern extremity, with a total seashore length of about 75 miles.

SOUTH CAROLINA

Three areas totaling 16 miles were selected for consideration along South Carolina's 187 miles of shoreline. Two are in the northern portion between Georgetown and the North Carolina State line, and the third is below Charleston.

GEORGIA

A chain of sea islands extends along Georgia's 100 miles of general shoreline. Four were selected for consideration; one—Cumberland—is thought to be of such outstanding value as to be of national significance. Three of the areas are in the northern half of the State shoreline and one in the southern portion. Combined seashore length is about 50 miles.

FLORIDA

Nearly a third of the general shoreline of the Atlantic and Gulf coasts is in Florida. Four mainland areas plus four of the keys were selected for consideration within its 1,197 miles of shoreline. Two areas are along the Atlantic coast between Daytona Beach and West Palm Beach; two others, along the Gulf coast, are located south of Ft. Myers

and south of Panama City. These four have a total shortline of 78 miles. The four keys selected in the region between Key Largo and Key West are believed to be of national wildlife significance.

ALABAMA

Much of Alabama's 53 miles of shoreline has been absorbed in private, commercial, and State developments. Three areas, two in the eastern portion of the State and one in the western end, possess some of the resources necessary for public seashore recreation.

MISSISSIPPI

Mississippi's Gulf coast is void of any major undeveloped areas. Two of its four offshore islands were selected for consideration, however, with a total of about 44 miles of coastline.

LOUISIANA

The second longest shoreline of any State bordering the Atlantic or Gulf coasts, 397 miles, provides a single area for consideration. Its historical features are more important than its other features.

TEXAS

The third longest shoreline, 367 miles, on either the Atlantic or Gulf coasts embraces six areas selected for consideration. Four are between the Texas-Louisiana State line and Corpus Christi, and two in the southern part of the State. Total shoreline of these six is approximately 206 miles.

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