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WHEELER NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

JANUARY - APRIL 1959

I. GENERAL

A. Weather Conditions:

<u>Month</u>	<u>Precipitation</u>	<u>Max. Temp.</u>	<u>Min. Temp.</u>
January	5.43	74	7
February	3.59	74	19
March	3.86	79	30
April	4.26	86	36

Hard cold fronts continued to move in through January, but there were only spittings of snow and sleet that gave no real ground coverage. Weather began moderating in February, although occasional freezes occurred throughout March and until the second week of April. Rains fell rather regularly throughout the period, becoming heavier toward the latter half of April. However, showers were widely spaced in March and early April, permitting some early spring land preparation and planting. While weather has been too wet to permit much use of heavy machinery, some road improvement and other field work was possible. Farm work progress exceeded that of the same period last year and, by the end of the period it was estimated that 75 per cent of the refuge row crop land was broken and 25 per cent of the corn and other early crop species were planted, much of this already up to good stands.

Comparing weather this period with that of the same period last year, temperatures seemed lower although there was no snow comparable to the heavy snow of mid-February 1958. Rainfall has been less heavy.

B. Habitat Conditions:

1. Water:

a. General Reservoir Levels: At the beginning of the period the reservoir was low, with the level standing between the 550 and 551 foot contours. With winter rainfall moderate, there was little fluctuation and the reservoir remained near the 550 mark until refilling began in mid-March. It had reached the bank-full stage by mid-April and has stood at the 556 contour or slightly above throughout the remainder of the period. There were no river floods during the period, although heavy showers in mid-February and again in late April built up hydraulic heads and caused creeks to overflow.

b. De-watered Units: At the beginning of the period, water levels in de-watered units did not exceed the 552-foot mark. Regular showers continued to build up the levels of these units and, by the second week of February, they stood at the 555 foot mark, or near this. In preparation for reservoir refilling, TVA opened the flood gate of the Rockhouse-Luckeye-Blackwell units the second week of February and the unit quickly dropped to river level. The gates were closed, when refilling began in mid-March in an effort to save later pumping, and they had refilled to about the 554 foot mark at the end of the period. The flood gates at the White Springs unit were opened in late February but the unit dropped only to about the 553 foot mark by the time flood gates were again closed in mid-March. Rains have since brought this level up to near the 555 foot contour. Pumping on both units is scheduled to begin shortly after May 1.

## 2. Food and Cover:

By the beginning of the period, waterfowl had cleaned all hard food from refuge uplands except traces and weed seed. Only a small amount of hard food remained in dewatered units. Even this was gone by mid-February. Green forage had suffered from heavy aphid damage in fall and early winter and from hard cold through the winter. Under the impact of over 30,000 grazing geese, it was soon browsed to ground level. However, regular showers and periods of mild weather kept sufficient greenstuff available to carry these geese through the mid- and late-winter period. No actual feeding was done, and the only grain put out was in connection with live trapping.

In winter, local fields support heavy stands of young, green wild onions. Refuge employees have never considered these of any value as goose forage. However, during the latter part of the hunting season two local hunters, both good observers, reported killing Canada geese that had been feeding on onion tops. One stated that he found the gullet of a bird he had shot filled with onion stems. The other stated that he shot a goose with meat so strongly flavored with onions that it was almost inedible. 11

The heavy mast crop of the fall was sufficient to carry squirrels through the winter in good condition. This period, there were light freezes during the second week of April and it is too early to determine the effects that these will have on wild fruit and mast production.

## II. WILDLIFE

### A. Migratory Birds:

#### 1. Geese:

a. Blue Geese and Snow Geese: The first census of the period, taken January 14, showed 465 blue geese and 35 snow geese present. The next airplane count, January 26, showed only 300 blues and 25 snows on the refuge. The last aerial count of the period, February 5, showed 350 blue geese and 25 snow geese. Ground observations indicated that numbers declined after this, but that a few were present until early March. Comparing this with the peak of 600 blue geese and 60 snow geese during this same period of 1958 indicates a drop of approximately 22 per cent in blue geese and 45 per cent in snow geese. None of these birds were trapped or banded during the period. Only a single snow goose and about a dozen blue geese were known to have been killed locally during the hunting season.

b. Canada Geese: The January 14 count showed 30,000 Canada geese present. By the January 26 count, the number had dropped to 22,000 and by the February 5 count, to 17,000. The decline continued steady throughout February, and the majority of those remaining moved out in early March. However, a few flocks remained throughout late March and most of April, and at least a few non-cripples were present at the end of the period.

During the 1958-59 season a total of 202 Canadas were trapped and sent to Noxubee Refuge for banding and release there. An additional 17 were banded and released at Wheeler and a number of repeats and foreign birds were trapped and released.

The usual careful check was made during and after the 1958-59 hunting season to determine the local kill. From kill figures given to the refuge by local landholders and by the State employees operating on the Swan Creek Hunting Area, and from estimates of scattered kill, there were 1,400 Canada geese taken by sportsmen. Including crippling, birds live trapped and shipped to the Mississippi Refuge, etc., the total removal from the local flock is set at 2,050 birds, or about 7 per cent of the wintering concentration. This can be compared with a total removal of over 3,100 during the 1957-58 season. It is difficult to explain the drop in the local kill at a time when there was an increase in the number of wintering birds. Geese remained on the refuge area and did not "fly out" as they did the previous season. Perhaps the best explanation lies in the fact that a much higher acreage of greenstuff than usual was planted on the refuge during the fall of 1958 and there were no fall floods to flush away hard food and drown green forage.

Evidence continues to accumulate that the little Richardson's geese are regular visitors here, though in small numbers. In early January, two local hunters shot a trio of small geese. Refuge employees weighed these. The smallest weighed only 3 pounds, 5 ounces. The other two weighed 4 pounds each.

From geese banded at Wheeler and from those banded in other localities and shot here, a number of banding returns have accumulated. While some of these are from widely scattered locations, the majority have come from 4 areas:

Akimiski Island, James Bay, Canadian Northwest Territories; the Jack Miner Sanctuary, Kingsville, Ontario, Canada; the Keellog Sanctuary, Hickory Corners, Michigan, and the Horicon Marshes of Wisconsin, in the order named.

## 2. Ducks:

The January 14 airplane census showed 30,000 ducks present. On the January 26 count the concentration had dropped to 17,000 and on the February 5 count, to only 5,000. By mid-February all duck concentrations were scattered and only a few remained until the end of the period. Comparing this with the 20,000 peak for this same period in 1958 indicates an increase of 50 per cent.

During the 1958-59 season, a total of 840 mallards, 302 baldpates, 45 pintails and 8 blacks were trapped, banded and released. A number of repeats and foreign banded birds were trapped.

Baldpates were the second most common duck throughout the period, with mallards, as usual, making up the highest average. A return from one baldpate shot in late 1958 showed that the bird was banded here in 1947, 11 years ago. As noted last period, black ducks have increased locally and again make up a respectable percentage of the population. Few blue-winged teal were noted during the fall migration, but the spring flight was normal. A heavy flight of shovelers passed through during late February, March, and early April. Gadwall, scarce during the 1957-58 season, were much more common this season, though still less abundant than in former years.

### 3. Coots:

Coot numbers were noticeably low throughout the winter, although fair numbers passed through during spring migration. Comparing the peak this period with that of the same period last year, indicates a decline of approximately 56 per cent.

### 4. Doves:

Fair dove numbers are present and nesting has already begun. However, field observations indicate a decline from last spring's above-average concentration.

### 5. Shorebirds:

No woodcock have been observed this period. The spring snipe flight was light, but both lesser and greater yellowlegs seemed more abundant than usual.

## B. Upland Game Birds:

Quail appeared to come through the winter in good condition. In early February the State released 25 pen-raised wild turkeys on the southwestern part of the Redstone Arsenal Reservation. Two were promptly killed by a mink. At last report the remaining 23 continue to survive. With several thousand acres of refuge land inside the Redstone Reservation, these birds are almost certain to use part time on this refuge. The turkeys previously released by the State along Cotaco Creek, near Florette, are still there, but there have been no indications that these birds have moved down the creek to refuge land. In early April one of the cooperators reported sighting a ring-necked pheasant on Flint Creek Island. As yet no cottontail quail have been seen on the refuge.



C. Big Game Animals:

In early January, two deer appeared in a private pasture near Cave Springs and were seen a number of times in the Priceville locality. In early February, tracks indicated that these deer had used in refuge fields along the southwestern side of Garth Slough. They continued to be seen in this general locality until late March, but evidently drifted away before the end of the period. These may be two of the six deer stocked by the State in the Florette vicinity, or they may have wandered here from the Bankhead Forest.

D. Fur Bearers, Predators, etc.

The February rabbit hunt indicates that past estimates of the Wheeler rabbit population have been too low.

Several years ago the local fox population was decimated by a skin disease resembling mange. Foxes have made some recoveries during the past two years, but recent observations indicate this disease is still active.

The new beaver colony first noted near the junction of Cotaco Creek and Madden Branch during early fall is still active. One co-operator, a good observer, states that at least three small beavers and one large one have been seen in this locality. No dams have been built and the presence of these animals is interesting and not particularly undesirable.

No changes have been noted in the populations or activities of other small mammals on this refuge this period.

#### E. Hawks, Eagles, Crows, and Other Predaceous Birds:

Approval to hold a supervised public shoot in the Whiteside crow roost this fall fills a long-felt need and should be successful in moving this roost, now a public relations problem.

Swarms of the blackbird group, including starlings, cowbirds, redwings, grackles, and rusty blackbirds have been far more numerous locally during this period and the preceding one than ever before. Some local farmers, including refuge cooperators, state that they will abandon grain sorghum planting as long as the local blackbird population is at its present height. A roost, near the heavily-settled Finley Island community, stirred up some public criticism.

About a dozen bald eagles continued use of the refuge area throughout the winter. No local nesting is known.

Two interesting hawk observations were made by refuge patrolmen this period. A pair of red-tailed hawks were noted feeding on a dead red tail, previously shot by a hunter, on private land adjacent to the refuge. A red-shouldered hawk was observed feeding on a medium-sized opossum that it had evidently succeeded in capturing.

No other changes were noted in the numbers or activities of predaceous birds on this refuge this period.

#### F. Other Birds:

On February 13 David Hulse, an excellent observer, noted a lone Hudsonian curlew near the White Springs dike. The bird remained in this vicinity until March 5 and was observed by Hulse and State Conservation Officer J.B. Tanner on several occasions. This is the first refuge curlew record since a small flock was observed by John Steenis in 1940.

Reference is made to the domestic goose that used with a flock of local Canada geese and was submitted to the Central Office for positive identification, during the preceding period. In late February Hulse again observed a large grey goose, evidently another domestic bird, flying in company with a flock of refuge Canadas.

Purple martins appeared on March 15, ten days earlier than any previous spring record.

G. Fish:

As usual, there was only moderate fishing pressure throughout January and February, but the rather widely spaced showers of March and April, warm weather and the absence of high winds resulted in heavy sport fishing. Crappie and bream catches have been above the average of those made this period last year. TVA fish specialists report no significant changes in the local fish population.

H. Reptiles:

No changes were noted in the refuge reptile population this period.

I. Disease:

Since there have been some news releases on the presence of fowl pox among doves, several local hunters have stated that they noted the typical symptoms of this disease among some local doves shot during the October season. No Trichomoniasis or fowl pox has been noted among doves this period, and no diseases have been noted among waterfowl or other game.

### III. REFUGE DEVELOPMENT AND MAINTENANCE

#### A. Physical Development:

##### 1. Soil and Moisture Work:

Some soil and moisture work was possible during the period. Twenty-thousand pine seedlings were planted. A 40-acre tract on Yellow Gal Island, set aside for Johnson grass control, was heavily disced. Arrangements have been made to apply lime and phosphate-potash mixture to this area as soon as it is dry enough to permit access by spreader trucks. An additional 70 acres on the White Springs islands, cleared several years ago, has had so many small, underground stumps and roots present that row-cropping was difficult. This was deep-plowed, using the heavy Rome offset harrow, to eliminate these obstacles and facilitate row-cropping. Eighty tons of lime have been purchased for application on 80 acres of river bank farm land lying between the Limestone-Madison County line and the Buckeye channel. Arrangements were made with the cooperetor to match this with a like amount, permitting liming at a two-ton-per-acre rate. Wet weather has prevented spreading, but this will be done as soon as spreader trucks can operate. Soil acidity tests have been made on a number of refuge fields to determine the need for future liming. Tentative arrangements have been made for the preparation of new farm plans.

##### 2. Roadwork, etc.:

A short distance southwest of the Refuge headquarters entrance, the fill of the Crabtree sub impoundment crosses the backwater and is connected with Highway 67 by short spurs at either end.

Long-range development plans have proposed graveling this to provide a parking area for public waterfowl observation. This was completed during the period. The patrol grader was used to grade the roads leading to the pecan orchard field, on Flint Creek Island, and to the old dock site, east of the headquarters area. Some grading was done to the Flint Creek Island road system south of state highway 67 and soft spots were graveled.

In cooperation with the Limestone County Road Commission, the gravel on the Beaver Dam Peninsula road system, on the road leading into the lower Limestone Peninsula and on the road along the western side of Blackwell Swamp between the refuge boundary and the Madison-Limestone County line was reinforced by a number of additional loads applied to thin spots.

In cooperation with the Limestone County Road Commission and the Athens Sportsmen's Club, a public boat landing was constructed along the western side of Limestone Bay. The entrance road was graveled, a parking area cleared and graveled and the shoreline hard-graveled to permit boat launching. An attractive sign designating this as "Arrowhead Landing" was erected by the Sportsmen's Club. Although only completed in mid-March, this is already subject to heavy public use and is proving a good public relations gesture. (Photo in appendix).

In cooperation with the Limestone County Road Commission, the dump pit donated to the City of Mooresville was dug and an approach road constructed and graveled. This pit is already subject to heavy use and should result in not only better public relations, but in some relief from the nuisance dumping that has gone on in this area.

### 3. Work on Dewatered Areas:

Although there was no pumping during the period, the water level of the White Springs unit was low enough to permit some work along its high eastern edge. On 40 acres of the most recent clearing, drift and other debris were picked up, piled and burned, about 65 acres of this edge was preliminarily cut with farm discs, then plowed with the heavy offset harrows.

### 4. Headquarters Development and Maintenance:

All exterior woodwork of the office was repainted. All interior woodwork was varnished and all walls and ceilings were kentoned.

The diesel fuel storage tank erected on the creek bank several years ago, had caught some water from heavy rains. This period, salvaged metal roofing was used to construct a rain proof canopy over the tank.

The refuge shop room was thoroughly cleaned, a tire storage rack constructed and the entire interior was repainted.

Twenty-five heavy loads of gravel were hauled to the headquarters area and used to complete the flooring of the new equipment canopy and to thoroughly gravel the surrounding parking area.

Concrete runways were poured on either side of the hydraulic grease rack. This was made necessary by the fact that newer vehicles are built so low that the rack could not be used without this modification.

Minor repairs were made to the barn and service building. Screens were repaired and a new screen door was installed on residence No. 2 and painted.

In addition to the above, the brushy area along the creek bank was cleaned up and thinned. The open headquarters area was kept mowed, shrubbery was pruned, and general cleanup to grounds and buildings carried on.

#### 5. Vehicle and Equipment Maintenance and Repair:

As usual, there were considerable repairs to vehicles and equipment this period. All track- and wheel-tractors were steam-cleaned. The starting engine and the clutch of the D-2 were repaired and this unit tuned and readied for use. One of the D-7's was repainted and its bottom springs and rollers repaired. The D-8 was tuned and readied for use. A new filter and new oil lines were installed on the Oliver tractor and its wheels were packed with grease. The Case tractor was tuned and readied. The radiator was removed from one of the M.M. tractors, boiled out, and a new battery and filters installed.

The heavy Rome offset harrow was cleaned, repainted and a wheel bearing replaced. The four farm discs were cleaned, repainted, and boxings replaced. Two bush-and-bog harrows and the turning plow were cleaned and repainted. The seeders were cleaned and repaired and readied for use. The farm trailer was refloored and repainted, and the pulverizer was cleaned and repainted. All farming equipment was readied for spring work.

On the 1948 Ford, rear brakes were relined, a rear wheel bearing and front spring leaf were replaced. On the 1956 Ford pickup, all brake shoes were replaced and two wheel cylinders installed.

On the Dodge pickup, two new tires and a battery were installed and the seat cushion was reupholstered. On the 1952 Ford, brakes were relined on the front wheels, valves were ground, the motor tuned and a new universal joint was installed. A complete new exhaust system was installed on the GMC truck-tractor and this unit was tuned and cleaned. Brakes were relined on the Dodge power wagon, and this unit was also tuned and cleaned.

#### 5. Miscellaneous:

Two trips were made to the Gadsden Air Force Depot and several surplus field generators were procured. These were cleaned and tuned.

The posting of that portion of the refuge lying inside the Redstone Arsenal Reservation, begun last spring, was completed this period. Many new signs were erected and the entire boundary was painted. This required many work hours. Previous posting and a number of concrete monuments had been destroyed and much of the line required re-surveying. This completes an essential job. In addition, considerable reposting and line marking was done on the south side of the river, particularly around the Flint and Village Creek arms of the refuge and on the north side of the river, particularly around the Beaver Dam Creek arm.

All farming agreements were renegotiated. Patrol was carried on. The rabbit hunt was strictly supervised. Visiting groups were guided about the refuge. Waterfowl trapping and banding was carried on and many minor jobs were completed.



B. Plantings:

1. Aquatics and Marsh Plants: No plantings of this type were made this period.

2. Trees and Shrubs:

Five thousand shortleaf pines and 15,000 loblolly pines were planted during February. All were placed on the land along the south side of Garth Slough, including the former Barber rental, withdrawn from agriculture, the poor pasture on the Crow rental, and some eroding unused land lying between Black's and Ginhouse Branches. Survival appears excellent to date.

3. Upland Herbaceous Plants:

Other than agricultural plantings made by cooperating farmers, no upland herbaceous plantings were made this period.

4. Cultivated Crops:

The new policy of placing the refuge under the ASC system, assigning it an ASC contract number and giving it a single allotment of quota crops has been thoroughly discussed with the ASC officials of Limestone, Madison, and Morgan Counties. Using the formula that takes into consideration the total land in use, refuge cooperators have been given increased cotton allotments for their adjacent farms. // The new system will stop this. Virtually all Wheeler cooperators own adjoining land. The fact that refuge farming agreements increased their cotton allotments on their home farms was a considerable incentive for renting refuge acreage, and was the incentive that prompted many of the most desirable cooperators.

In short, they were willing to barely break even or to lose money on refuge farming if this increased their allowable cotton quotas. Stopping this may have some advantages, but may well cause a marked reduction in the demand for refuge rentals.

A record acreage of winter crops was planted last fall, but under the impact of heavy aphid damage during fall and early winter, a long, hard winter, and over 30,000 grazing geese, the prospects for good yields are slim. A high percentage of the acreage planted was so badly damaged that it has been turned under for cover crop, and summer row crops will be substituted. Much of that remaining is of rather poor quality. Small grain yields will probably be low. These may be high enough to furnish the seed necessary for Wheeler green forage plantings, but little, if any, will be available for transfer.

The use of the new machines with interchangeable combine and corn harvester heads is coming into increasing popularity in this locality. The corn harvester attachment shells corn, dropping shucks and cobs back on the land, a contribution to the increase of organic content. Compared with the old style pickers and snappers, these new harvesters are highly efficient, leaving little waste grain to be gleaned by waterfowl.

The new, extremely short growing season hybrid corns that set ears close to the ground and are often called "hog off" varieties have been tried locally. These have some advantages, due to short growing seasons and the fact that low-set ears may make stalk leveling less important to good waterfowl feeding.

However, these quick-maturing strains have a low production rate compared with more conventional varieties and this refuge does not encourage their use.

More about Lee soybeans: According to the local experiment station, these new shatterproof beans will mature before frosts if planted any time between the end of frost danger and the first of July. However, May plantings are said to produce well above those made either earlier or later, and about May 15 is considered the ideal planting date. The number of hours of sunlight on plants during a critical stage of their growth is thought responsible. Locally, fertilizer recommended for Lee beans is 300 pounds of 0-14-14 per acre, or from 500 to 600 pounds of basic slag per acre.

C. Collections and Receipts:

1. Seed or Other Propagules: No collections of this type made during this period.

2. Specimens:

No specimens were collected from the refuge this period. However, University of Alabama personnel are continually requesting specimens. During the closing days of the hunting season, a local hunter shot a fine example of the white-bellied phase of the blue goose on private land, turned this over to refuge employees who, in turn, sent it to the University to be included in the collection there.

D. Control of Vegetation:

The 35-acre Nigger Slough Island, on which Johnson grass control has been carried on for the past two years, was returned to row crop this year, virtually free of all Johnson grass.

In its place, a 40-acre tract on Yellow Gal Island, also heavily infested, has been taken out of cultivation and will be given the same discing treatment. It had already been disced one time by the end of the period and frequent summer discings are planned.

E. Planned Burning:

No planned burning was done this period.

F. Fires:

Fire hazard was high between the widely spaced showers of March and early April. Two small fires occurred on the refuge, both near Flint Creek not far distant from the Highway 67 bridge. Both were promptly extinguished by refuge employees. They burned over only a few acres of brush and grassland and did only insignificant damage.

#### IV. RESOURCE MANAGEMENT

A. Grazing:

The long, hard winter and heavy use by geese kept refuge pastures in poor condition during the first half of this period. However, ample rain and warmer temperatures during the latter half of the period have caused most of these to make good recovery. At present, 1,527 acres of this refuge are in pasture use. Of this, 1,413 acres are included in cooperative farming permits. Sixty acres of pasture continues as a free-use donation to the Morgan County Tuberculosis Sanitorium. Fifty-four acres are in five cash permits and have returned a revenue of \$107.00

B. Haying:

No hay has been cut from the refuge this period. However, 399 acres are scheduled for hay use this year. Of this, 388 acres are included in cooperative permits. A single cash rental accounts for the remaining 11 acres and has brought a total revenue of \$44. Hay crops include alfalfa, lespedeza, sudan grass, oats, and soybeans.

C. Fur Harvest:

There was no fur harvest from this refuge this period.

D. Timber Removal:

The only sale of timber products from the refuge this period was the pulpwood thinned from pine plantations through TVA sales to the Hiwassee Land Company. While considerable pulpwood was cut, TVA officials state that this had been previously billed and was reported last period. Plantation thinning is now almost complete and will probably be finished during the summer period.

E. Commercial Fishing:

No change was noted among numbers of commercial fishermen operating on the refuge this period and catches have remained average.

F. Other Uses:

Use of the Mooresville gravel pit by the Limestone County Road Commission continued through the early part of this period.

During the period, final clearance was obtained for the donation of the use of a city dump site to the community of Mooresville. The Limestone County Road Commission cooperated by digging the required pit and graveling the approach road.

Proper use of this site should help reduce indiscriminate refuse dumping on the refuge. The pit itself is located on otherwise unused land and is out of public view.

Mussel shelling, at almost a standstill last year, was resumed on a limited scale this period. Local shellers are receiving \$60.00 per ton for white "pigtoes" and \$20.00 per ton for "rub boards" and "three ridges." All shells are reported exported to Japan.

Figures are available for the 1958 shell catch. TVA fish and game officials report that 300 tons of mussel shells were taken and sold in 1958 for an average price of \$50.00 per ton. This would give a total of \$15,000.00 received for shells from this refuge, plus an estimated \$2,000.00 worth of slugs and pearls, or a total return of \$17,000.00 from the mussel catch. Comparing this with the catch of 740 tons of shells in 1957 and a total return of \$52,540.00 indicates a decline of approximately 56 per cent in shell catch and of approximately 68 per cent in catch value. This decline is due in part to the continued fishing out of shell beds, but to a greater degree to the fact that 1958 markets were limited and prices low. Practically all local shells were exported to Japan.

#### V. FIELD INVESTIGATION OR APPLIED RESEARCH

The weighing of local Canada geese, begun by refuge personnel last period, was continued this period. A total of 117 dead Canada geese have been weighed. Weights have ranged from 3 lbs. 5 oz., to 11 pounds. Only three weighed less than 5 pounds and only one weighed more than 10 pounds. The average weight for the 117 birds was 8.47 pounds.

A check made through the 1958-59 season on the use of turnip tops by Canada geese indicates that these birds feed on young turnips without hesitation.

During the mid-February rabbit hunt, cottontail and swamp rabbit heads were supplied to Mr. Dan Holliman, of the University of Alabama's Biology Department. Mr. Holliman is currently engaged in a statewide rabbit research project.

## VI. PUBLIC RELATIONS

### A. Recreational Uses:

Recreational use for the period was limited largely to the mid-February rabbit hunt and to sport fishing. Fishing use was light during the first half of the period, but normal or above for the latter half.

### B. Refuge Visitors:

As usual, a number of visiting groups called on the refuge throughout the period. These were shown displays in the refuge office and carried on refuge tours to observe waterfowl usually around the White Springs dike. Refuge personnel gave each group a short talk on refuge objectives and accomplishments and answered questions. The following groups paid visits this period:

<u>Date</u>	<u>Group</u>	<u>Number</u>
Jan. 8, 1959	Decatur Cub Scouts	26
Jan. 14 "	Decatur Science Club	45
Feb. 15 "	Huntsville Photographic Society	20
Feb. 20 "	Decatur Cub Scouts	16
Mar. 13 "	Florence Alabama Girl Scouts	15
Mar. 17 "	Priceville Girl Scouts	19
April 29 "	Walter Jackson School Class	35
Total group visitors . . . . .		176

In addition, there were many individual visitors, including two from Korea. Within recent years, visitors from foreign countries have included citizens of Korea, Formosa, India, Egypt, Indonesia, Thailand, France, England, and Canada.

#### Official Visitors

Mr. Lawrence S. Givens, Regional Refuge Supervisor	Jan. 2.
Mr. L. C. Hester, Ala. Dept of Agriculture, Birmingham, Ala.	Jan. 9
Mr. Houston Terrell, " " "	Jan. 9
Mr. Hollis Cowart, U.S. " " "	Jan. 9
Mr. David W. Peterson, Refuge Manager, Big Lake Refuge	Jan. 9
Mr. Philip A. Dumont, Chief, Section of Public Use, Washington	2/16-17.
Mr. Philip G. Van Dyck, Ass't. Regional Refuge Supervisor	2/16-17.
Mr. Leonard Foote,	Feb. 12.
Mr. Harold Peters	Feb. 12.
Mrs. Wright, Ala. Ornithological Society, Birmingham, Ala.	Feb. 3.
Mr. Baker D. Williams, Meteorologist, Weather Bureau, Huntsville	2/24.
Mr. H. D. Bagley, Ass't. " " " "	2/24.
Mr. J. N. Welden, Land Mgm. Office, Redstone Arsenal,	" Mar. 4
Mr. Wm. T. Davis, Regional Supervisor, Br. of Mgm. and Enforcement	3/11.
Mr. Chas. H. Richardson, Game Mgm. Agent, Montgomery	1/23 Mar. 11.
Mr. R. C. Hansen, Flyway Biologist, Minneapolis, Minn.	Jan. 23.

#### C. Refuge Participation:

In early February the Manager attended a meeting of the Athens Sportsmen's Club and gave a talk on the refuge rabbit hunt. He has also attended several meetings of the Morgan County Sportsmen's and Conservation Association.

The Manager, Biologist, and William Depreast attended the Regional Refuge Conference, held in Athens, Ga., from Feb. 23 through February 27.

The Manager has attended the regular weekly meetings of the Decatur Lions Club, broom sales, etc. He has also attended various Scout Council meetings.



In February, the Biologist made a conservation talk to the Athens Garden Club, a talk on rare and vanished species of birds before the Huntsville Garden Club, a talk on birds in general and the refuge in particular to the Trellis Garden Club of Decatur, and later a similar talk to the Brookmeade Garden Club of Decatur. In March he attended a meeting of Decatur Scout leaders and gave a talk on forest conservation.

Refuge employees aided in the preparation of a conservation display that formed a part of the Decatur flower show.

Service films have been procured for local group showings.

#### D. Refuge Publicity:

During the period, refuge employees have aided the sports editor of the Decatur Daily in the preparation of two feature news stories, one dealing with bald eagles, the other more general in nature and dealing with Wildlife Week.

The Outdoor column appearing in the Sunday edition of the Decatur Daily, and prepared by refuge employees, was continued throughout this period. Seven separate news items were prepared by refuge personnel during the period. All appeared in at least one local paper and some in as many as four.

The revised bulletin, "Farming for Waterfowl in the Southeastern United States," was submitted to the Regional and Central Offices.

Two articles, "Mongrel Waterfowl," dealing with waterfowl hybrids, and "Snipe," dealing with that bird, were prepared by refuge employees and submitted to the "Alabama Conservation." Both were accepted for future use. One issue of that magazine received this period carried favorable mention of this refuge on its goose management.

An article, "Golden-eye, Old Squaw, and Greater Scaup Records from the Tennessee Valley," was prepared by refuge employees, submitted to "Alabama Birdlife" and accepted for publication in that magazine.

The article, "The Use of Millets in Southeastern Waterfowl Management," was returned by the "Wildlife Journal," completely revised, rewritten, and resubmitted to The Journal during this period.

The Refuge Manager presented a paper on depredation and the Biologist presented a paper on new foods at the February Regional Conference in Athens, Georgia.

Local students have been aided in the preparation of class papers dealing with conservation in general and this refuge in particular.

Wheeler bird notes have been furnished for use in the magazine, "Audubon Field Notes."

#### E Hunting:

The only public hunt held this period was the February rabbit hunt, the first of its kind on the refuge. A special report covering this has already been submitted. Public reaction to this hunt was enthusiastic. Five hundred permits were issued. Only about one-third of the land area was opened, but hunters bagged 1,362 rabbits, 146 crows, 8 red foxes, and 5 gray foxes. There were no known violations, no fires, and no hunting accidents. As long as the refuge rabbit population remains near its present level, it is believed that this hunt should be continued.

F. Violations:

heavy patrol, including holidays and weekends, was continued throughout January and mid-February and was resumed during the rabbit hunt. Afterwards, it was reduced sharply and limited to intermittent patrol on weekends and in connection with other work. Violations were aimed mainly at waterfowl. There were no reports of night waterfowl-shooting during the period. Good cooperation was given the refuge by State conservation officers. There was minor livestock trespass, but no impoundments were made. Following is a list of the cases made or settled during this period:

<u>Name</u>	<u>Charge</u>	<u>Fine and Costs</u>
John A. Petty	Possession of firearms on refuge	\$15.00
Joseph E. Golden	" " " " "	29.00
Donald Wilkerson	Hunting on refuge	114.00,
	and 6 months jail sentence, suspended, but placed on two years probation.	

In addition to the above refuge cases, the following cases involving Federal violations were made by refuge employees on adjacent private land:

<u>Name</u>	<u>Charge</u>	<u>Fine and Costs</u>
Edwin Jones	Hunting waterfowl without licenses or M.B. stamp	\$20.00
O. H. Wright	Hunting waterfowl with gun holding more than three shells.	9.00
C. C. Humphrey	Hunting without licenses	14.00
William V. Balch	Shooting waterfowl after legal hours	19.50

## VII. OTHER ITEMS OF INTEREST

A new black-topped farm-to-market road is under construction that leaves State Highway 67, near Valhermosa Springs, and extends in a northerly direction to the refuge line near Sunnyside Landing. While this will be of minor value to the refuge, it will also channel much more public use into the Sunnyside Landing and Talley Bottoms localities and will probably increase the patrol problem there.

Under its late director, Claude Kelley, the Alabama Department of Conservation stopped both its coturnix quail stocking and its pen-raised wild turkey stocking programs. One coturnix quail from each of the three local counties, Morgan, Madison, and Limestone, were reported shot last season that wore Kentucky Conservation Commission leg bands and trailing plastic ribbons clipped into the skin of their backs.

Although the local goose kill declined last season, local interests in duck and goose hunting continues high. The increase in hunting right rentals on land adjacent to the refuge continues, as does the development of goose hunting areas and small duck pond impoundments.

Decatur housing continues to move eastward. Within the past few months, houses have been completed and others are under construction along the western refuge boundary adjacent to the old Murphree place. A year ago this was a section of the boundary that experienced heavy goose use.

Decatur now has a large sewage treatment plant under construction. When completed, this should stop all local dumping of raw sewage into this part of the reservoir.

Rocket development continues on Redstone Arsenal. At this refuge headquarters the rumble of the big rockets, a sound as new as the mid-Twentieth Century, often mingles with the clamor of the geese, a sound as old as the Pleistocene.

The Danville Sportsmen's Club procured a permit to live-trap quail from this refuge for restocking purposes. However, only 15 birds were caught.

5-4-59  
Date submitted

Charles M. Parker  
Charles M. Parker  
Refuge Manager

Approved by:

Lawrence S. Stevens

Regional Supervisor

May

1959

PHOTOGRAPHS



Photo No. 1. Snapshot of cannon net trap in action. Note small white dot in clump of trees in background. Shelter that is used as "firing position."



Photo No. 2. Canada geese using headquarters area. Snapshot taken from office door. Very cloudy. Boathouse and lower service buildings in left background.

PHOTOGRAPHS



Photo No. 1. Snapshot of cannon net trap in action. Note small white dot in clump of trees in background. Shelter that is used as "firing position."



Photo No. 2. Canada geese using headquarters area. Snapshot taken from office door. Very cloudy. Boathouse and lower service buildings in left background.



Photo No. 3. Same as No. 2. Just a little different angle.  
Boathouse in left background.



Photo No. 4. Trash and garbage dumping on refuge and Highway 67  
right-of-way near headquarters.





Photo No. 5. Same as photo No. 4. Note headq. bluds in background. Natural brush thicket and ample parking room off pavement made a natural spot for such indiscriminate use.



Photo No. 6. View after cleanup. With TD-18 'dozer, dug pit, buried trash, cleaned out "thicket" and shaped right-of-way with ditch to prevent parking. At this writing it appears we have this one isolated problem licked.

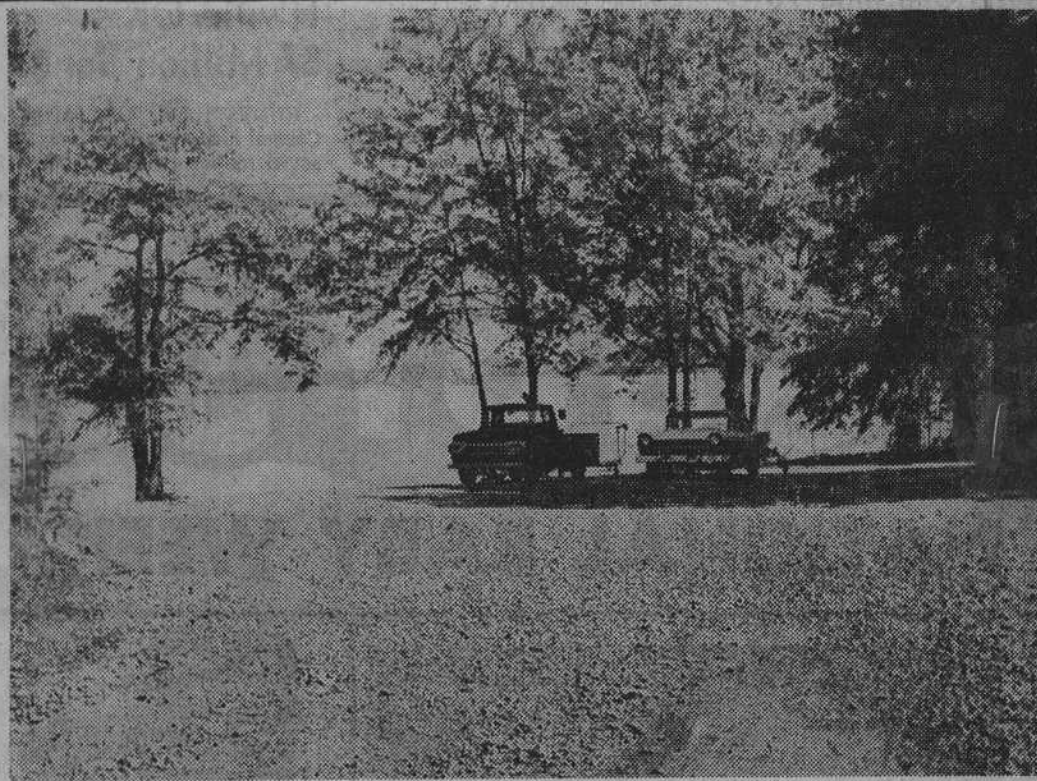


Photo No. 7. View of boat launching site on Limestone Bay.  
Note natural gravel bank. Reservoir pool level approximately  
550.00.



Photo No. 8. Boat launching site, continued. View of part of  
parking area behind scene in photo No. 7. All of area gravelled  
heavily.

THE DECATUR DAILY, SUNDAY MORNING, APRIL 26, 1959



**BOAT LAUNCHING SITE** — One of the finest boat launching sites in this area has recently been completed in Limestone County near choice fishing spots in Limestone Creek and Piney Creek, thanks to efforts by the Limestone County Sportsmans Club, with cooperation from Limestone County Road officials, and the Wheeler Wildlife Refuge. The site (a portion of which is shown above) known as Arrowhead Landing — and complete with a fancy sign to that effect — is reached by turning off the Mooresville Road a short distance West of Mooresville onto a graveled road which follows along Piney Creek. A large parking area was cleared out and graveled and the natural and gradual drop-off into the water was graveled thoroughly. An approach road was also graveled, all this together making for a picturesque and easy-to-use launching site. (Daily Photo)

Newspaper clipping. Self-explanatory

W A T E R F O W L

REFUGE Wheeler - Alabama

MONTHS OF January TO April, 1959.

(1) Species	(2) Weeks of reporting period									
	1	2	3	4	5	6	7	8	9	10
<b>Swans:</b>										
Whistling										
Trumpeter										
<b>Geese:</b>										
Canada	30,000	30,000	30,000	22,000	20,000	17,000	11,000	8,000	5,000	1,000
Cackling										
Brant										
White-fronted										
Snow	35	35	25	25	25	25	25	25	25	10
Blue	450	450	475	300	300	350	300	250	250	200
Other										
<b>Ducks:</b>										
Mallard	20,000	17,250	19,100	7,725	9,075	3,000	2,500	2,000	1,500	1,000
Black	2,500	2,400	2,500	3,000	1,500	500	300	400	500	500
Gadwall	1,000	950	500	500	400	100	75	200	100	200
Baldpate	6,000	5,500	3,000	2,500	1,500	300	500	400	300	100
Pintail	2,500	2,400	2,500	2,000	1,500	500	200	300	300	200
Green-winged teal	700	600	300	300	400	100	100	100	300	100
Blue-winged teal										
Cinnamon teal										
Shoveler	100	100	300	100	100	100	100	100	300	300
Wood	200	200	300	200	200	200	200	200	200	200
Redhead	25	25	50	0	0	0	0	0	0	0
Ring-necked	100	100	600	200	100	50	50	100	150	25
Canvasback	25	25	100	25	25	25	25	25	25	25
Scaup, Lesser	100	100	200	100	50	25	25	100	0	0
Goldeneye, Common	25	25	20	25	0	0	0	0	0	0
Bufflehead	200	150	100	100	50	0	0	0	0	0
Ruddy	25	25	50	0	0	0	0	0	0	0
Other: Hooded Merganser	100	100	200	200	100	100	75	50	50	25
Common Merganser	25	25	25	25	0	0	0	0	0	0
Red-breasted Merganser	25	25	25	25	0	0	0	0	0	0
<b>Coot:</b>	300	300	200	100	200	100	100	100	200	300



Cont. NR-1  
(Rev. March 1953)

WATERFOWL  
(Continuation Sheet)

REFUGE Wheeler - Alabama MONTHS OF January TO April, 1959.

(1) Species	(2) Weeks of reporting period								(3) Estimated waterfowl days use	(4) Production : Broods: Estimate : seen : total	
	11	12	13	14	15	16	17	18			
Swans:											
Whistling											
Trumpeter											
Geese:											
Canada	600	350	200	150	100	75	50	25	1,228,700		
Cackling											
Brant											
White-fronted											
Snow	5	2	0	0	0	0	0	0	1,834		
Blue	100	10	0	0	0	0	0	0	23,345		
Other											
Ducks:											
Mallard	600	400	20	100	75	50	50	50	591,725		
Black	300	200	100	50	25	25	25	25	103,800		
Gadwall	0	0	0	0	0	0	0	0	28,175		
Baldpate	0	0	0	0	0	0	0	0	140,700		
Pintail	100	0	0	0	0	0	0	0	87,500		
Green-winged teal	0	0	0	0	0	0	0	0	21,600		
Blue-winged teal	0	0	0	0	100	300	500	300	6,600		
Cinnamon teal											
Shoveler	300	400	300	150	150	50	0	0	20,650		
Wood	200	200	200	100	150	200	200	200	23,650		
Redhead	0	0	0	0	0	0	0	0	700		
Ring-necked	0	0	0	0	0	0	0	0	10,325		
Canvasback	25	50	0	0	0	0	0	0	2,800		
Scaup, Lesser	0	0	0	0	0	0	0	0	4,900		
Goldeneye, Common	0	0	0	0	0	0	0	0	665		
Bufflehead	0	0	0	0	0	0	0	0	4,200		
Ruddy	0	0	0	0	0	0	0	0	700		
Other: Hooded Merganser	0	0	0	0	0	0	0	0	7,000		
Common Merganser	0	0	0	0	0	0	0	0	1,050		
Red-breasted Merganser	0	0	0	0	0	0	0	0	700		
Coot:	200	150	75	700	600	500	400	300	31,975		

(over)

3-1751

Form NR-1A

(Nov. 1945)

## MIGRATORY BIRDS

(other than waterfowl)

Refuge Wheeler - AlabamaMonths of January to April 1949.

(1) Species	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production			(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. <u>Water and Marsh Birds:</u>										
Common Loon	-	-	5	Jan.15	1	Feb.15	0	0	0	10
Pied-billed Grebe	-	-	100	Mar.20	Still present		0	0	0	175
Great Blue Heron	Permanent resident		300	Jan.20	-	-	0	0	0	400
American Egret	1	Jan.23	5	Apr. 30	Still present		0	0	0	10
II. <u>Shorebirds, Gulls and Terns:</u>										
Ring-billed Gull	-	-	1200	Jan. 1	Still present		0	0	0	2500
Herring Gull	-	-	350	Jan. 1.	2	Apr.15	0	0	0	500
Greater Yellowlegs	5	Mar.27	250	Apr.10	Still present		0	0	0	1000
Lesser Yellowlegs	8	Mar.27	300	Apr.15	Still present		0	0	0	1500
Wilson's Snipe	-	-	50	Mar.20	Still present		0	0	0	300
Killdeer	Permanent resident		800	Jan.15	-	-	0	0	0	2000
Hudsonian Curlew	1	Feb.13	1	-	1	Mar.5.	0	0	0	1

(over)

## UPLAND GAME BIRDS

Refuge Wheeler - Alabama Months of January to April, 1959

[illegible]

3-1754  
Form NR-4  
(June 1945)

SMALL MAMMALS

Refuge Wheeler - Alabama Year ending April 30, 1959

(1) Species	(2) Density		(3) Removals					(4) Disposition of Furs						(5) Total Popula- tion
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control *	For Re- stocking	For Re- search	Share Trapping			Total Refuge Furs Shipped	Furs Donated	Furs Destroyed	
								Permit Number	Trappers Share	Refuge share				
Gray squirrel,	Hardwoods and pines, 7,000 acres.	72	257	0	0	0	0	0	0	0	0	0	0	10,500
Fox squirrels	Upland hardwoods and pines, 300 acres.	20.	0	0	0	0	0	0	0	0	0	0	0	15
Beaver	Stream banks, 2½ mi.	0.	0	0	0	0	0	0	0	0	0	0	0	10
Muskrat	Marginal shoreline, 1200 acres.	5.	0	0	0	0	0	0	0	0	0	0	0	240
Woodchuck	All types, 600 acres	30.	0	0	0	0	0	0	0	0	0	0	0	20
Cottontail rabbit	All types, 19,000 acr.	4.	125	0	0	0	0	0	0	0	0	0	0	4,750
Swamp rabbit,	All types, 5,000 acr.	5.	140	0	0	0	0	0	0	0	0	0	0	1,000
Mink	Streams, sloughs, 275 mi.	-	0	0	0	0	0	0	0	0	0	0	0	80
Striped skunk	All types, 19,000 acr.	33.	0	0	0	0	0	0	0	0	0	0	0	570
Raccoon,	All types, 19,000 acr.	20.	154	0	0	0	0	0	0	0	0	0	0	950
Opossum	All types, 19,000 ac.	15.	190	0	0	0	0	0	0	0	0	0	0	1,266
Gray fox	All types, 19,000 ac.	70.	26	0	0	0	0	0	0	0	0	0	0	271
Red fox	All types, 19,000 ac.	115.	13	0	0	0	0	0	0	0	0	0	0	165
Flying squirrel	Woodland - hardwood or pines 7,000 acres	10.	0	0	0	0	0	0	0	0	0	0	0	700

\* List removals by Predator Animal Hunter

\* List removals by Predator Animal Hunter

REMARKS:

Reported by \_\_\_\_\_



3-1570  
NR-8a

REFUGE GRAIN REPORT

Refuge Wheeler - Alabama

Months of January thru April 1959.

(1) VARIETY	(2) ON HAND BEGINNING OF PERIOD	(3) RECEIVED DURING PERIOD	(4) TOTAL	(5) GRAIN DISPOSED OF				(6) ON HAND END OF PERIOD	(7) PROPOSED USE		
				TRANS- FERRED	SEEDED	FED	TOTAL		SEED	FEED	SURP.
Corn	300	0	300	0	0	300	300	0	0	0	0
Milo	435	0	435	0	0	30	30	405	405	0	0
Japanese Millet	430	0	430	0	25	0	25	405	405	0	0
Brown-top Millet	355	0	355	0	15	0	15	340	340	0	0
Combine Corns	37	0	37	0	25	7	12	25	25	0	0
Guar Pigs	2	0	2	0	0	2	2	0	0	0	0
Soybeans	265	0	265	0	0	0	0	265	265	0	0

(8) Indicate shipping or collection points Decatur, Alabama

(9) Grain is stored at Wheeler Refuge headquarters.

(10) Remarks All feeding done in connection with live-trapping. All seed on hand to be used for  
deistered planting next period.