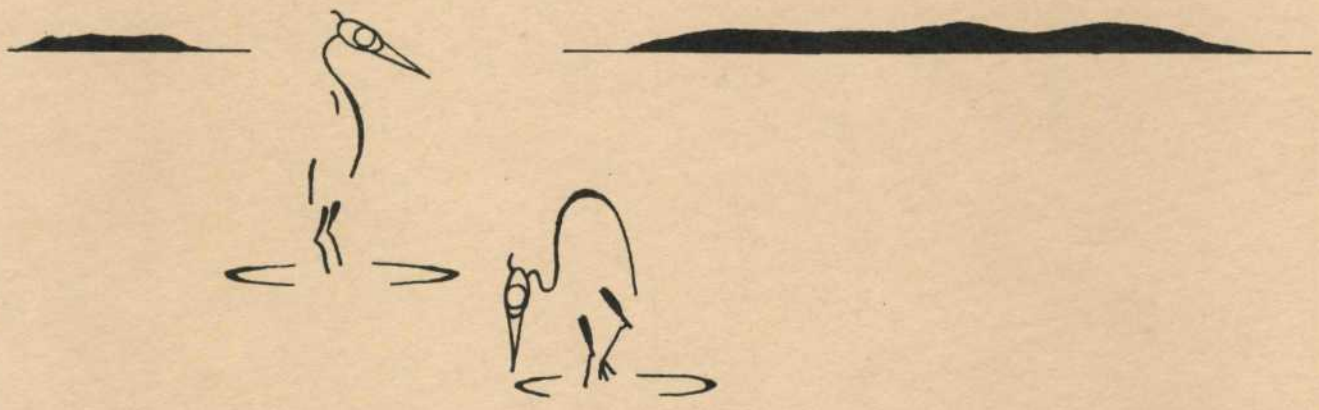
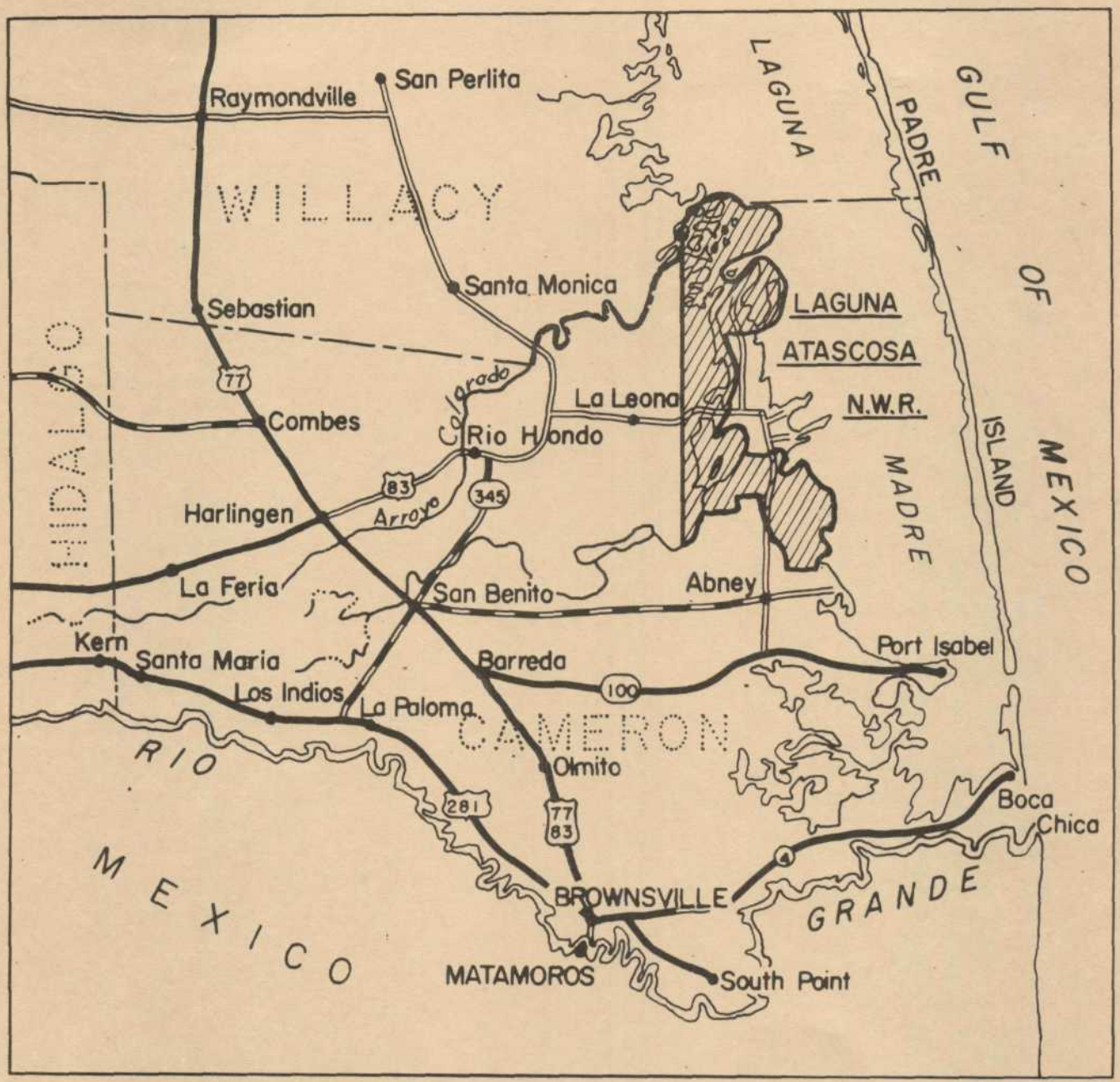
LGA_D01_Laguna Atascosa Wilderness Study Area



LAGUNA ATASCOSA WILDERNESS STUDY AREA

LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE TEXAS



VICINITY MAP

0 2 4 8 16 24

SCALE OF MILES

NATIONAL WILDLIFE REFUGE

The National Wildlife Refuge System is a nation-wide network of lands and waters managed and safeguarded for preservation and enhancement of the human benefits associated with wildlife and their environments. It presently consists of over 320 units, embracing over 30 million acres in 46 States. About 90 refuges containing over 25 million acres in 32 States qualify for study under the Wilderness Act.

PREFACE

The Wilderness Act of September 3, 1964 (Public Law 88-577) requires that the Secretary of the Interior review every roadless area of five thousand contiguous acres or more and every roadless island, regardless of size, within the National Wildlife Refuge System, within ten years after the effective date of the Act, and report to the President of the United States his recommendation as to the suitability or nonsuitability of each such area or island for preservation as wilderness. A recommendation of the President for designation as wilderness will not become effective unless provided by an Act of Congress.

In defining wilderness, the Act also included areas of less than 5,000 acres that are of sufficient size to make practicable preservation and use in an unimpaired condition.

Sections 4(a) and (b) of the Wilderness Act provide that: (1) the Act is to be within and supplemental to the purposes for which National Wildlife Refuges are established and (2) wilderness areas shall be administered so as to preserve their wilderness character and shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use, insofar as primary refuge purposes permit. Wilderness designation does not remove or alter an area's status as a National Wildlife Refuge.

This brochure describes a National Wildlife Refuge that has been studied by the Bureau of Sport Fisheries and Wildlife at the direction of the Secretary of the Interior to determine its potential for inclusion in the National Wilderness Preservation System.

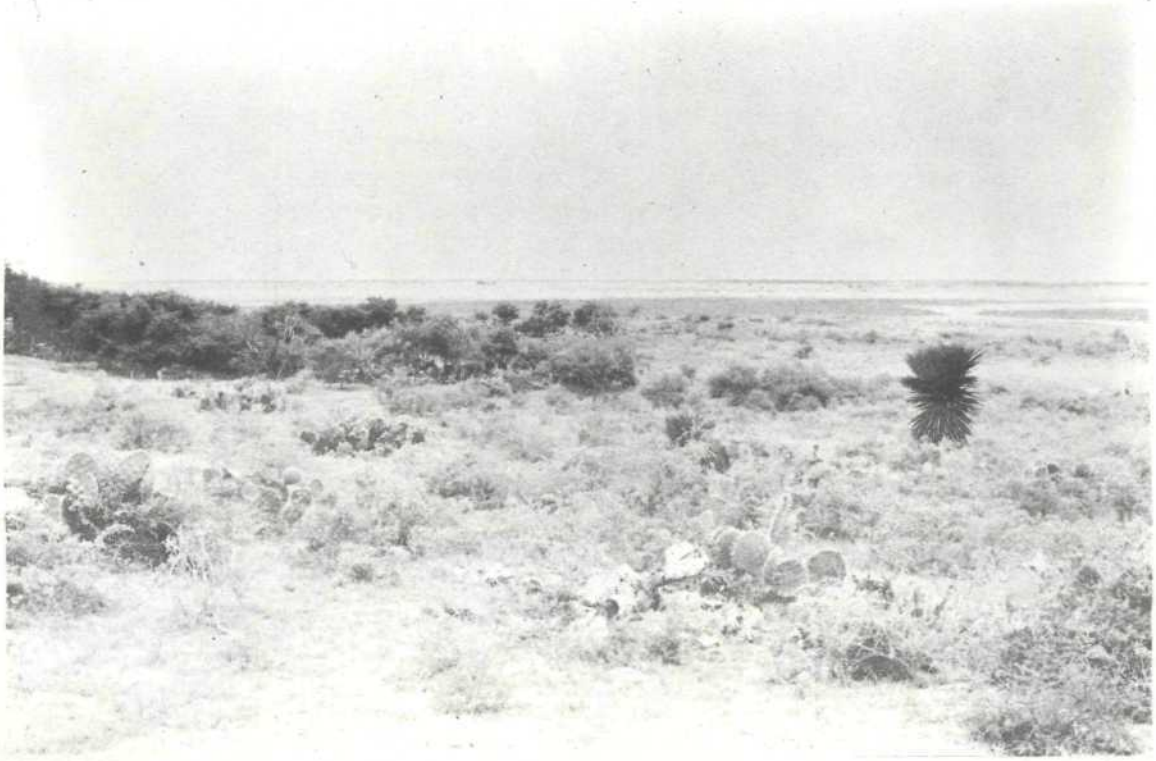
INTRODUCTION

Laguna Atascosa National Wildlife Refuge is located on the South Texas coast 25 miles north of the International Boundary. The eastern border of the refuge fronts on the Laguna Madre, a long shallow embayment formed by Padre Island.

The refuge was established in 1946 under the authority of the Migratory Bird Conservation Act to preserve and manage resting and feeding habitat for migrating and wintering waterfowl. It is the southernmost link in a chain of waterfowl refuges along the Central Flyway.

Laguna Atascosa is administered, together with the Santa Ana National Wildlife Refuge, from a central office in the town of San Benito. A subheadquarters is located on the refuge.

The refuge consists of eight management units, each of which was examined for wilderness potential. Only the northern one-fifth of the refuge, the North Island Unit, was found suitable for consideration as wilderness. It is isolated by the Harlingen Ship Channel and is the only roadless, undeveloped and relatively undisturbed block of 5,000 acres or more on the refuge.



HISTORY

Lost in the corner of a large Spanish land grant, the refuge saw little of a fascinating history. Nomadic Indian groups probably passed through the area, but even these were few in number and had largely disappeared by 1850. It was after 1900 before the refuge area began to become economically important.

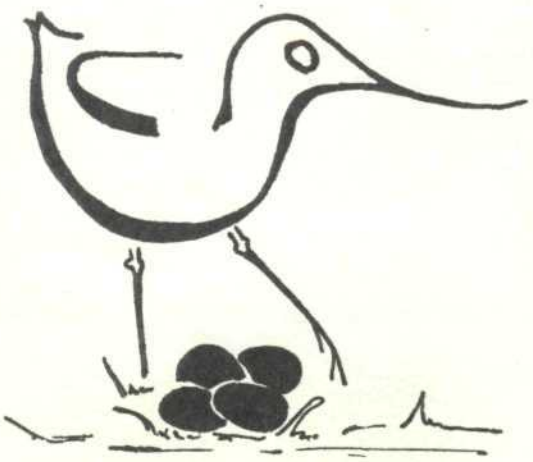
Settlement and growth of the Lower Rio Grande Valley revolved around Port Isabel at the mouth of the Rio Grande just 25 miles south of the refuge. This port formed the only practical funnel through which commerce poured into northern Mexico. Early Spanish expeditions (1519-) recognized the potential, but settlement was slow in coming. It was 1760 before permanent settlements appeared along the river.

During the decline of Spanish influence (1793-1821), Port Isabel grew in importance and played a significant role in Mexico's struggle for independence. Its importance was felt again during the Mexican and Civil Wars. AND the refuge?... still a bystander.

After the Civil War, ships brought supplies to the Rio Grande and shallow-draft steamboats moved them up the river to a rapidly expanding economy. Cattle became the major enterprise, but interest soon shifted to the fertile river soils. By 1910 there was enormous capital investment in the land, and agriculture became the backbone of the Lower Rio Grande Valley. Although the refuge served grazing interests, it was on the fringe of most activity.

The turn-of-the-century brought further change. Railroads were completed through Cameron County. Port Isabel became a deep water port, and shipping took on a new meaning with the opening of the Intracoastal Waterway and the Harlingen Ship Channel.

Laguna Atascosa National Wildlife Refuge, established in 1946, became an active participant as the largest of four refuges along the Texas Gulf Coast.



DESCRIPTION

Laguna Atascosa National Wildlife Refuge embraces 45,150 acres of shallow lakes and ponds, coastal prairie, and mud flats interspersed with low ridges. Lying within the Lower Rio Grande Valley, it is cut by three resacas, former stream channels of the Rio Grande. Elevations range from sea level to 34 feet.

The climate is mild with both subtropical and semiarid features. Water, while not scarce, is rather unreliable and seasonal drought is common. Annual precipitation averages 27 inches. The mean winter temperature is 62° and the mean summer temperature 84°

Medium-sized to small thorny trees associated with a dense growth of thorny shrubs and some cacti predominate on ridges and the better drained sites. This cover is occasionally broken by coastal prairie with an almost continuous stand of native and introduced grasses. The lower sites support a more open growth while only coarse salt grasses, cordgrass and other halophytes are present on poorly drained soils.

South of the Harlingen Ship Channel farm lands, improved pasture and waters of the Laguna Atascosa and Laguna del Cayo break up the natural pattern. Dikes, roads, fences and ditches are present.

The isolated, 9,440-acre North Island is part of a small delta formed by the Arroyo Colorado, formerly a principal flood channel of the Rio Grande. It is an area of low ridges crossed by a number of old stream channels, broad flats with no natural drainage, and coastal mud flats occasionally inundated by wind tides.

Mud flats cover nearly half of this unit and provide a striking contrast to the coastal ridges. These seemingly barren flats are important in the food chain of marine fishes and are the primary feeding area for shorebirds and wading birds. The coastal area is protected by Padre Island which is separated from the mainland by the shallow waters of the Laguna Madre.

North Island contains no roads and is accessible only by boat. It contains a small group of corrals, several miles of fencing, and the spoil from dredging operations along the ship channels. Numerous fishing shanties line the Intracoastal Waterway outside the refuge and are quite conspicuous. Several oil drilling platforms are visible offshore.

RESOURCES

The primary purpose of the refuge is to provide migration and wintering habitat for migratory waterfowl; and, each year, it plays host to thousands of birds. Peak numbers in 1968 were 211,000 ducks and 13,000 geese; use-days exceeded 18 million. About 75 percent of the continental redhead population winters on the Laguna Madre, attracted by the fresh water supplied by the refuge. North Island accounts for about 10 percent of the duck use and 5 percent of the goose use. With planned development, this will be substantially increased.

There are few places in the United States where the variety of birds found on Laguna Atascosa Refuge can be equaled. About 45 percent of the bird species found in the contiguous 48 States have been seen on the refuge. This includes two endangered species, the southern bald eagle and the American peregrine falcon, and one rare species, the prairie falcon. Of the 330 species included on the refuge bird list, 83 nest here.

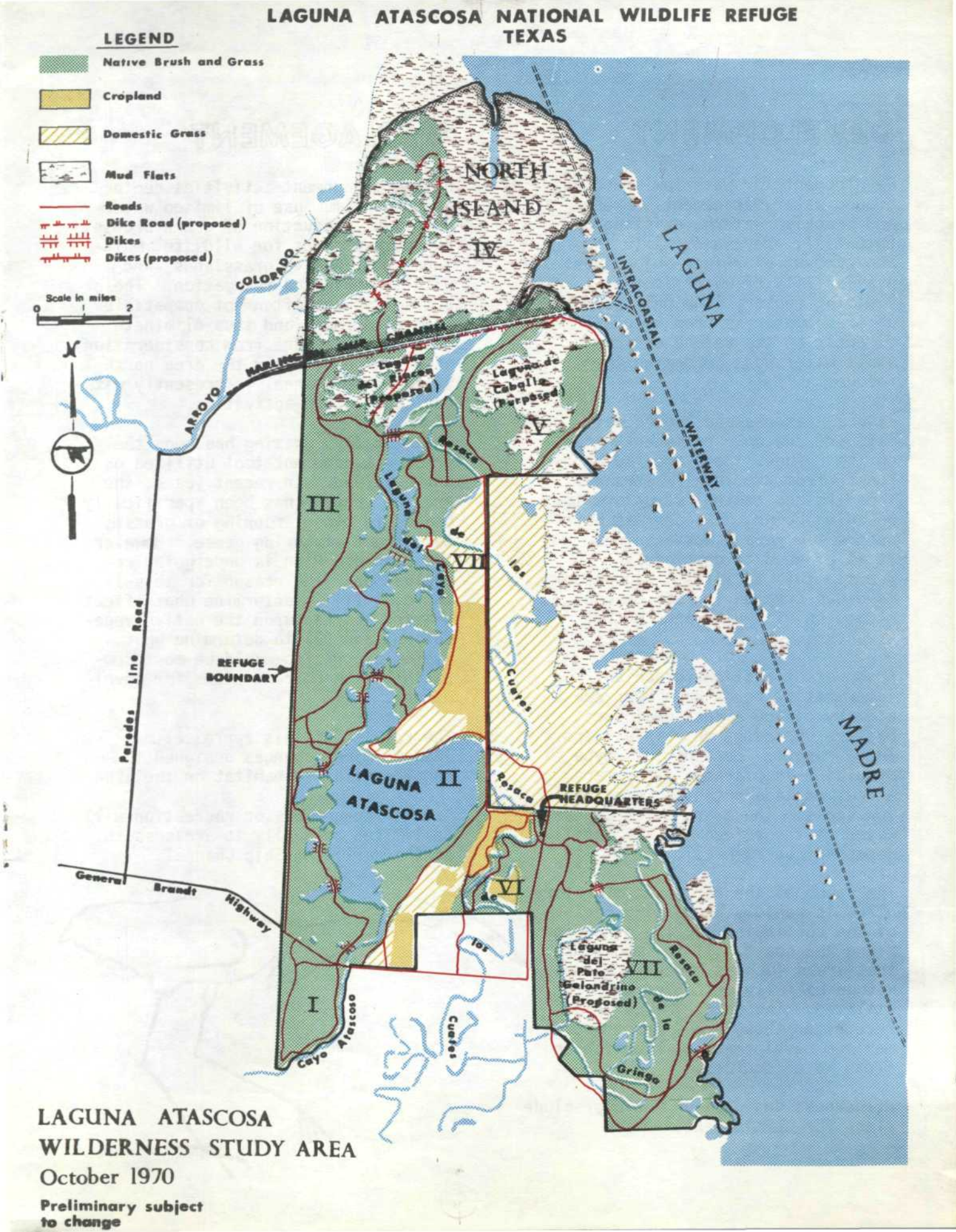
White-tailed deer and javelina are but two of 31 species of mammals occurring on the refuge. In recent years, numbers have averaged 550 and 140 respectively. Very few of these are now present on North Island. Two subtropical cats, the ocelot and jaguarundi, are seen occasionally. Both are peripheral species and occur within the United States only in southern Texas and a limited area of southern Arizona.

Mild climate and moderate rainfall produce conditions well-suited to many reptiles and amphibians. The refuge lies within the range of 67 species, 18 of which are limited to South Texas in their U.S. distribution.

One of the most outstanding features of the refuge is the pattern of coastal vegetation. While areas south of the ship channel are interspersed with farm lands and improved pastures, North Island is virtually undisturbed in this respect. A blend of semiarid, tropical and seashore elements, it varies from brush-entangled ridges to mud flats. Plants like acacia, palo verde, mesquite and several species of cacti indicate semiarid, while Texas lantana, wild crepe myrtle, and yaupon have generally tropical distribution. Seashore plants like moss flower, sea oxeye and glasswort complete the triangle.

Oil and natural gas constitute the mineral potentials of the entire refuge. Although some exploration has been carried out, no producing wells have been established. There are currently five fields producing natural gas in eastern Cameron County. All of these are within 10 miles of the refuge.

LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE
TEXAS



LAGUNA ATASCOSA
WILDERNESS STUDY AREA
October 1970

Preliminary subject to change

DEVELOPMENT

Development for waterfowl revolves around water management. Fresh and brackish waters, existing and potential, are essential to achievement of refuge objectives. Availability of water is the limiting factor. The only source of fresh water is from rainfall directly on the refuge or from small watersheds bordering the refuge.

Laguna Atascosa and Laguna del Cayo are the only permanent waters on the refuge. Both are fed by runoff from the local watershed. The dike and control structure impounding Laguna Atascosa was built before the refuge was acquired. It is planned to completely rebuild this facility. Laguna del Cayo was created in 1953 by construction of a dike and control structure.

A number of shallow, brackish intermittent ponds have been created by diking across drainages, but are dependent on rainfall and local runoff. More of this type of diking is planned. There are a few man-made potholes in natural low spots. These are the freshest water on the refuge but are totally dependent on rainfall.

The value of the refuge to migratory birds is rapidly increasing because of the continuing decline of habitat along the coast. It is important that areas such as Laguna Atascosa Refuge be fully protected and utilized. The refuge Master Plan recognized these needs and proposes maximum development of brackish and *fresh water sources.*

Wilderness designation would preclude plans for development.

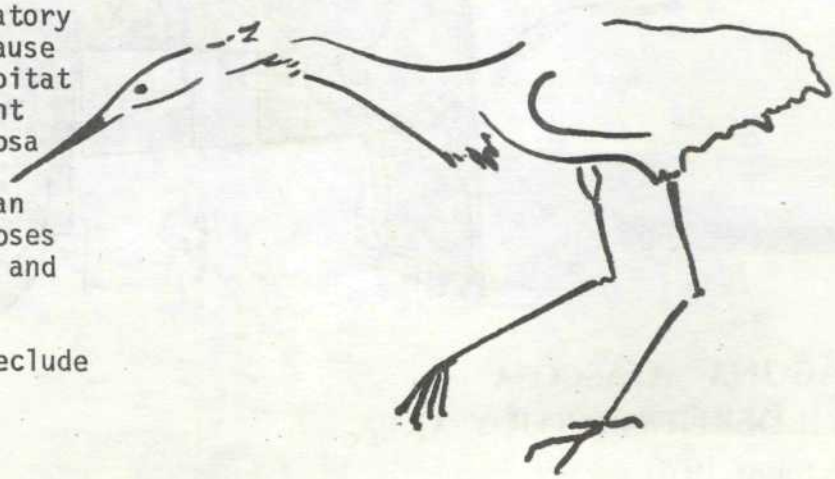
MANAGEMENT

Refuge management activities center around optimum use of limited water supplies, production of green browse and mature crops for wildlife, maintenance of native grasslands, and wildlife-oriented recreation. These activities are often not compatible with wilderness and thus eliminate much of the refuge from consideration as wilderness. Only the area north of the ship channel is presently without conflicting activities.

Historically, grazing has been the primary management tool utilized on North Island. In recent years, the grazing program has been specifically geared to close cropping of grasses to attract wintering geese. However, the Land Use Plan is undergoing re-evaluation. The reason for this is twofold: (1) to determine what effect grazing has had upon the native vegetation; and (2) to determine what system of grazing would be most compatible with current plans for development.

The results of this appraisal may lead to minor changes designed to enhance wildlife habitat on the area.

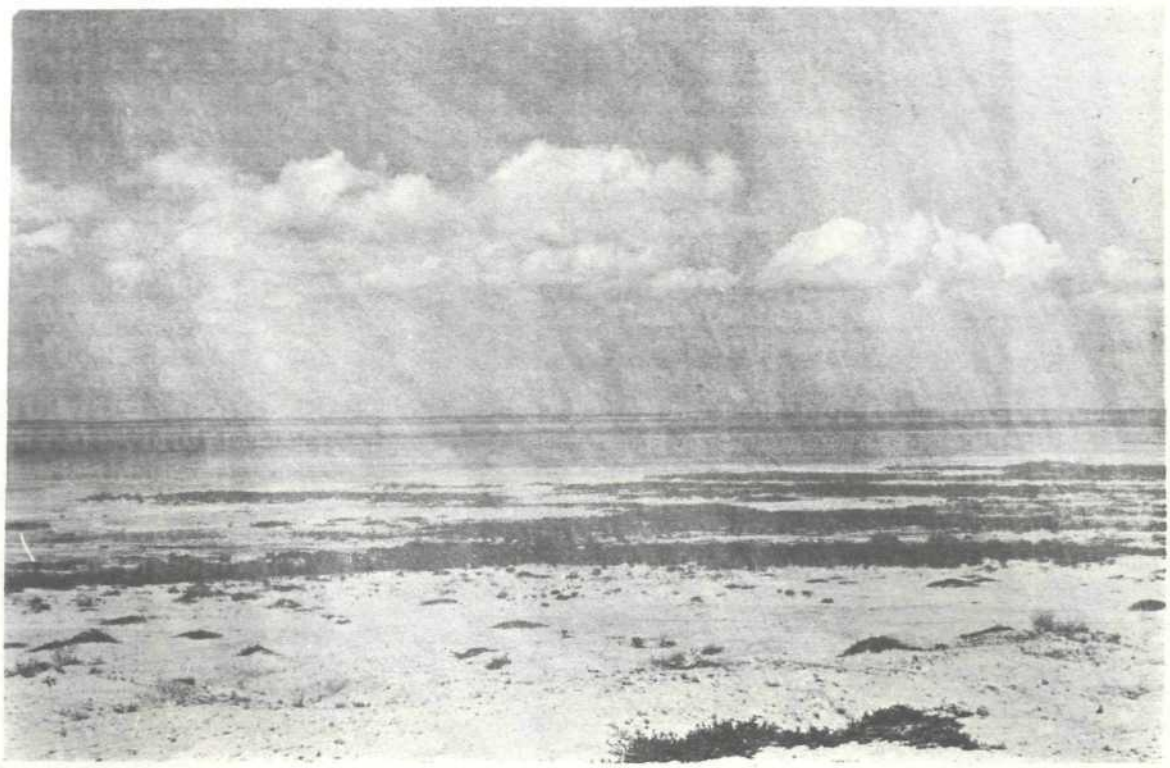
Active management for recreation will be limited primarily to areas south of the Harlingen Ship Channel.



PUBLIC USE

Laguna Atascosa Refuge accounts for more than 30,000 wildlife-oriented visits annually. Fishing and wildlife observation are the most popular activities. However, because these are more convenient in other areas of the refuge, virtually none of the use occurs on the North Island Unit.

Existing facilities for public use are confined to areas south of the ship channel. They include two small day-use sites along the Harlingen Ship Channel, one walk-in nature trail and two auto tours. Plans call for expansion of these facilities with an addition of a visitor center-interpretive complex.



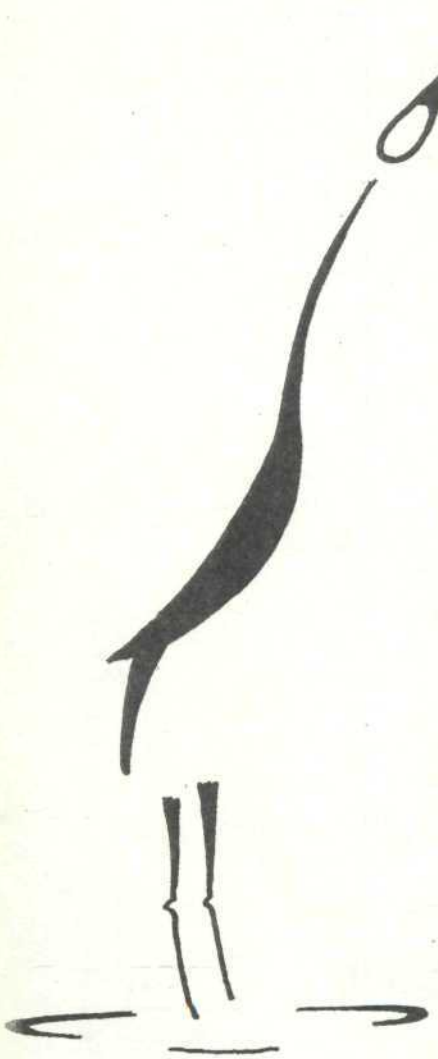
SOCIAL AND ECONOMIC CONSIDERATIONS

The refuge contributes to the surrounding community in several ways. Refuge lands sustain nearly 800 head of cattle which results in considerable income for local permittees. Also, the county receives 3/4 of 1 percent of the land value each year. North Island carries 130 head yearlong under the current program.

Approximately 2,100 acres of refuge land are available for cultivation. Some of these lands are sharecropped under cooperative agreements and all are south of the ship channel.

Although there are natural gas fields nearby, the refuge sustains no producing wells. However, mineral rights have been retained by the previous landowners. The last of these are due to expire within 10 years on lands north of the Harlingen Ship Channel. Until then, the area is open to exploration. Should a discovery be made and development begun, production rights would remain in effect indefinitely.

The most important contribution of the refuge, however, cannot be measured with the economic yardstick. It includes those values derived from man's contact with nature.



CONCLUSIONS

Field studies of the Laguna Atascosa National Wildlife Refuge reveal that only the portion of the refuge north of the Harlingen Ship Channel qualifies for consideration as wilderness. It is roadless, uninhabited and largely undeveloped. However, the area has significant potential for development as waterfowl habitat--habitat that is rapidly disappearing along the Texas Gulf Coast. The primary objective of Laguna Atascosa National Wildlife Refuge is to provide habitat for migratory waterfowl. Designation as wilderness would conflict with plans to enhance the wildlife values of the refuge.

INSPECTION

Anyone concerned about this wilderness study is urged to personally inspect the Laguna Atascosa Wilderness Study Area. Additional information may be obtained from the

Regional Director
Bureau of Sport Fisheries and Wildlife
Federal Building
500 Gold Avenue S. W.
Albuquerque, New Mexico 87103 or

Refuge Manager
Laguna Atascosa National Wildlife Refuge
P. O. Box 739
San Benito, Texas 78586

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