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WHEELER NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

JANUARY - APRIL 1960

I. GENERAL

A. Weather Conditions

<u>Month</u>	<u>Precipitation</u>	<u>Max. Temp.</u>	<u>Min. Temp.</u>
January	5.81 in.	74	16
February	2.81 in.	70	12
March	8.55 in.	75	11
April	2.01	88	38

January alternated between rains and hard freezes. Temperatures dropped to near the zero mark and, on several occasions, all refuge backwater except spring holes and the deeper channels iced tightly. Early February was much the same. On February 12 and 13, the heaviest snowfall since the establishment of the refuge struck the Tennessee Valley. Decatur recorded 11 inches of snow, but the surrounding countryside showed up to 16 inches on level land, much deeper in drifts. This was followed by a series of lighter snows, ranging from an inch to four inches, that fell at from one to two week intervals throughout the remainder of February and the month of March. The refuge escaped the damaging ice storm that affected many parts of the South. Cold weather continued until the end of March, but changed abruptly with the beginning of April. April temperatures were mild and rain was limited to occasional showers.

Comparing the weather of the period with that of this same period last year, both snowfall and rainfall were far heavier from January through March, and temperatures were lower. However, April was both milder and less rainy.

The cold and wet conditions of January, February, and March made farm work impossible and limited field work of all types. However, the drier weather of April permitted full-scale farm work and allowed the refuge work crew to complete badly-needed road and other field work. By the end of the period approximately 50 per cent of the refuge row-crop land had been broken and 20 per cent of this had been planted.

## B. Habitat Conditions

### 1. Water

#### a. General Reservoir Levels

At the beginning of the period the general reservoir level stood between the 550 and 551 foot contours. Although rains came regularly, they were not heavy and there was no wide range of fluctuation.

There have been no river floods for the past two years. Reservoir filling began in mid-March. The bank-full level was reached during the third week of April and it remained full until the end of the period.

#### B. b. Dewatered Units:

At the beginning of the period the White Springs unit gauge was at about the 553.5 mark and the Rockhouse-Buckeye-Blackwell unit stood at the 554.3 mark.

Rainfall brought the White Springs unit up to the 555 level, or slightly above, and the Rockhouse-Buckeye-Blackwell unit to near the 556 foot mark. Flood gates were opened in mid-February and both units dropped about two feet before they stabilized with rising river levels in early April and gates were again closed. At the end of the period, the White Springs gauge read 554.9 and the Rockhouse-Buckeye-Blackwell gauge read 554.8. Pumping is scheduled to begin on May 2.

## 2. Food and Cover

At the beginning of the period some milo, millet and soybeans remained in dewatered units, along with a small amount of corn and milo and fair amounts of soybeans on upland fields. All corn, millet and milo had been cleaned up by late January. The remaining soybeans were consumed during the snow and bad weather of February.

Although the green forage acreage was below normal and geese made regular use of that available, only a few of the more heavily grazed locations were damaged. Forage proved sufficient to carry geese through the entire winter and early spring.

## II. WILDLIFE

### A. Migratory Birds

#### 1. Geese

##### a. Blue Geese and Snow Geese

An airplane count on January 8 showed 800 blue geese and 50 snow geese using the refuge.

The next day, a count by Julian and Hanson revealed only 50 blue geese and snow geese, but the count was admittedly only partial. On January 26, another refuge aerial count showed 700 blues and 40 snows present. No further counts were made, but blue and snow goose numbers began dwindling in early February and these birds were gone by mid-March.

In January, a goose was noted several times feeding in company with Canadas that had a normally-colored Canada goose body but had the head and upper part of the neck white. This may have been a blue goose - Canada hybrid, possibly only a partially albinistic Canada. A single snow goose and about a dozen blue geese were shot locally during the hunting season. No blue or snow geese were trapped or banded.

b. Canada Geese

The January 8 aerial count showed 28,000 Canada geese present. The January 9 count, by Julian and Hanson, which was admittedly only partial, showed 22,000 birds. The January 26 count gave only 12,000. Numbers dropped rapidly during late January and early February, and by mid-February only 3,500 were estimated present. These dropped to a few hundred in March and, by the end of the period, only a dozen or so, probably all cripples, remained.

The usual careful effort was made to determine the local goose kill. The tally showed 1,075 birds known and estimated to have been killed in the Wheeler reservoir locality, a drop of 24 per cent below the kill of the 1958-59 season.

Considering predation, crippling, etc., the total removal for the fall and winter is estimated at 1,475, or slightly more than five per cent of the peak population.

Again, a strange gray goose was seen several times during the period in company with Canada geese, usually in the White Springs locality. This bird was carefully checked by Hulse, Dr. Maurice Baker, Dr. A. E. Pearson, and others, and pronounced nothing more than a feral domestic goose.

Comparing the goose situation with that of the same period last year, blue geese and snow geese showed some increase, but Canada goose numbers dropped seven per cent. Goose-days' usage dropped even more, as birds began to move out much earlier than usual despite an above-average amount of late food present and the severity of the late winter. One hundred twenty-six Canada geese were banded and released during the 1959-60 season.

## 2. Ducks

The 1959-60 duck peak came with the January 8 aerial count. This showed about 40,000 present. By the time of the January 26 count, numbers had dropped to only 5,000. They continued to dwindle, and only about 3,000 were present in mid-February.

Black ducks continued to make up an above-normal percentage of those present, with this species sometimes occupying third place, sometimes fourth. The spring blue-winged teal flight seemed normal, or slightly above. There were no other noticeable species changes.

Although the 40,000 count for this period exceeds the 30,000 count taken at about the same time in 1959, this indicates a later peak, not an increase. For the 1959-60 season, the Wheeler duck count was down over 30 per cent. Duck days dropped even more drastically, despite reasonably good seed supplies and a severe late winter. Hunting, during the latter part of the season was extremely poor. The Wheeler reservoir duck kill for the 1959-60 season is estimated at only about 5,000 birds, a drop of 40 to 50 per cent below that of the previous season. Throughout the 1959-60 season, 497 mallards, 122 baldpates, 24 pintails, and 2 black ducks were trapped, banded, and released.

### 3. Coots

Few coots were present until spring migration and even then numbers were not large. Comparing figures with those of this same period last year indicates a decline of about 60 per cent.

### 4. Doves

Dove numbers seem somewhat lower than those for this period last year, definitely lower than the high population of three years ago. No Trichomoniasis has been noted or reported. Nesting began in late March and early April and was common throughout late April.

### 5. Shorebirds

Despite the severe winter, some greater yellowlegs and least sandpipers were noted throughout January and February. A normal shorebird flight passed through during April. Snipe numbers appeared normal. A marbled godwit, the second record for the refuge, was noted on March 27.

A lone whimbrel, or Hudsonian curlew, was noted on February 6 and 7.

B. Upland Game Birds

Bobwhite numbers continue rather high. The Morgan County Sportsmen's and Conservation Association obtained a permit to livetrapped quail from the refuge, but bad weather hampered trapping operations and only a dozen were caught. These were released on private land.

In February 1959, 25 pen-raised wild turkeys were turned loose on the Redstone Arsenal reservation by the Alabama Conservation Department. During the following spring and summer these brought off several broods of young. Now, about 30 adult turkeys are estimated using the south and southwestern parts of the Redstone reservation. Since the majority of the water, woods and brush remaining on the Arsenal are on refuge land, these birds are using on and off the refuge area.

C Big Game Animals

During February and March the Alabama Conservation Department released 34 deer on the Redstone Arsenal reservation. Twenty-four of these had been livetrapped from a private area on the Tombigbee River, below Demopolis. Ten were procured from a surplus held by the Birmingham zoo. Three of the deer promptly died, probably from trapping or shipping injuries. The remaining 31 include four bucks. The majority of the does are pregnant. These deer were released on the southern and southwestern parts of the Redstone reservation and are using on and off refuge land. There have been several reports of these deer having been seen on both refuge and private land on the south side of the Tennessee River between Slaughter's Landing and the mouth of Cotaco Creek.



D. Fur Bearers, Predators, etc.

Despite the severity of the late winter, there appears to be a good carry-over of gray squirrels, swamp- and cottontail rabbits.

Beavers are continuing to increase. In addition to small colonies on Beaver Dam Creek and at the mouths of Madden Branch and Cotaco Creek, there are now several beavers using along the lower part of Limestone Creek proper, just north of its entrance into Limestone Bay.

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

Although there were two good golden eagle records in December, there have been none since. From six to eight bald eagles used the refuge during January, February and early March. All wore immature plumage. No changes in populations or behavior among the hawks and owls using the refuge were noted this period.

A special report dealing with crow control efforts has already been prepared and submitted. One small roost shoot was held in late January in the Edmondson slough vicinity. A decline in crow use of the refuge has been noted following the shooting up of roosts, and it is believed that this type of control is well worthwhile.

Swarms of the blackbird group continued to use this locality through late winter and early spring. The unusual numbers of these birds caused considerable local comment. There seems no doubt that blackbirds have increased considerably here, with redwings and starlings making up the bulk of the concentrations.

F. Other Birds

The refuge yellow-crown night heron nesting colony, located between Triana and Blackwell Swamp and discovered last summer, was revisited on April 8. No incubation was in progress at that time, and at least 25 adults were present, probably more.

G Fish

Bad weather throughout January, February, and most of March limited fishing, but the mild weather of late March and April brought fishermen out full force. To date both sport and commercial catches have been light. The majority of the crappie caught this spring have been small, and TVA biologists attribute this to above-normally successful crappie spawning in 1958 and 1959.

H. Reptiles

No change in refuge reptile life have been noted this period.

I. Disease

No Trichomoniasis or other disease has been noted or reported among refuge wildlife this period.

### III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development

1. Roadwork

The unusually cold and wet weather of the first three months of the period prevented heavy equipment use. The wet weather of the past year and the heavy freezes of the winter left roads in poor condition. With the coming of drier weather in April, full attention was turned to repairing roads and restoring them to good usable conditions.

In cooperation with the Limestone County Road Commission, the remaining ungravelled stretch of river bank road between Blackwell Swamp and Rockhouse landing was thoroughly graveled. This now gives us a solidly graveled road system from the entrance of the road into the refuge north of Rockhouse landing to its exit from the refuge on the western side of Blackwell Swamp, a distance of about 6.5 miles.

During the wet weather period, the refuge work crew removed overhanging limbs and brushed back the rights-of-way of many miles of refuge road systems. In the same operation, dozens of culverts were cleaned out and their entrances ditched. This treatment was given the road along the western side of Limestone Bay and the northern side of Yellow Cal Slough, the road into the lower Limestone Peninsula, the river bank road from near Rockhouse Landing to its exit on the western side of Blackwell Swamp and the entire south boundary line truck trail.

The entire south boundary line truck trail from its point of departure from Highway 67 to its terminus near Martin's Branch was thoroughly reworked and graded. One stretch of this road, about 200 yards, was actually located on private land. This land has recently sold, and it was necessary to relocate this length of the truck trail inside the refuge boundary and rebuild it. This was completed. In addition, several spurs leading from the truck trail to agricultural areas were thoroughly reworked and regraded. Several culverts were repaired and several new culverts were installed.

The spur road leading from Highway 67 to the pecan orchard field on Flint Creek Island was completely reworked and regraded and an entrance barrier was erected.

The boundary line road from Highway 67 south along the east side of Flint Creek to the Dancy Bottoms was also thoroughly reworked, regraded and new culverts were installed.

In cooperation with TVA, a sturdy gate was erected at the Highway 31 entrance to the White Springs dike. A cable-type barrier was also erected at the Highway 20 entrance to the spur road in the Whiteside vicinity.

## 2. Soil and Moisture Work

Considerable soil and moisture work was done during the period. In February, 29,000 seedlings, including 1,000 Arizona cypresses, 8,000 slash pines and 20,000 loblolly pines were planted on eroding sites or unused fields along the southern side of Garth Slough and in the Whiteside vicinity.

Many refuge fields were tested for soil acidity. Ninety-two tons of lime were purchased and spread on 92 acres of land on Beaver Dam Peninsula. Forty tons were purchased and spread on the 20-acre field lying between the Rockhouse pumps and Brake Springs run. One hundred twenty tons were bought and spread on 60 acres of the river bank land between Brake Springs run and the Buckeye channel. In all cases, cooperators have matched or will match these purchases with additional amounts on refuge fields.

A D-7 tractor and heavy Rome harrow were used to deep plow approximately 100 acres of the White Springs Islands. This was done in an effort to eliminate small underground stumps and old root systems left by clearing operations several years ago.

About 25 acres of Flint Creek Island land was disced during the period for Johnson grass control.

In accordance with the farm plan covering the Poplar Ridge and Martin's Branch localities, a ditch draining a large basin area of the main Poplar Ridge field was completely reworked, extended, deepened, and its banks sloped to permit better use of farm machinery.

### 3. Headquarters Development and Maintenance

Asbestos shingles of the roofs of headquarters buildings had become badly faded, streaked and unsightly. The roofs of the office, oil house, gasoline canopy, and front half of the service building were cleaned and painted an apple green. Through the years efforts have been made to locate a paint designed for this purpose. Paint used is an exterior latex type. Present painting is considered experimental and, if satisfactory, will be continued as time and money permit until all headquarters roofs have been covered.

Shrubbery was pruned, grounds kept mowed, and general cleanup practiced throughout the period. The headquarters road system was regraded.

### 4. Vehicle and Equipment Maintenance and Repair

The bad weather of the early part of the period was used to put equipment in proper shape to carry through the spring and summer work period. All tractors, vehicles, plows, harrows, seeders, etc., were thoroughly checked, cleaned, repaired, and worn parts replaced.

A 1951 Ford 1½-ton stakebody truck was procured from Tennessee Refuge, cleaned, repaired, repainted, and readied for use.

The dump bed and hydraulic system were removed from the old Diamond T truck and used to convert the International stake truck to a stake-dump type. The Diamond T has now been set aside for transfer and upgrading. The lowboy trailer was repaired and two new tires were installed and the brake system reworked. The motor patrol grader was worked over and a new brake system installed. The Dodge pickup was worked over and the bed was repainted. The Galion grader and the heavy Rome plow were repainted.

#### 5. Miscellaneous

Three official trips were made during the period. The State nursery at Opelika was visited and seedlings picked up for soil and moisture planting. A trip was made to the Tennessee Refuge to procure the Ford stake truck held there, and a trip was made to the Memphis Engineers Depot for surplus barbed wire.

Surplus corn was shelled and transferred. Heavy patrol was maintained until the breakup of waterfowl concentrations. Some boundary line posting was done. Waterfowl trapping and banding were continued through early February. The rabbit hunt was closely supervised. All farming agreements were renegotiated and a close check kept on spring farm work. Visiting groups were guided over the refuge.

#### B. Plantings

##### 1. Aquatic and Marsh Plants

No plantings of this type were made this period.

##### 2. Trees and Shrubs

One thousand Arizona cypresses, 8,000 slash pines, and 20,000 loblolly pines, all one-year stock, were purchased from the State and planted in early February.

Heavy snow, ice and hard freezes during the latter half of February and most of March may have done some damage to these newly planted seedlings, although it is too early to determine the survival rate.

### 3. Upland Herbaceous Plants

Except for those plantings made by cooperators as part of the farming program, there have been no plantings of this type this period.

### 4. Cultivated Crops

Although a below-normal acreage of small grain, ryegrass and fescue was planted last fall, due to unusually wet conditions - and this has experienced an unusually severe winter, prospects for a good harvest appear promising. Some oats were ruined or damaged by freezes, and some of the best located fields suffered some goose damage, but goose damage, in general, was much less severe than in recent years. Young wheat looks especially promising. Wheeler will probably produce ample seed of this type for its own use, perhaps some for transfer.

Although farmers could do little until early April, good progress was made during that month. A high percentage of the row crop land has been broken. Considerable corn and a few soybeans have already been planted and are up to good stands.

Every effort was made to rent out all available Wheeler crop land, but some remains. The uprented area includes 110 acres on Flint Creek Island, 17 acres on Winsmore Slough, and 12 acres along the eastern side of the Village Creek bottom.

The latter two places are relatively unimportant, but the Flint Creek island land is strategically located. Until a cooperator can be found, the only method of handling seems to be to disc this repeatedly through the summer for Johnson grass control, then sow it to green-stuff for cover crop and goose forage in early fall.

If wheat acreage restrictions are still in effect this fall, Wheeler will be limited to a total planting of 61.9 acres.

The swing to Lee soybeans continues. There will be a definite increase in the refuge soybean acreage again this year.

Two recent trends in fertilizer use are developing locally which affect both private and refuge land. One is the increased broadcasting, rather than drilling, of fertilizer on row crops. The other is the increasing tendency of farmers to buy and handle fertilizer in bulk, rather than in sacks.

Some 1960 farming totals may be of interest. This year, Wheeler has 71 cooperative agreements covering a total of 5,675 acres. Of this, 3,785 acres will be planted to row- and broadcast crops. There are no cash row-crop rentals.

## C. Collections and Receipts

### 1. Seed or Other Propagules

Forty pounds of Funk's hybrid corn and 112 pounds of Pfister's hybrid corn were donated during the period by those associations. These are special low-eared hybrids that will be used for experimental plantings.



There were no other receipts of seed or planting stock during the period except the 29,000 seedlings purchased from the State nursery and already discussed above.

2. Specimens

Two Canada geese, both found dead on the refuge, were contributed to the Leighton School for use as study specimens. A third, also found dead, evidently from crop impaction, was turned over to the Alabama Cooperative Wildlife Research Unit for a post-mortem report, but to date this report has not been received. These were the only specimens collected during the period.

D. Control of Vegetation

No herbicides have been used during the period. Approximately 25 acres of Flint Creek Island land, not under cooperative agreement, was disced during the latter part of the period to control Johnson grass.

E. Planned Burning

No burning of this type was done this period.

F. Fires

Wet weather from early January until past mid-March kept fire hazard low. However, drier weather in late March and through most of April, coupled with rank dead vegetation and heavy fishing use, resulted in five fires fought by refuge personnel. These burned over a total of 57½ acres of grass and brush land. While undesirable, these did little actual damage.

## IV. RESOURCE MANAGEMENT

A. Grazing

There are five cash 1960 pasture rentals totaling 54 acres. These netted a total revenue of \$107.00. In addition, the use of a 60-acre pasture is donated to the Morgan County Tuberculosis Sanatorium. There are 1,631 acres of pasture included in cooperative agreements. This gives a total of 1960 pastured area of 1,745 acres, cash, donated, and cooperative.

The severe cold that lasted from January through late March kept pastures in poor condition and pasture use low. However, the warm weather and regular showers of late March and the month of April have restored pastures to excellent conditions.

B. Haying

There is only a single cash hay rental this year, 11 acres that returned a net revenue of \$44.00. However, 259 acres of hay crop are included in cooperative agreements. No hay was cut this period.

C. Fur Harvest

There was no fur harvest this period.

D. Timber Removal

No timber products were sold this period.

E. Commercial Fishing

Contacts with commercial fishermen indicate that catches have been below normal throughout the period.

F. Other Uses

With the transfer of title from TVA to the Service, the refuge has taken over the rental of the single concession still located on it.

This is a small boat-rental concession, more a public service than a means of livelihood. A \$20.00 annual charge was assessed and collected.

The issuance of shell cookout permits has also passed to this office. Six free-use cookout permits have been issued this period. The 1959 refuge shell-catch data has been made available by TVA. A total of 940 tons of graded white shells were sold from refuge waters last year and brought an average price of \$67.00 per ton. An estimated 940 ounces of slugs were also sold at an average price of \$6.00 per ounce. The total value of the refuge shell catch is set at approximately \$62,000.00. This year, shell prices have again increased. Graded white shells are bringing \$80.00 per ton on the bank, \$86.00 loaded on railroad cars. "Three ridges" and "Elephant ears" bring \$30.00 per ton. There is no sale for colored shells. Slugs sell for \$5.00 an ounce. These improved prices are causing a marked increase in shelling activity. Good catches are reported to date.

The Limestone County Road Commission made regular use of the gravel pit, located near Mooresville, until early April. Use will probably not be resumed until late this year.

#### V. FIELD INVESTIGATION OR APPLIED RESEARCH

Just prior to the beginning of the refuge rabbit hunt, Alabama Conservation Department officials contacted refuge personnel and stated that the State had just begun a rabbit study and hoped to use the refuge hunt as a means of collecting data on northern Alabama rabbits.

Refuge employees cooperated as fully as possible. A checking station was set up in Mooresville, another at the junctions of Highways 40 and 67. State research men manned these throughout the hunt, examining 20 per cent of the total kill. Findings were made available to the refuge. These showed 29 per cent of all female cottontails pregnant, 81 per cent of all female swamp rabbits. After refuge employees had tabulated data from returned hunt permit questionnaires, the questionnaires were forwarded to the Conservation Department for further analysis. It is understood that the State plans to continue to use these rabbit hunts as a method of procuring data at least for several years.

Following instructions from the Regional Office, the refuge is experimenting with low-eared corn hybrids in an effort to test the production of these against that of the more commonly used hybrids and to determine whether or not waterfowl can use these effectively without special manipulation. The Funk Association contributed 20 pounds each of Nos. 70 and 72, the Pfister Association four half-bushel lots of No. 12145. Three of these experimental plots have already been planted. The others will be soon. Detailed records are kept of the row width, spacing, moisture condition, rate of fertilization, location, planting date and the strain of corn used nearby, and a careful check will be kept on these plots throughout the remainder of the year.

## VI. PUBLIC RELATIONS

A. Recreational Uses

There was little recreational use, due to inclement weather, from January until late March. With the coming of warm, fair weather in April, heavy fishing use began. Fishermen have made good use of Arrowhead landing, a public boat landing constructed on the western side of Limestone Bay last year. A second boat landing is now under construction through cooperation with the Madison County Road Commission. The gravel extension of the Triana blacktop, which touches the refuge line at a point midway between Triana and Blackwell Swamp, has been extended to the river bank. This will be widened into a parking area and the road and parking area will be well graveled. This will provide ready access to the river for the people of the Huntsville area and surrounding countryside. At this point there are no sloughs and there is little waterfowl use. By providing ready access there, this may divert much of the fishing traffic from the road along the western side of Blackwell Swamp and reduce waterfowl interference there. This improvement was made in accordance with the approved recreational development plan.

B. Refuge Visitors

Cold, wet weather reduced the number of groups visiting the refuge this period. However, the following were guided about by refuge personnel:

<u>Date</u>	<u>Group</u>	<u>Number</u>
Jan. 22, 1960	Auburn Game Management Class	9
Jan. 25, 1960	Birmingham Audubon Group	13
Apr. 11, 1960	Tuscumbia School Science Class	33
Apr. 14, 1960	Decatur Brownie Scouts	13
April 20, '60	Decatur Brownie Scouts	9

#### Official Visitors

Jan. 16, 1960	Mr. John Langenback, Federal Aid, Central Office
Jan. 18 "	Game Management Agent C. H. Richardson, Montgomery.
Jan. 22 "	Dr. A. M. Pearson, Professor, Auburn University
	Dr. Maurice Baker, Leader, Wildlife Coop. Unit, Ala.
	Mr. Lawrence S. Givens, Reg. Refuges Inspector, Atlanta.
	Mr. C. J. Fairer, Sanitary Engr., TVA, Wilson Dam.
	Mr. Lucian Reynolds, Reservoir Property Div. TVA.
Feb. 9, '60	Mr. Walter A. Gresh, Regional Director, Atlanta.
Feb. 16, "	Mr. Lawrence Miller, Chief, TVA Fish and Game Div.
	Mr. John Chance, Ass't. Chief, TVA Fish and Game Div.
	Mr. Reynolds W. Thrasher, State Biologist, Montgomery
	Mr. Nix, State Refuge Manager.
Feb. 29, '60	Mr. Tom Mullin, Pres. Rome Plow Co., Cedartown, Ga.
Mar. 20-24, '60	Mr. Victor W. Kay, Ass't. Reg. Refuges Insp. Atlanta.

#### C. Refuge Participation

The Manager has attended all weekly meetings of the Decatur Lions Club, is currently serving on the Board of Directors, and has attended the bi-monthly director's meetings.

The Biologist made a talk to the Trellis Garden Club of Decatur in early January. On March 28 he made a talk on the refuge to a Chicago chapter of the Toastmaster's Club. On April 8 he made a talk to an organizational meeting of the Lawrence County Sportsmen's and Conservation Association in Moulton. April 30 the Biologist and Depreast attended the spring meeting of the Alabama Ornithological Society, held at the Monte Sano State Park.

We are very proud of the fact that Biologist Atkeson received one of the American Motors' Conservation Awards during the period.

The refuge procured several Service films for local showings during the period.

D. Refuge Publicity

Ten separate news items were written by refuge personnel during the period. All appeared in at least one Valley newspaper and some in as many as four.

The weekly Outdoor column, written by refuge personnel, was continued in the Decatur Daily throughout the period, although this was written by guest columnists throughout the month of March.

The December-January issue of ALABAMA CONSERVATION carried the short article "Mongrel Waterfowl" prepared by refuge employees. In addition, various issues of this magazine have made frequent favorable mention of the refuge.

An issue of ALABAMA BIRDLIFE received this period carried the article "Plover Records from the Mid-Tennessee Valley," prepared by refuge personnel. In addition, all issues received this period have contained the area bird column written by refuge employees.

Two short articles: "Ruddy Turnstone Records from Morgan and Limestone Counties" and "Knot and Dowitcher Records from Wheeler Refuge and Adjoining Areas" were prepared during the period by refuge personnel and submitted to ALABAMA BIRDLIFE for future publication.

Bird records were submitted for use in AUDUBON FIELD NOTES.

E. Hunting

The only hunting during the period included a two-day crow roost shoot in late January and the refuge rabbit hunt held February 15-20.

Special reports covering both have already been submitted.

Despite the worst weather ever experienced on Wheeler hunts, the rabbit hunt netted 1,261 rabbits, 6 red foxes, 8 gray foxes, and 176 crows.

#### F. Violations

Regular patrol was continued until late January, then resumed throughout the mid-February rabbit hunt. Since, patrol has been limited to that in connection with other work. Since the close of the hunting season, violations have been minor or non-existent. There was some livestock trespass, though no impoundments have been made. No game law violation cases have been made on private land adjacent to the refuge. Good cooperation has been received from nearby State conservation officers. The following cases were made or settled during this period:

<u>Name</u>	<u>Charge</u>	<u>Fine and Costs</u>
Billy Joe Smith	Hunting on refuge	\$25.00
John Robin Thomas	" " "	25.00
Chester Chensault	Possessing firearms on refuge	25.00
J. C. McMurtry	" " " "	25.00
Barry Redding	" " " "	32.00
William Herchanhahn	" " " "	32.00
Leon Herchanhahn	" " " "	32.00
Howard Hogland	" " " "	32.00

#### VII. OTHER ITEMS OF INTEREST

The J. H. Owen property which bounded the refuge along its entire western and northern sides has been bought up by a Decatur group and subdivided into building lots. This will mark the first sizable Decatur subdivision to be placed on the eastern side of the Flint Creek embayment. The end result will be another line of dwellings along a long stretch of refuge boundary.



The new Decatur sewage disposal plant was placed in operation during the period. This is a long-needed step in clearing up the local pollution problem.

The Watkins place, a moderate-sized farm located along the refuge boundary between Blackwell Swamp and Triana, has recently been sold to the Huntsville Development Association. According to local rumor, a large chemical plant will soon be located there. Only a narrow strip of refuge land separates this property from the Tennessee River. Demands for pipe and sewage line easements, docking facilities, etc., are almost certain to follow.

With the transfer of land title from TVA to the Service, five small tracts were eliminated from the refuge area. These include a tract lying between Highways 40 and 67, a small tract on the eastern side of the boundary line truck trail a short distance north of Highway 67, two small tracts on the northern side of Highway 20, and a small tract along the eastern bank of Limestone Creek, north of the old Mooresville - Swanscot Road. There are many other small areas jutting across heavily-traveled public roads that should be deleted from the refuge. Such tracts have absolutely no waterfowl value, little wildlife value of any type, and their inclusion is a source of continuous embarrassment.

5/5/60  
Date submitted

*Charles M. Parker*  
Charles M. Parker  
Refuge Manager

Approved:

*Lawrence S. Lisenard*  
Regional Refuge Supervisor

MAY 9 1960

PHOTOGRAPHS



Photo No. 1. River bank protection - Adjacent east end of White Springs dike - in cooperation with T.V.A.



Photo No. 2. Section of White Springs dike - reservoir side-riprapped with crushed rock to correct or hold down erosion from wave action. Also, done in cooperation with T.V.A.



Photo No. 3. Rebuilding section of Flint Creek Island road system - adjacent old airport strip.



Photo. No. 4. Same as No. 3. Job completed with field edges shaped for easier and more efficient use of farm machinery.



Photo. No. 5. Poor photography, but snap shot of water levels and flooded milo in White Springs area in late December.



Photo No. 6. Same quality photography as No. 5, and same view: and time.



Photo. No. 7. Milo field in White Springs area - same as  
photos 5 and 6,- practically inundated, in  
mid-January.



WATERFOWL  
(Continuation Sheet)REFUGE Wheeler RefugeMONTHS OF January TO April, 1960.

(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	1,500	300	250	100	50	25	20	20	745,155	
Cackling Richardson's	-	-	-	-	-	-	-	-	2,940	
Brant										
White-fronted										
Snow	-	-	-	-	-	-	-	-	1,995	
Blue	6	-	-	-	-	-	-	-	35,042	
Other										
Ducks:										
Mallard	200	200	150	100	50	50	50	50	312,160	
Black	75	50	25	25	20	20	20	20	72,035	
Gadwall	-	-	-	-	-	-	-	-	8,995	
Baldpate	50	50	25	-	-	-	-	-	80,745	
Pintail	50	25	-	-	-	-	-	-	125,475	
Green-winged teal	50	25	-	-	-	-	-	-	10,710	
Blue-winged teal	-	50	100	500	400	300	200	200	11,250	
Cinnamon teal	-	-	-	-	-	-	-	-	-	
Shoveler	50	50	25	25	-	-	-	-	7,875	
Wood	50	100	200	200	200	200	200	200	22,170	
Redhead	-	-	-	-	-	-	-	-	-	
Ring-necked	-	-	-	-	-	-	-	-	5,950	
Canvasback	-	-	-	-	-	-	-	-	840	
Scaup	-	-	-	-	-	-	-	-	1,645	
Goldeneye	-	-	-	-	-	-	-	-	280	
Bufflehead	5	-	-	-	-	-	-	-	2,065	
Ruddy	-	-	-	-	-	-	-	-	245	
Other Hooded merganser	-	-	-	-	-	-	-	-	3,850	
Common merganser	-	-	-	-	-	-	-	-	1,330	
Red-breasted Merganser	-	-	-	-	-	-	-	-	665	
Coot:	50	100	200	250	200	200	150	100	10,910	

(over)

WATERFOWL

REFUGE Wheeler Refuge

MONTHS OF January TO April, 1960

(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	26,000	25,000	12,000	11,200	10,000	8,000	3,000	2,500	3,500	3,000
Cackling Richardson's	150	150	60	60	-	-	-	-	-	-
Brant										
White-fronted										
Snow	50	50	40	40	40	25	20	20	-	-
Blue	800	800	700	700	700	500	400	400	-	-
Other										
<b>Ducks:</b>										
Mallard	20,425	10,155	2,500	2,050	2,500	2,000	1,500	1,250	900	500
Black	4,000	3,000	500	500	400	500	400	350	300	200
Gadwall	400	400	200	100	50	50	20	20	20	25
Baldpate	5,000	5,000	500	300	200	300	20	20	20	50
Pintail	9,000	6,000	500	300	300	300	500	450	300	200
Green-winged teal	200	300	300	200	50	150	100	80	25	50
Blue-winged teal										
Cinnamon teal										
Shoveler	75	200	100	200	100	50	50	50	50	100
Wood	300	300	200	200	200	200	200	150	110	100
Redhead										
Ring-necked	400	300	75	25	25	25	-	-	-	-
Canvasback	-	-	25	20	10	-	25	25	15	-
Scaup, Lesser	25	100	75	20	15	-	-	-	-	-
Goldeneye	10	20	10	-	-	-	-	-	-	-
Bufflehead	50	75	50	25	20	20	20	10	10	10
Ruddy	-	-	25	10	-	-	-	-	-	-
Other: Hooded Merganser	75	100	75	25	25	75	75	60	25	15
Common merganser	25	30	15	15	10	20	25	25	25	-
Red-breasted merganser	15	20	10	10	10	10	10	10	-	-
<b>Coot:</b>	20	20	25	50	25	50	50	40	100	100

WATERFOWL  
(Continuation Sheet)REFUGE Wheeler RefugeMONTHS OF January TO April, 1960.

(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			
<b>Swans:</b>											
Whistling											
Trumpeter											
<b>Geese:</b>											
Canada	1,500	300	250	100	50	25	20	20	745,155		
<del>Cockling</del> Richardson's	-	-	-	-	-	-	-	-	2,940		
Brant											
White-fronted											
Snow	-	-	-	-	-	-	-	-	1,995		
Blue	6	-	-	-	-	-	-	-	35,042		
Other											
<b>Ducks:</b>											
Mallard	200	200	150	100	50	50	50	50	312,160		
Black	75	50	25	25	20	20	20	20	72,035		
Gadwall	-	-	-	-	-	-	-	-	8,995		
Baldpate	50	50	25	-	-	-	-	-	80,745		
Pintail	50	25	-	-	-	-	-	-	125,475		
Green-winged teal	50	25	-	-	-	-	-	-	10,710		
Blue-winged teal	-	50	100	500	400	300	200	200	11,250		
Cinnamon teal	-	-	-	-	-	-	-	-	-		
Shoveler	50	50	25	25	-	-	-	-	7,875		
Wood	50	100	200	200	200	200	200	200	22,170		
Redhead	-	-	-	-	-	-	-	-	-		
Ring-necked	-	-	-	-	-	-	-	-	5,950		
Canvasback	-	-	-	-	-	-	-	-	840		
Scaup	-	-	-	-	-	-	-	-	1,645		
Goldeneye	-	-	-	-	-	-	-	-	280		
Bufflehead	5	-	-	-	-	-	-	-	2,065		
Ruddy	-	-	-	-	-	-	-	-	245		
Other Hooded merganser	-	-	-	-	-	-	-	-	3,850		
Common merganser	-	-	-	-	-	-	-	-	1,330		
Red-breasted Merganser	-	-	-	-	-	-	-	-	665		
<b>Coot:</b>	50	100	200	250	200	200	150	100	10,910		
				(over)							



	(5) Total Days Use	(6) Peak Number	(7) Total Production	SUMMARY
Swans	0	0	-	Principal feeding areas <u>White Springs unit, Buckeye locality,</u>
Geese	785,132	27,000	-	<u>Beaver Dam peninsula, Flint Creek embayment, Garts Slough,</u>
Ducks	668,285	40,000	-	<u>and Limestone Bay locality</u>
Coots	10,910	250	-	Principal nesting areas <u>None</u>
				Reported by <u>Charles M. Parker</u>
				Charles M. Parker, Refuge Manager

INSTRUCTIONS (See Secs. 7531 through 7534, Wildlife Refuges Field Manual)

- (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and national significance.
- (2) Weeks of Reporting Period: Estimated average refuge populations.
- (3) Estimated Waterfowl Days Use: Average weekly populations x number of days present for each species.
- (4) Production: Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
- (5) Total Days Use: A summary of data recorded under (3).
- (6) Peak Number: Maximum number of waterfowl present on refuge during any census of reporting period.
- (7) Total Production: A summary of data recorded under (4).

W A T E R F O W L

REFUGE Wheeler Refuge MONTHS OF January TO April, 1960

(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	26,000	25,000	12,000	11,200	10,000	8,000	3,000	2,500	3,500	3,000
Cooking Richardson's	150	150	60	60	-	-	-	-	-	-
Brant										
White-fronted										
Snow	50	50	40	40	40	25	20	20	-	-
Blue	800	800	700	700	700	500	400	400	-	-
Other										
<b>Ducks:</b>										
Mallard	20,425	10,155	2,500	2,050	2,500	2,000	1,500	1,250	900	500
Black	4,000	3,000	500	500	400	500	400	350	300	200
Gadwall	400	400	200	100	50	50	20	20	20	25
Baldpate	5,000	5,000	500	300	200	300	20	20	20	50
Pintail	9,000	6,000	500	300	300	300	500	450	300	200
Green-winged teal	200	300	300	200	50	150	100	80	25	50
Blue-winged teal										
Cinnamon teal										
Shoveler	75	200	100	200	100	50	50	50	50	100
Wood	300	300	200	200	200	200	200	150	110	100
Redhead										
Ring-necked	400	300	75	25	25	25	-	-	-	-
Canvasback	-	-	25	20	10	-	25	25	15	-
Scaup, Lesser	25	100	75	20	15	-	-	-	-	-
Goldeneye	10	20	10	-	-	-	-	-	-	-
Bufflehead	50	75	50	25	20	20	20	10	10	10
Ruddy	-	-	25	10	-	-	-	-	-	-
Other: Hooded Merganser	75	100	75	25	25	75	75	60	25	15
Common merganser	25	30	15	15	10	20	25	25	25	-
Red-breasted merganser	15	20	10	10	10	10	10	10	-	-
<b>Coot:</b>	20	20	25	50	25	50	50	40	100	100

3-1751

Form NR-1A

(Nov. 1945)

## MIGRATORY BIRDS

(other than waterfowl)

Refuge Wheeler RefugeMonths of January to April 1960 ~~1959~~

(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
<b>I. Water and Marsh Birds:</b>											
Common loon		-	-	10	Jan. 1.	1	Mar. 15	-	-	-	25
Pied-billed grebe		-	-	75	Mar. 20	Still present		-	-	-	150
Great blue heron		Permanent resident.		250	Feb. 1	-	-	-	-	-	350
Yellow-crowned night heron		25	Apr. 8	75	Apr. 30	Still present		1	15	-	150
American egret		2	Mar. 25	25	Apr. 30	Still present		-	-	-	50
Double-crested cormorant		-	-	5	Jan. 1	1	Mar. 15	-	-	-	10
Horned grebe		-	-	5	Jan. 1	1	Jan. 15	-	-	-	10
<b>II. Shorebirds, Gulls and Terns:</b>											
Ring-billed gull		-	-	1,200	Jan. 1	Still present		-	-	-	2,000
Herring gull		-	-	350	Jan. 1	3	Apr. 15	-	-	-	500
Laughing gull		-	-	10	Jan. 1	1	Feb. 10	-	-	-	15
Franklin's gull		1	Jan. 4	1	Jan. 4	1	Jan. 4.	-	-	-	1
Marbled godwit		1	Mar. 27	1	Mar. 27	1	Mar. 27	-	-	-	1
Whimbrel		1	Feb. 6	1	Feb. 6-7	1	Feb. 7	-	-	-	1
Greater yellowlegs		-	-	175	Apr. 10	Still present		-	-	-	300
Lesser yellowlegs		4	Mar. 18	250	Apr. 15	Still present		-	-	-	500
Wilson's snipe		-	-	50	Apr. 1	Still present		-	-	-	100
Killdeer		Permanent resident		800	Mar. 1	-	-	-	-	-	2,000

(over)



Form NR-2  
(April 1946)

## Refuge Wheeler Refuge

Months of January to April, 19 60.

[illegible]

## INSTRUCTIONS

### Form NR-2 - UPLAND GAME BIRDS.\*

- (1) SPECIES: Use correct common name.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

\* Only columns applicable to the period covered should be used.

3-1754  
Form NR-4  
(June 1945)

SMALL MAMMALS

Refuge Wheeler

Year ending April 30, 1960

(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 squirrels	Hardwood & pines, 7,000 acres	.5	300	0	0	0	0	-	0	0	0	0	0	14,000	
Box squirrels,	Upland hardwoods and pines, 300 acres	25.	0	0	0	0	0	-	0	0	0	0	0	12	
Beaver	Stream banks, 3 miles	0	0	0	00	0	0	-	0	0	0	0	0	12	
Muskrat	Margin, shoreline 1200 A.	4.	0	0	0	0	0	-	0	0	0	0	0	300	
Woodchuck	All types, 600 acres	50	0	0	0	0	0	-	0	0	0	0	0	12	
Cottontail rabbit	All types, 14,000 A.	2.5	900	0	0	0	0	-	0	0	0	0	0	5,600	
Swamp rabbit	All types, 5,000 acres	2.8	360	0	0	0	0	-	0	0	0	0	0	1,800	
Sink	Streams and sloughs, 275 miles	-	0	0	0	0	0	-	0	0	0	0	0	85	
Striped skunk	All types, 19,000 A.	32.	0	0	0	0	0	-	0	0	0	0	0	570	
Raccoon	All types, 19,000 A.	20	137	0	0	0	0	-	0	0	0	0	0	950	
Opossum	All types, 19,000 A.	15	102	0	0	0	0	-	0	0	0	0	0	1,266	
Gray fox	All types, 19,000 A.	75	35	0	0	0	0	-	0	0	0	0	0	253	
Red fox	All types, 19,000 A.	120	10	0	0	0	0	-	0	0	0	0	0	158	
Flying squirrel	Woodland, hardwoods or pines, 7,000 A.	10	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 Charles M. Parker

## INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, short-tailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.)
- (2) DENSITY: Applies particularly to those species considered in removal programs. Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year, including any taken on the refuge by Service Predatory Animal Hunter. Also show any removals not falling under headings listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market, including furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimeness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.
- (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.
- REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.



# REFUGE GRAIN REPORT

Refuge Wheeler National Wildlife Refuge

Months of January through April, 1960, ~~1961~~

(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 OR SUITABLE USE*		
				Transferred	Seeded	Fed	Total		Seed	Feed	Surplus
Corn	430 bu.	0	430	150	0	280	430	0	0	0	0
Milo	220 "	80	300	0	0	0	0	300	300	0	0
Soybeans	280 "	0	280	0	0	0	0	280	280	0	0
Millet, Japanese	625 "	0	625	0	0	0	0	625	625	0	0
Millet, brown-top	385 "	0	385	0	0	0	0	385	385	0	0
Combine Cowpeas	7 "	0	7	0	0	0	0	7	7	0	0
Oats	100	0	100	0	0	100	100	0	0	0	0

(8) Indicate shipping or collection points Decatur, Alabama

(9) Grain is stored at Seed stored at refuge headquarters

(10) Remarks Seed on hand will be used for deatered plantings

\*See instructions on back.

## REFUGE GRAIN REPORT

This report should cover all grain on hand, received, or disposed of, during the period covered by this narrative report.

**Report all grain in bushels.** For the purpose of this report the following approximate weights of grain shall be considered equivalent to a bushel: Corn (shelled)—55 lb., corn (ear)—70 lb., wheat—60 lb., barley—50 lb., rye—55 lb., oats—30 lb., soy beans—60 lb., millet—50 lb., cowpeas—60 lb., and mixed—50 lb. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

- (1) List each type of grain separately and specifically, as flint corn, yellow dent corn, square deal hybrid corn, garnet wheat, red May wheat, durum wheat, spring wheat, proso millet, combine milo, new era cowpeas, mikado soy beans, etc. Mere listing as corn, wheat, and soybeans will not suffice, as specific details are necessary in considering transfer of seed supplies to other refuges. Include only domestic grains; aquatic and other seeds will be listed on NR-9.
- (3) Report all grain received during period from all sources, such as transfer, share cropping, or harvest from food patches.
- (4) A total of columns 2 and 3.
- (6) Column 4 less column 5.
- (7) This is a proposed break-down by varieties of grain listed in column 6. Indicate if grain is suitable for seeding new crops.
- (8) Nearest railroad station for shipping and receiving.
- (9) Where stored on refuge: "Headquarters granary," etc.
- (10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.