

LOWER SUWANNEE NATIONAL WILDLIFE REFUGE

Chiefland, Florida

Satellite of Chassahowitzka

ANNUAL NARRATIVE REPORT

Calendar Year 1979

NATIONAL WILDLIFE REFUGE SYSTEM

Fish and Wildlife Service

U.S. DEPARTMENT OF THE INTERIOR



PERSONNEL ON BOARD AT END OF YEAR

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Not pictured:	
Floyd Geathers	YACC Enrollee
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Review and Approvals

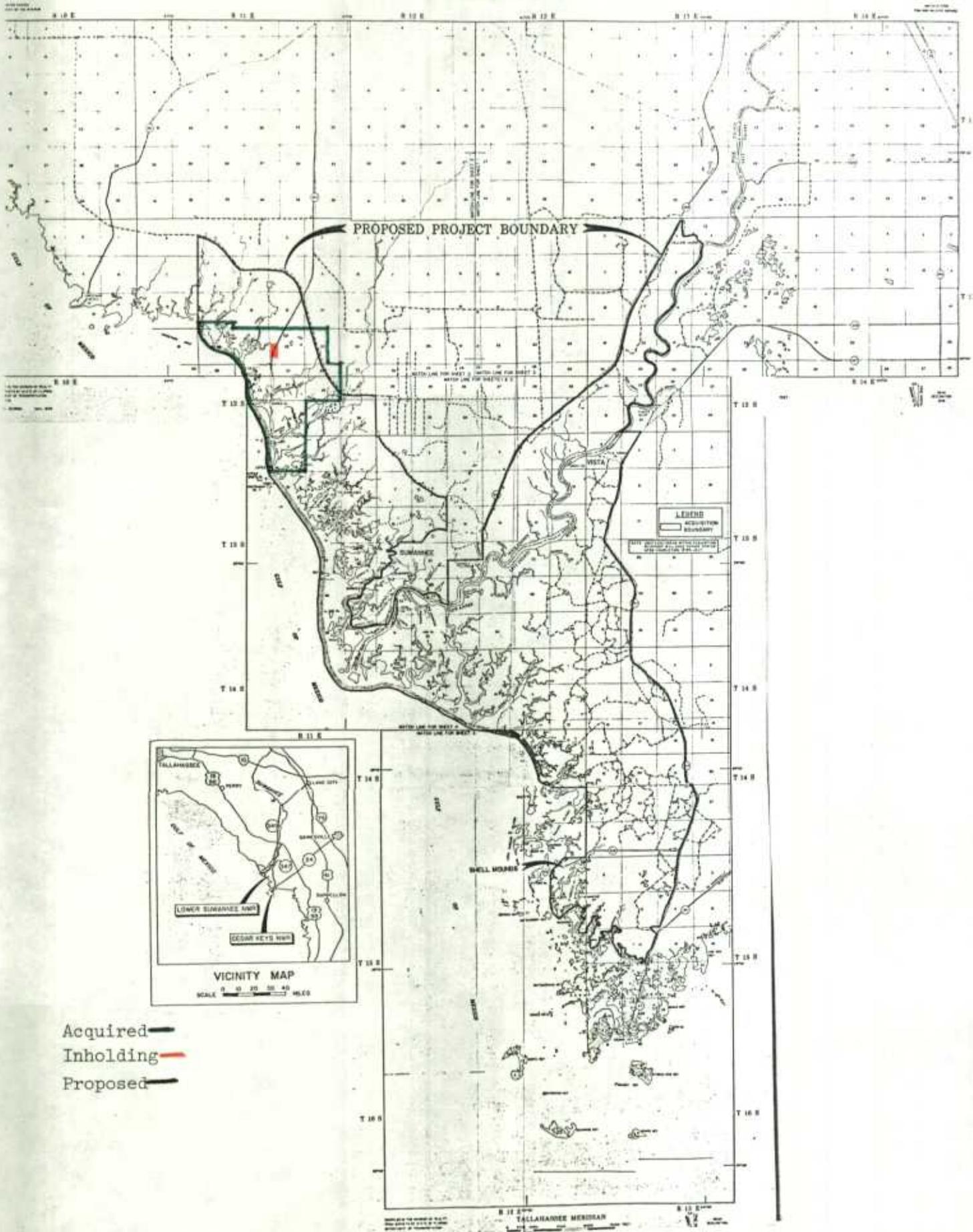
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Regional Office

LOWER SUWANNEE NATIONAL WILDLIFE REFUGE  
DIXIE AND LEVY COUNTIES, FLORIDA



Acquired ———  
 Inholding ———  
 Proposed ———

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## I. GENERAL

### A. Introduction

Lower Suwannee National Wildlife Refuge, satellite of Chassahowitzka NWR, is located 115 air miles north of Tampa, Florida, in Dixie County.

The refuge was established in March of 1979 and currently consists of the Shired Island tract which is 5300 acres situated five miles south of the town of Horseshoe, adjacent to the Gulf of Mexico.

The refuge consists primarily of esturine salt marshes and tidal streams with hammocks of cabbage palm, longleaf pine, slash pine, live oak, laurel oak and cedar dominating the higher elevations. Elevations within the existing and proposed area rarely exceed 15 feet above mean sea level. The higher elevations are generally found as islands within the tidal zone or small remnant dunes. An unusual topographical feature of the area is the result of Indian shell mounds (middens.)

Fresh water from the Suwannee River coupled with the numerous small streams of the coastal terrace, gives rise to a biologically rich saltwater estuary. Several endangered species such as the brown pelican and southern bald eagle are found in the area. The large flock of redheads numbering up to 100,000 traditionally wintering along the Gulf Coast of Florida, spend part of their time here together with other species, including the wood duck which is a resident.



Typical Narrow Beach of Shired Island Tract  
NR1-79 - Marcus

The large nesting colony of white ibis from the nearby Cedar Keys NWR are dependent upon the area for food. Likewise, other colonial and wading birds from Cedar Keys and those throughout the area find their life requirements in the fragile marine estuary.



Salt Marsh Habitat of Shired Island, Gulf of Mexico  
in Background. NR2-79 - Marcus

#### B. Climatic and Habitat Conditions

Dixie County is a low lying, subtropical, coastal land area; however, it lies within the frost belt with the result that tropical fruits and vegetables do not flourish. The annual average temperatures of about 77 degrees F. ranges from a mean 81 degrees F. to a 57 degrees F. January average. There is no predictable dry or rainy season for the region. During the summer months, rain clouds form offshore and move inland to precipitate showers 15 or 20 miles from the coast which accounts for a significant portion of the annual average of 54 inches of rainfall. The area is in the hurricane belt and these tropical disturbances produce winds of very high velocity and destructiveness.

This year's 74 inches of rainfall for the area was well above the average of 54 inches. Hurricanes David and Frederick contributed to this year's above normal precipitation.

Temperature extremes for the year were represented by a high of 97 degrees F. in June and July, with a low of 20 degrees F. experienced in January. The first frost occurred on Nov. 15.

### C. Land Acquisition

#### 1. Fee Title

The proposed acquisition of Lower Suwannee NWR, an area comprising approximately 54,000 total acres is located along either side of the Lower Suwannee River and extending both north and south along the Gulf Coast in Levy and Dixie Counties, Fla. The Gulf of Mexico forms a western boundary while State Road 347 establishes the south and eastern boundary. State Road 349, an unnumbered road, and Sanders Creek define the northern perimeter of the area. Map 1 shows the geographical location of the area.

Approximately 39,120 acres lie in Levy County and 15,034 lie in Dixie County. Both counties are located in Northern Florida on the Gulf coast, west of the Gainesville and Ocala urban centers. These counties are predominantly rural and are characterized by extensive forestry and farming resources.

The proposed area lies immediately east and north of the Cedar Keys NWR and serves as the primary feeding ground for the large rookery of colonial birds using Cedar Keys.

Division of Realty along with the refuge staff are currently actively engaged in land acquisition procedures. Two separate tracts totaling 7300 acres. located on the south side of the Suwannee River, are expected to be added to the existing 5300 acres of refuge during calendar year 1980. The remainder of acquisition may take from one to five years depending on funding availability.



Refuge staff looking over acquisition area.  
NR3-79 Marcus



If y'all are "way down upon the Suwannee" lodging is  
available at Hog Island Holiday Inn. NR4-79 Marcus

## D. Systems Status

### 1. Objectives

The proposed refuge acquisition covers the entire delta system of the Suwannee River. This river system drains an area of over 10,000 square miles and is the second largest river in the State of Florida. The new refuge will preserve approximately 54,000 acres of hardwood swamp forest, coastal marsh and upland forest surrounding the mouth of the river. The system is one of the few unspoiled river-delta estuary systems remaining in the United States. The system's diversity of habitats support a broad spectrum of wildlife species, and the estuary is an important waterfowl wintering area and a key feeding area for colonial birds nesting in the Cedar Keys NWR. The new refuge will be a major addition to the protection of the Gulf coastal marshes and the productive fishery that they support.

### 2. Funding

Funding for FY 79 was \$184,000 in 1210 monies which was used primarily for equipment purchase. The following are major equipment purchases for 1979.

- 15 ft. Panther airboat and trailer
- 18 ft. jonboat with 35 HP and 9.9 Hp motors and trailer
- 850B Case bulldozer with fire plow
- 450C John Deere crawler/tractor with front end loader and backhoe.
- 5 yd. dump truck
- 1/2 ton diesel pickups (2)
- 1-1/2 ton tractor transport
- Radio communications equipment

Planned funding for FY 80 includes \$169,000 in 1210 monies and \$5,000 in 1240 monies.

Lower Suwannee is fortunate to have adequate funding for the first two years of its existence, allowing for the purchase of necessary equipment. The refuge will not have headquarters or storage facilities until more land is acquired. Temporary office and storage has been established at the assistant manager's residence.



New Panther Airboat and Trailer NR5-79 - Collinsworth



New 850B Case Bulldozer NR6-79 - Collinsworth

## II. CONSTRUCTION AND MAINTENANCE

### A. Construction

Several cable and aluminum gates were placed to close off access into traditional dumping sites.

A refuge entrance sign was placed alongside county road 357 leading into Shired Island.

### B. Maintenance

A full month of trash cleanup was conducted by refuge staff and YACC enrollees.

Boundary posting was initiated on the west boundary of Shired Island.

### C. Wildfire

Nothing to report.

## III. HABITAT MANAGEMENT

### A. Cropland

N.A.

### B. Grasslands

N.A.

### C. Wetlands

N.A.

### D. Forestlands

N.A.

### E. Other Habitat

Nothing to report.

### F. Wilderness and Special Areas

All existing and proposed acquisition land will undergo consideration for wilderness and special area designation. An archeological study is currently out on bid. Several Indian shell mounds (middens) may be of archeological and/or historical significance.

G. Easements and Waterfowl Management

N.A.

IV. WILDLIFE

A. Endangered and Threatened Species

Wildlife surveys of Shired Island did not begin until August of 1979 due to the absence of staff until that time. Consequently annual production to include nesting information is incomplete. The following are survey results and observations from August through December.

Brown pelicans utilize the coastal area and offshore islands for feeding and roosting purposes; however, nesting seems confined to adjacent Cedar Keys NWR. Up to 550 brown pelicans have been observed utilizing a sand bar at the mouth of the Suwannee River during October.



Large numbers of brown pelicans, black skimmers, cormorants, willet, gulls and terns often utilize this sand bar at the mouth of the Suwannee River.  
NR7-79 - Marcus

A small flock of white pelicans were seen flying over Shired Island during early December.

Osprey are fairly abundant on Shired Island. One nest was reported. Several active osprey nests are located within proposed acquisition. Seven nests are within a two-mile stretch of tidal creek near the mouth of the Suwannee River.

Several American alligators have been observed inhabiting the freshwater interior of Shired Island. Others have been seen "Way Down Upon the Suwannee". Most nesting is thought to occur in inaccessible areas because of the scarcity of high ground along river and creek banks.

One indigo snake has been seen on the refuge.

Refuge staff have received several unconfirmed reports of Florida panther sightings on and near Shired Island.

One Southern bald eagle nest has been sighted within the proposed acquisition area; however, a more intensive search may reveal additional nests, as there exists great potential for nesting sites. Two confirmed sightings of bald eagles were made on Shired Island.

On October 5, a peregrine falcon was seen chasing a dove over the marsh at Shired Island.

Florida manatee have been seen at the mouth of the Suwannee River and reported to use some of the springs up the river during the winter months, though the area is one of the more northerly extremes for the species.

The Florida scrub jay which is endangered in Florida has been seen within the proposed areas.

The following endangered or threatened species have not been seen within the present or proposed refuge but are thought to utilize the area; red-cockaded woodpecker, Florida sandhill crane and Bachman's warbler.

## B. Migratory Birds

### 1. Waterfowl

The large raft of redhead ducks which winter off the Gulf coast drift onto this area near the end of the winter period. This flock has often exceeded 100,000 birds. Other species represented are lesser scaup, red-breasted merganser, black duck, mallard, gadwall, widgeon, pintail, bufflehead and hooded merganser. Wood ducks are fairly abundant, however, suitable brood rearing habitat and nest cavities may be a limiting factor to the population.

## 2. Marsh and Water Birds

The following table represents peak population levels of the more predominant marsh and water birds based on surveys taken on Shired Island from August through December.

<u>Species</u>	<u>1979</u>
Brown Pelican	25
Double-crested Cormorant	200
White Ibis	50
Great Blue Heron	100
Little Blue Heron	85
Louisiana Heron	80
Green Heron	75
Black-crowned Night Heron	50
Yellow-crowned Night Heron	45
Great Egret	150
Snowy Egret	100
Anhinga	50
<u>Total</u>	<u>1010</u>

Other marsh and water birds include Virginia rail, sora rail, black rail, yellow rail, clapper rail, king rail, Florida gallinule, pied-billed grebe, cattle egret, American bittern, least bittern, white pelican, wood ibis, frigate-bird, common snipe and woodcock.

## 3. Shorebirds, Gulls and Terns

Numerous oyster bars, sand flats and extensive shoreline with narrow beaches provide excellent feeding, loafing and nesting for a wide variety of shorebirds. A variety of gulls and terns can be found in the area. Nesting sites for these species are limited, but do exist.

The following table shows August-December peak populations of the predominant shorebirds, gulls and terns on Shired Island.

Species	1979
Willet	300
Greater Yellowleg	50
Dunlin	10
Sanderling	50
Black-bellied Plover	20
Semi-palmated Plover	20
Semi-palmated Sandpiper	250
Least Sandpiper	200
Dowitcher	20
Killdeer	50
Black Skimmer	50
Ring-billed Gull	150
Herring Gull	100
Laughing Gull	75
Royal Tern	200
Common Tern	100
Caspian Tern	100
Least Tern	50
Totals	<u>1795</u>

Other shorebirds include Wilson's plover, black-necked stilt, ruddy turnstone, American oystercatcher and other sandpipers.



Shorebirds use on mud flats at Shired Island.  
Try identifying these peeps. NR8-79 - Marcus

## 2. Mammals - Problem Species

Feral hogs are common to the river floodplain. Several hog traps and holding pens have been seen on Shired Island and within proposed lands, suggesting that the populations are being utilized for commercial purposes. The feral hogs cause severe damage to the landscape in certain areas.

The armadillo is the only exotic wildlife species currently known to exist within the area. They range in moderate numbers causing minimum damage to flora.

## 3. Other - Reptiles

Reptiles which have been observed on Shired Island include the gopher tortoise, king snake, green snake and eastern indigo snake. Though not seen yet, the cottonmouth-water moccasin is thought to inhabit the island.

## 4. Other Animal Life

Fish resources were generally abundant this year. Trout fishermen reported "best catches in years", during the November - December period. Redfish were less abundant but fishing for them was generally considered fair to good. Commercial fishermen reported good catches of mullet and blue crabs.



One of many Monarch butterflies that migrate through the refuge. NR9-79 Marcus

## V. INTERPRETATION AND RECREATION

### A. Information and Interpretation

No interpretive programs are in effect at this time. A considerable amount of correspondence is acknowledged from Chassahowitzka to individuals and institutions requesting information on Lower Suwannee. A refuge leaflet and bird list for Lower Suwannee are currently being prepared.

On December 20, a CBS film crew with Producer Jack Armstrong filmed parts of Lower Suwannee NWR for national viewing. It was part of a segment of CBS' Sunday Morning "America's Gift to America".

Don Perkarchin, refuge manager of Bombay Hook and Prime Hook of Delaware visited and toured Lower Suwannee in December.

### B. Recreation

Sport and commercial fishing is the main attraction to Shired Island. A fish camp with motel, cabin and restaurant facilities is located on the island for public use. The fish camp is operated by a private concessionaire under a lease agreement. Some of the more sought after fish include speckled trout, redfish and mullet. This area is also well known for its fine oysters and blue crabs.



Common scene during trout season offshore of Shired Island. NR 10-79 Marcus



Heavy public use at Shired Island Fish  
Camp during trout runs. NR11-79 Marcus



Private concession restuarant and motel at  
Shired Island Fish Camp. NR12-79 Marcus

A limited amount of rail and waterfowl hunting occurs within the refuge. Waterfowl hunting was reported to be "very poor" this past season.

Dixie County maintains a one acre county park on Shired Island which is used by hunters for camping. Up to seventeen camps were located within the confines of the park during this past deer hunting season. According to county park rules, no camping is allowed. Obviously the regulation is not enforced.



One acre Dixie County park located within refuge.  
NR13-79 Marcus

Other recreational pursuits within the county park and on the balance of Shired Island include shell collecting, bird watching, hiking and picnicking. Public visits between July and December totaled 1250.

#### C. Enforcement

Since the refuge's establishment in March, enforcement has been incidental to other refuge operations. However, during the October and December period, several cable gates and one 3'x6' refuge entrance sign were destroyed or stolen. Also 4-wheel drive vehicles climbed several sand embankments on Shired Island. More intensive enforcement is planned to include weekend and night patrols. Special agents from Law Enforcement out of Tallahassee and Gainesville have offered their assistance.

## VI. OTHER ITEMS

### A. Field Investigations

The numerous census studies that are required to effectively monitor wildlife populations were conducted August through December. No formal studies were conducted by refuge personnel in 1979.

Bids are currently out for an archeological study of several Indian shell mounds (middens) located on Shired Island and proposed land.

### B. Cooperative Programs

A one-year concession-lease agreement was established with the owner of the Shired Island Fish Camp. The owner of the fish camp has expressed some interest in selling to us. Our realty people from Atlanta are to assess the property during early 1980.

Two YACC enrollees were hired in early December to help with refuge operations at Lower Suwannee and Cedar Keys NWRs. Some of their accomplishments follow:

- Placement of a refuge entrance sign on Shired Island.
- Boundary posting at Lower Suwannee and Cedar Keys.
- Installation of four cable gates on Shired Island.
- An enormous amount of trash cleanup on Shired Island.
- Maintenance of refuge vehicles and equipment.



YACC enrollees, Henry Wilson and Floyd Geathers erecting refuge entrance sign. NR14-79 Marcus



Before trash cleanup of Shired Island  
Point. N15-79 Marcus



After trash cleanup of Shired Island  
Point. NR16-79 Marcus



YACC personnel boundary posting on Shired Island. NR17-79

C. Items of Interest

Assistant Manager Gamble attended the Jacksonville Area Conference held the week of September 17.

Jerre Gamble was at Glynco, GA for law enforcement training during the period of October 3 - December 7.

Biological Technician Marcus attended fire management training in Atlanta during the week of November 4.

On November 15, Stuart Marcus received four hours of law enforcement training related to waterfowl hunting regulations at Merritt Island NWR, Florida.

D. Safety

Lower Suwannee staff and YACC personnel attended required safety meetings at Chassahowitzka NWR.

E. Other

This report was prepared by Assistant Refuge Manager Jerre Gamble; arranged and typed by Administrative Clerk Esther Brown.