

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
BUREAU OF SPORT FISHERIES AND WILDLIFE  
NOXUBEE NATIONAL WILDLIFE REFUGE  
ROUTE # 1, BROOKSVILLE, MISSISSIPPI

NARRATIVE REPORT - 1963

May 1 to August 31, 1962

Inclusive

PERSONNEL

BURTON S. WEBSTER . . . . . REFUGE MANAGER  
BENNIE C. LUNDY . . . . . ASS'T. REFUGE MANAGER  
N. F. WILLIAMSON, JR. . . . . ASS'T. REFUGE MANAGER  
KENNETH W. TENNYSON . . . . . ADMINISTRATIVE ASSISTANT  
ROBERT W. BRITT . . . . . FORESTER  
RICHARD M. BAYS . . . . . FORESTER  
ROBERT W. SPENCE . . . . . WILDLIFE TECHNICIAN  
JACOB J. SMITH . . . . . AUTOMOTIVE MECHANIC  
WILLIS C. SMITH . . . . . MAINTENANCEMAN  
HUBERT S. LIVINGSTON . . . . . MAINTENANCEMAN  
PHARRIS LEON LIVINGSTON . . . . . MAINTENANCEMAN  
ROBERT H. ANTHONY, SR . . . . . LABCRER (FARM)  
ROBERT L. SHINN . . . . . LABCRER (FARM)  
GRADY H. WHITE . . . . . LABCRER (FARM)

ALSO

UNDER THE ACCELERATED PUBLIC WORKS PROGRAM WE HAD SOME 50 OR  
MORE WORKING. WE TRIED TO KEEP ABOUT THE SAME NUMBER WORKING;  
HOWEVER, WE HAD SOME STOPPING ALONG FOR VARIOUS REASONS.

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## I. GENERAL

### A. Weather Conditions.

	Rainfall	Gauge Readings		TEMPERATURE*				TEMPERATURE	
		Max.	Min.	Aver.	Max.	Aver.	Min.	Max.	Min.
January	4.36	-.40	-2.0	46.7		27.4		75	1
February	2.03	.15	-.40	51.7		29.0		71	11
March	2.82	.45	.13	71.1		47.5		86	33
April	3.48	.25	.05	77.0		56.7		87	45

\* From Mississippi State University 17 miles north of refuge.

This has been the strangest weather ever. Creeks, sloughs and rivers remained low or dry throughout the period. Water did not flow over Bluff Lake spillway until February 21st. February was the coldest on record and the winter in general was one that will be long remembered for oddities. The office thermometer showed 6 below, the coldest ever for Noxubee. The period was also one of the driest on record. Local tornadoes seemed to increase and electric storms were much fewer than usual.

There is some evidence that high altitude atomic testing and rocketry are seriously affecting the weather which will in turn affect our ducks. Before 1950 there were 150 - 200 tornadoes each year where as the number has increased to 600 - 700 for 1960 - 61. Some increase is attributed to better weather reporting but even so, the increase is far beyond that which can be explained by natural causes.

### B. Habitat Conditions.

#### 1. Water.

Water was scarce during the period. Our impoundments that depend upon rainfall were dry during most of the winter. These pools were Jones Creek fields, Dry Creek fields, Smith Fields # 1 and # 2.

Green Timber Reservoirs # 1 and # 2 functioned nicely throughout the entire wintering season and due to the drought, we believe we had nearly all the ducks in this area since there was no other place for them to go.

#### 2. Food and Cover.

All corn was consumed by waterfowl, doves, black birds, crows or deer. We do not believe however that crows are too much of a factor in the utilization of corn. We cannot see where they take very much corn so conclude that they are not as bad as generally thought.

Aquatics and emergents in Bluff Lake were almost completely utilized by ducks.

Soy Beans left by the D. C. Miller Permit # 26 in Jones Creek Area are still in the field. Chief use of these Lee Variety beans has been by doves and deer. The doves use was spectacular.

Oak mast forms the bulk of winter waterfowl food and the "hot foods" we grow are taken only in quantity during extremely cold weather when the reservoirs are frozen.

## II. WILDLIFE

### A. Migratory Birds.

Ducks: Populations were the largest ever probably due to the severe weather north of us and lack of local water but even so, it was nice to see so many ducks and a slight increase was noted. For instance on November 19 - 25, 1961 we reported 19,176 ducks and on November 18 - 24, 1962 we reported 31,740 an increase of approximately 1/3 rd. Our maximum population was estimated to be 100,000 compared to 22,400 for 1961 - 62 wintering season.

Canada Geese - Maximum migrant population was 146 compared to 40 for the 1961 - 62 season. There seems to be considerable movement of our geese to the Elliot flock in Clay County where Mr. Elliot reports that his geese drive newly arrived migrants away. Our geese would come and go all thru the season.

Doves - Populations seem to have declined somewhat. We wonder what would happen if baiting for doves were legalized. How far will a dove fly to bait? Would systematic baiting throughout the southeast wipe out the population to reduce them to a point of no return?

Woodcock - Woodcock were occasionally seen during late February.

Snipe were absent on the annual inventory but were found in their usual numbers in early March.

### B. Upland Game Birds.

Turkey population increased over last year and seem well distributed over the refuge. Nine were harvested during the spring gobbler hunt compared to six last year.

Quail are present in the usual numbers.

C. Big Game Animals.

Deer management is now one of herd control and definitely not increase. We have had our warning in the die off in the summer of 1962 which was more severe than we thought. One TSI crew found six dead deer on 300 acres. Our management should provide for the maximum harvest possible up to 50% of the herd annually. We cannot however even attain that sort of a harvest due to legal and physical limitations and it may not be unreasonable to consider ways and means to control the herd by use of oral contraceptives rather than to tolerate the evils of over populations.

D. Fur Animals, Predators, Rodents and other Mammals.

Otter populations seem not to have increased much.

Bobcat populations are increasing some since the only place we control them is at the goose pen.

Fox (gray and red) populations are normal.

Opossum populations are low.

Mink populations are normal.

Weasel are rare if not totally absent.

Muskrat population seems low.

Raccoon populations are high and need controlling we think in the interest of breeding wood ducks.

Rabbit populations are low. It is easier to find a deer than a rabbit.

Beaver populations seem to be controlled now due to the efforts of our trappers.

Predator Control - During the period the following animals were trapped on the refuge:

<u>Animals</u>	<u>Period</u>	<u>CY - 1963</u>
Bobcat	4	4
Fox - Gray	3	3
Raccoons	3	3
Dogs	3	3

These figures do not include animals removed by fur harvest. Predator control was confined to the goose pen area.

E. Hawks, Eagles, Owls, Crows, Ravens, and Magpies.

Hawks. Red shouldered and broad-winged populations are high.

Eagles. No bald eagles seen this winter. Golden eagle seen occasionally.

Owls. The great horned owl populations are normal in that they are not abundant. Barred owl populations are high.

Crows. Crows are abundant but are not believed to be as bad as generally thought as competitors of ducks in our corn fields. They must be after insects, etc., since they spend a lot of time in the fields but we can't seem to miss the corn they eat.

Buzzards. Buzzards are abundant and like to worry the experimental geese.

F. Other Birds.

Grackles and black birds are abundant and can really clean up a field of corn or eat mast in the forest.

G. Fish.

Fishing began on March 1 and has been excellent. Bluff Lake is considered an excellent early lake since aquatics take over as the water warms up.

Estimated fishing days - Bluff Lake 3,955  
Income to Miss. Game and Fish Comm. \$1,940.25  
Other Refuge Waters 8,000

For every paid fishing day on Bluff Lake we estimate that there is at least two fishing days on other refuge waters.

H. Reptiles.

Water snake populations are low as are cotton mouths. Eighteen rattle snakes were taken by the TSI Crew in the Douglas Bluff Area in Section 9, Township 16 North, Range 15 East. One rattler measured 65" which is unusually large for a timber rattler in this area. Seven copper heads were taken by the TSI Crews.

Turtles are very abundant in all refuge waters. The Alligator snappers are hard to find but are thought to be quite common.

I. Disease.

None noted during the period.

### III. REFUGE DEVELOPMENT AND MAINTENANCE

#### A. Physical Development.

When the happy news came that we were to get \$400,000.00 of APW money, we were really shocked. After years of skimpy budgets and practically no development moneys, suddenly getting \$400,000.00 is a jolt but thanks to our Master Plan, we knew what to do with it and more too if available.

Jobs initiated or completed are as follows:

1. Graveled 20 miles of refuge roads. This is first cost only. It is wonderful to start some place with assurance you will get there instead of in the ditch. Our clay roads were wonderously slick and sticky and on at least one occasion a rooster got stuck in our heavy clays. We hope the era of extreme dust, extreme mud, and the hundred of man hours wasted by being stuck have gone forever. This does not imply that our road problem is over. It will take at least \$250,000.00 to give us what we need in safe roads and bridges.
2. Built a 5 ton dynamite house.
3. Began Ross Branch Storage Reservoir.
4. Awarded Contract 14-16-0008-390 for Green Timber Reservoir # 3 and # 4 to S. J. Cohen Company, Blytheville, Arkansas. Some equipment moved in on April 26, 1963.
5. Completed three spillways in Green Timber Reservoir Levees # 1 and # 2.
6. Erected signs as prescribed by the Accelerated Public Works Program.
7. Began fencing parts of refuge subject to trespass cattle.
8. Completed TSI on 3,750 acres.
9. Staked location for new office, shop, oil house, and two dwellings.
10. Staked location for new Lake Loakfoma.
11. Built canopy over trailer.
12. Built and installed new cattle guard at Smith Field.
13. Began further improvements at Quarters # 91.

B. Plantings.

1. Aquatics and Marsh Plants.

None.

2. Trees and Shrubs.

None. However, we planted 18 acres of acorns. See Page 6 a.

3. Upland Herbaceous Plants.

None.

4. Cultivated Crops.

During the period cooperative farmers as well as refuge personnel were in the process of preparing land for planting the various crops grown on the refuge. All land to be planted during the spring planting season was either disked, broken with breaking plow, or plowed with the chisel plow. Approximately 300 acres of land has been plowed to a depth of 8 to 12 inches using the chisel plow, which breaks the land deeper than it has been broken in years gone by.

The following plantings were made by refuge personnel, 2½ acres millet (for captive goose browse), 14 acres of corn on Doyle Arm (7 acres in goose pen and 7 acres of Dwarf 12145 SF Pfister corn on Doyle Arm in Fields # 1, Compartment # 14). Cooperator Douglas C. Miller planted 30 acres of corn during the period. At the writing of this report the corn looks excellent, (an excellent stand as well as growth).

Seven cooperators will farm a total of 563 acres with the following acreages being planted, corn or soy beans 382 (of which most of it will be planted to soy beans), grain sorghum 10, Bahia grass 5, Lespedeza 5, sorghum 29, corn 107, and millet 25. The 30 acres of corn planted by Cooperator D. C. Miller looks excellent.

Rains amounting to over two inches during the last five days of April slowed down farming operations. The moisture was needed for germination of seeds in most areas.

Plans are being made for refuge personnel to plant approximately 60 acres of corn and 75 acres of millet during the summer months.

C. Collections and Receipts.

None.

NOXUR E NATIONAL WILDLIFE REFUGE

TREE PLANTING DATA

SPECIES Water and Willow Oak Acorns AMOUNT Mixture ACRES 18  
DATE STARTED 1/3/63 DATE COMPLETED 1/1/63  
COMPARTMENT 21 TOWNSHIP 17N RANGE 14 E SECTION 26 COUNTY Okt. 10th  
SITE Bottomland Gumbo METHOD OF PLANTING See remarks SPACING 6 x 6 feet

COST ITEMS

<u>16</u>					
<u>48</u>	No. of man-hours	@ \$ <u>2.58</u>	per hour	-- \$	<u>113.28</u>
<u>Direct Seeding</u>	No. of trees	@ \$ <u>-</u>	per M	-- \$	<u>-</u>
<u>32</u>	Mi. of transportation	@ \$ <u>.10</u>	per mile	-- \$	<u>3.20</u>
<u>12</u>	Other Tractor	@ \$ <u>3.00</u>	per	-- \$	<u>36.00</u>
			Total cost	\$	<u>152.48</u>
			Cost per acre	\$	<u>8.47</u>

REMARKS: (Brief description of the operation - weather, health of plants, etc.)

Site was prepared with Chisel Plow and Acorns dropped on a 6 x 6 feet spacing. Each acorn was stepped on to press it into the ground. Ground was too stiff to cover the acorns.

RESULTS:

To be seen in spring of 1963! We checked the planting but we will need to check again in late summer.

D. Control of Vegetation.

Approximately 40 acres of heavy Johnson Grass was winter plowed at the advice of the U. S. Department of Agriculture, Experiment Station as a control measure. It worked beautifully. The hard winter froze the root stocks so that all spring growth was from seed which is easily controlled by disking.

Our total acreage receiving TSI treatment by annual work funds and APW funds is 3,750 acres.

Since January 1st approximately 650 acres of timber land have received timber stand improvement treatment by annual work funds. This work done by the refuge labor through Soil And Moisture Funds and Timber Management Funds.

On January 23rd, the refuge began an Accelerated Public Works Program with \$25,000.00 set up for TSI work. Since that time 3,100 acres of timber have received TSI treatment under this program.

Prior to the APW program the Reuel Little Tree Injector was used with 4 pound per gallon 2-4-5 T mixed with diesel fuel at a rate of 1:15. Since the initiation of the APW program we have purchased eight JEM-JIM Injectors which use a concentrate of 4 pounds per gallon 2-4-5-T. The APW program employ 21 men at the present for this work.

E. Planned Burning.

Prescribed burning for the year (May 1, 1962 through April 30, 1963) were conducted in the month of December and March. Rains and unfavorable winds prevented burning during January and February. Burning was started on December 6th and concluded on March 14th. Burning was done in Pine and Pine-hardwood stands and sedge fields to increase food plants on the forest floor, reduce wild fire hazard, control undesirable vegetation, and to open underbrush for turkey use.

Fifteen burning days accounted for 3,071 acres burned throughout the refuge. The total cost was \$999.80, with an average of \$0.33 per acre. The largest burn was 403 acres at a cost of \$0.34 per acre and the smallest burn was 5 acres at a cost of \$1.48 per acre. We think our objectives were accomplished in all cases.

We burned 76% of our planned schedule and the results met our objective.

ACREAGE BURNED BY TIMBER TYPES

Island		1
FG	(Field, Grass)	90
P2F	(Pine)	189
P3M	(Pine)	719
PH4M	(Pine Hardwood)	584
P4M	(Pine)	257
P3F	(Pine)	402
P4F	(Pine)	180
FP	(Field Permanent)	331
PH1F	(Pine Hardwood)	31
UH3M	(Upland Hardwood)	3
P2M	(Pine)	81
PH4L	(Pine Hardwood)	19
FR	(Field Rotation)	36
PH3M	(Pine Hardwood)	2
P1M	(Pine)	6
UH4M	(Upland Hardwood)	47
P2L	(Pine)	3

1	10 - 20 Feet Height	<u>Density</u>
2	20 - 40 Feet Height	L - Light Stocking
3	40 - 60 Feet Height	M - Medium Stocking
4	60 + Feet Height	F - Full Stocking

F. Fires.

Four fires were suppressed by refuge personnel during this period. Three of these fires occurred on refuge lands and one on private land. Prescribed burning, lightning, refuse burning, and smoking were the causes of these fires. Economic loss through damage to the refuge was valued at \$246.30 and \$1,522.80 for damage to private lands. Suppression cost of the four fires was \$151.84. Thirty-five acres burned on the refuge and two hundred on private land.

We are fortunate in having such a low fire occurrence this winter. Mississippi had an outbreak in fires this past fire season that taxed the whole suppression organization. Our crews were asked to stand-by in case of emergencies in three instances. This outbreak of fires was thought by many to be caused by the severe weather complexed by the recent decline in sawtimber stumpage prices.

Our prevention efforts appears effective but with heavy fuels in all timber types we would possibly get an conflagration that would be very difficult to stop with our suppression equipment. Noxubee National Wildlife Refuge is 90% timbered and most of our wildlife program is centered around sound ground fire protection of this resource.

IV. RESOURCE MANAGEMENT

A. Grazing.

There are five special use permits for grazing a total of 1,246 animal use months. The total fees collected amounted to \$341.70. From observations made the permittees are carrying out their agreement in accordance with plans.

B. Haying.

Only one special use permit for removing wild hay from two acres is in effect this year. One cutting during the period will yield a total fee of \$1.50.

C. Fur Harvest.

Five trapping permits were in effect for the trapping season and the following small mammals were removed, 85 raccoons, and 173 beavers. Other small mammals getting into the traps accidentally were, 2 otter, 6 muskrat, 3 opossum and one rabbit. Trappers also reported catching four ducks and one quail. The # 330 Conibear traps were used with excellent results, (no escapes and all animals were dead when the trappers reached their traps).

From conversations with the trappers, the objective of reducing beaver populations is being accomplished. Trappers report that beaver seem harder to locate than they were last season. Our records show that last season yielded 189 beaver as compared to 173 this season and high water did not interfere as it did last season.

D. Timber Removal.

Logging activity during the winter was very slow due to slack market even though the woods were very dry and suitable for logging.

The pulpwood market is still slow and doesn't look too promising for the immediate future. One pulpwood buyer quoted a price of \$2.00 per cord for pine and \$3.00 per cord for sweetgum. He wasn't too interested at all in pine and would take gum occasionally. The sawtimber market is still sluggish and has seen a steep drop in stumpage prices. It is a general belief that stumpage prices will remain lower than in the past in order to give the sawmill man more operating margin.

Eight special permits for timber harvesting have been issued since January 1st. Seven permits had a value of \$17,697.32 for the removal of 687,800 board feet and 36 cords. One permit was issued for land-timber exchange which authorized the removal of 170,000 board feet of pine timber. The land was valued at \$5,100.00. These eight permits covered 351 acres.

Several permits carried over from 1962 are still active and will bring revenue soon. Two sales totaling 1.5 million feet are to be sold early in May. We are in the process now of marking up sales for this summer.

E. Commercial Fishing.

None.

F. Other Uses.

None

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Progress Report.

Our banding operation was fair for the period. We banded a total of 204 birds; 54 Mallards; 3 Hooded Merganser; 50 coots; 20 Wood Ducks; 77 Ring-necks and 1 retake on a Ring-neck February 11th with band number 566-4561.

During the period we used two methods to trap the birds. The Ohio trap was used and we made drives to a winged trap in Green Timber Reservoir.

B. Band Return Data

Wood Ducks

<u>Band No.</u>	<u>DATE BANDED</u>	<u>DATE RECOVERED</u>	<u>WHERE RECOVERED</u>	<u>H.W.</u>	<u>LAT.</u>	<u>LONG.</u>
586-62259	9/6/62	9/11/62	Brooksville, Miss.	10	331	884
586-62275	9/7/62	12/6/62	Fountain, Fla.	01	302	852
586-62277	9/7/62	12/24/62	Crossett, Ark.	01	330	915
586-62439	11/16/62	12/3/62	Ville Platte Area, La.	01	304	921

MALLARD

617-50124	2/10/58	10/28/62	Columbus Jet Iowa	01	411	912
617-50423	12/5/60	10/13/62	Mud L New London Minn.	01	452	945
<u>CANADA GEESE</u>						
508-18589		12/6/62	Brooksville, Miss.			(Laurel unable to key)
518-12346	11/17/57	10/13/62	Clinton Area, Iowa	01	415	900
518-98082	11/22/59	12/23/62	Cartersville, Ill.	89	374	890
518-98101	11/19/58	5/30/62	Winisk Area, Ont.	01	550	852
518-98108	11/12/58	11/4/62	Shelbyville, Tenn.	01	353	862
518-98211	11/19/58	12/6/62	Brooksville, Miss.	00	331	884
518-98319	11/25/58	12/6/62	La Crosse, Ind.	01	411	864
518-98347	11/25/58	10/25/62	Allegan, Mich.	01	423	855
518-98355	12/2/58	11/11/62	Linesville, Pa.	01	413	802
518-98527	1/23/59	12/15/62	Huntsville, Ala.	01	343	863
518-98540	1/23/59	10/6/62	Bayfield, Ont.	01	433	814
518-98578	1/28/59	10/25/62	Fennville, Mich.	01	423	860
558-03514	12/3/60	12/13/62	Geiger, Ala.	01	325	881
558-03557	12/3/60	12/6/62	Brooksville, Miss.	00	331	884
558-03570	12/3/60	12/11/62	Brooksville, Miss.	98	331	884
558-03603	8/15/61	12/13/62	Geiger, Ala.	01	325	881
558-03605	8/15/61	12/6/62	Brooksville, Miss.	00	331	884

CANADA GEESE, Cont'd

<u>Band No.</u>	<u>Date Banded</u>	<u>Date Recovered</u>	<u>Where Recovered</u>	<u>How</u>	<u>Lat.</u>	<u>Long.</u>
558-03614	12/13/61	12/8/62	Brooksville, Miss.	00	331	884
558-03619	12/13/61	11/22/62	Brooksville, Miss.	00	331	884
558-03630	12/13/61	12/11/62	Brooksville, Miss.	00	331	884
558-03632	12/13/61	12/6/62	Brooksville, Miss.	00	331	884
558-03636	12/13/61	12/6/62	Brooksville, Miss.	00	331	884
558-03651	12/13/61	12/6/62	Brooksville, Miss.	00	331	884
558-03663	12/13/61	12/6/62	Brooksville, Miss.	00	331	884
558-03669	12/13/61	12/6/62	Brooksville, Miss.	00	331	884
558-03671	12/13/61	12/6/62	Brooksville, Miss.	00	331	884
558-03682	12/13/61	12/6/62	Brooksville, Miss.	00	331	884
558-03683	12/13/61	1/1/63	Brooksville, Miss.	00	331	884
558-03690	12/13/61	12/6/62	Brooksville, Miss.	00	331	884

Also, we had a Memorandum of Understanding, executed February 7, 1963 between Mississippi State University and the Bureau, providing for cooperative wildlife studies to be conducted on Noxubee National Wildlife Refuge. The management studies are entitled "Determination of Nesting and Rearing Habitat Requirements for Wood Ducks" and will be conducted by John Woods, graduate student, under the direct supervision of Dr. Dale Arner, Professor of Wildlife Management, Mississippi State University.

The study is just getting under way and there is no progress at present to report except that of the three metal woodduck nest boxes put up, two were used and broods were successfully hatched.

## VI. PUBLIC RELATIONS

### A. Recreational Uses.

Picnicking has been more popular than usual this spring. The population increase is beginning to show up. Estimated picnicking 4,000. Sight seeing will continue to increase as our development progresses. Estimated visitor days 16,000.

### B. Refuge Visitors.

We had about 685 visitors at refuge headquarters during the period. However, many were not registered on our visitor's list. We had about 214 calling to pick up turkey permits and in many cases they returned the permit after the hunt. About 300 called by looking for employment and in some cases they have returned more than three times. Many timber men came by looking and discussing the timber sales and market conditions. Several groups of students came by and a few groups of boy scouts made a tour of our area. We had about 171 individuals that we listed on our Visitor's List and a few of them were as follows:

During the period January 22 - 24, Messers. Victor Kay and Phillip Van Dyke were in with reference to the Accelerated Public Works program.

On February 7th Mr. Joe Hubde, U. S. Forest Service, Jackson, Mississippi called regarding Recreation Resources.

On February 5 - 8th, Regional Forester, Verlon E. Carter, called and we discussed forestry program and the Accelerated Public Works Program with him.

On February 17th, U. S. Game Management Agent, M. K. Welvin gave us a courtesy call.

Also, during the week of February 17th, we had with us Messers. Brown, Thurston, and Davis. They did survey work for us that was past due. This will help us greatly in our law enforcement work as well as other refuge programs.

On February 27th, Dr. Arner, Instructor Mississippi State University, (Professor of Wildlife Management) called and set up legume plots on the refuge.

On March 11th, Sam Barton, Refuge Manager, Paris, Tennessee called to exchange some service property, etc.

Also, during the month of March we had R. O. Survey Crews in doing badly needed survey work, Land Acquisition, Construction, etc. Messers. Cook, Brown, Smith, Jr., Davis, Thurston, Dawsey, and Chreitzberg gave us help during the period.

On April 17th, Mr. Otis G. Pauley, Engineer from the R. O. called and during the next few days set stakes for the proposed buildings to be constructed at Noxubee under the APW Program.

On March 26th, Messers. Stephen R. Pierce, Del W. Thorsen, and L. R. Johnson, from the U. S. Forest Service gave us a courtesy call and we gave them a tour of our area.

March 26th, Mr. G. G. Gregory, TVA, Tupelo, Mississippi called by and picked up turkey permits for several hunters during his stay.

On April 17th, C. E. McMullan, Refuge Manager, Chottaw National Wildlife Refuge, called at Noxubee Refuge to deliver a stake truck and to borrow a disc.

K. C. Donovan, TVA Representative, called by for a visit and he was very much impressed with our project.

Mr. T. W. Fickett, Dekalb, Mississippi, one of the Mississippi Game and Fish Commission, commissioners. He stated that we have the best area that he had visited while working for the Mississippi Game and Fish Commission.

During the last part of April we were pleased to have Messers. Budolph and Carthell visit with us and to assist us with our work at Noxubee.

C. Refuge Participation.

February 5th, Manager Webster talked to Macon, Mississippi Rotary Club regarding refuge plans under APW Program.

February 27th, Manager Webster and Foresters Bays and Britt attended a session at Mississippi State University on "Role of Computers in Forest Management".

March 28th, Manager Webster and Foresters Bays and Britt attended Southern Hardwood Group Meeting at Tunica, Mississippi.

April 8 - 12, Manager Webster, Foresters Bays and Britt, attended Region Wide Fish and Wildlife Service Conference at Athens, Georgia.

April 20th, Manager Webster guided Mr. Walther Wells and scout troop on visit to refuge.

April 25th, Forester Britt, conducted Miss. Kitty Mosley and 90 6th graders on tour of refuge.

April 20th, Manager Webster, helped to entertain 40 members of the International Club from Mississippi State University. They were all from Central and South America.

D. Hunting.

Deer hunting ended January 1, 1963 and was reported in the September - December report. Figures for the harvest did not change appreciably except several dead deer, victims of poor shooting, have been found.

Turkey hunting. We issued 214 permits and 159 were returned. Thirty eight were not used; however, the other 121 hunted a total of 1,058 hours.

Hunters shot seven gobblers that weighed from 10 to 22 pounds and crippled three. Two of the crippled turkeys were picked up by patrolmen dead.

Hunters reported more turkey than last year. Permits returned indicated they saw a total of 79 hens, 56 gobblers, 173 deer, 7 bobcats and killed one, 7 fox, 2 opossums and 6 wild hogs.

It was interesting to note that so many hunters saw turkey which indicate a good population. It was a good hunt and hunters look forward to next years opening day.

E. Violations.

Only two cases were made during the period even though patrol was done over most weekends.

John Malone and Robert Taylor, Noxubee County Negroes, were apprehended February 1st by State Wardens Dawkins, Coleman, and White for hunting rabbits. They were fined \$25.00 each plus \$5.00 cost.

F. Safety.

1. Number and nature of safety meetings.

With the coming of AFM Program we felt it necessary to beef up our safety program by holding meetings bi-weekly.

During the period six meetings were held and the following subjects discussed.

- a. Electrical equipment (Safe Use in damp weather) to avoid fatal or serious accidents. Regional Office memos on automotive equipment operation. Special point made on avoiding deer-car accidents. All personnel urged to stop or drastically reduce speed when they see a deer by the road side, since where there is one, there is probably another ready to cross the road. Safety in handling the fire tractor and the back fire torches.
- b. How to Help the Injured Employee Handbook - In which the rights of Employees under the compensation act was covered.

Ten Commandments of the Highway in Safety Bulletin No. 10 were read.

General safety precautions to take while working in woods, in shop, and around head quarters were discussed. Precautions to take while driving were discussed including the use of the safety belts.

- c. Use safety precautions in everything we do.
- d. All personnel were reminded of the extreme fire danger that exists with days in high class 5's and burning index in the high 90's.

Truck drivers were advised to keep their windshields clean and to be sure their turn signals were operating. Each was given a pack of paper towels to wipe the windshields. They were also cautioned to drive extremely carefully on account of the dust that now is a real hazard.

TSI crews are experiencing trouble with ticks and spray is provided for them. Warning was given relative to the use of the spray since it kills ticks, it will also kill you if get enough of it.

- e. Snake bite procedure was discussed, since we killed five big rattle snakes last week in 1 1/2 days work.

Farm tools and machinery safety discussed.

- f. Safety and first aid equipment at headquarters and in refuge vehicles. Reviewed what a person should do in case of accidents or emergencies, wudh as fire, car wrecks, simple tool injiries or disabling body accidents.

The following safety films were also shown during the period:

Safety Everywhere All The Time  
Key Man Series of Safety (Series of four)  
Point of No Return  
You're the Key Man  
It's the Little Things that Count  
People are the Puzzle  
Farm Tractor Safety  
Anatomy of an Accident # 7

## 2. Accidents

No lost time accidents but the following minor accidents were handled.

- a. APW Emplayee Thomas E. Pearson cut his finger while sharpening an ax. Pearson was just plain incompetent for woods work and voluntarily resigned.
- b. APW Laborer John H. Payton stepped into a stump hole while engaged in TSI work and sprained his great toe. Our area is full of stump holes which result from forest fire burning burning stumps high in rosin content. The holes are usually 10 to 16 inches wide and 18 inches to 3 feet deep. Some areas have three or four of these holes per acre. The holes are a hazard and sometimes are covered by detris so one just gets trapped. They are particularly aggravating in wet weather when you get a boot full or sometimes a face full of water since they often act like a geyser when stepped in.

- c. John E. Jackson, APW Truck Driver, cut his left foot at upper joint of big toe with an ax while clearing brush on Ross Branch. It was too wet to haul gravel and rather than lay John off we put him to clearing brush. This unfortunate incident might indicate that truck drivers aren't supposed to cut brush but then John is a country boy and knows how to use an ax. However, since John has demonstrated a tendency to hack himself, we no longer let him use an ax.
- d. Paul Lampkin, APW Laborer, assigned to survey work whacked himself in the neck with a bush hook while brushing line. A limb caught the bush hook and deflected it just enough to cut his neck.

What is the answer to this? All these victims except Pearson are country folks who still live by the ax or who walks the woods in search of "lighter wood" or meat. Things like this are the reasons we decided to hold safety meetings bi-weekly instead of monthly as long as APW last or other increased labor activity here.

3. Measures taken to correct or prevent hazardous conditions.

Installed safety seat belt on fire tractor. There were some who were against it but we tried it out and all like it. It is a real skull saver.

Checked all electric drills and other shop tools for three prong plugs. Bought suitable ground plugs where needed.

Filled up two cistern holes in Keaton Tower Area.

Held bi-weekly safety meetings instead of monthly meetings due to the APW Laborers.

Erected reflectors at hazardous places on Bluff Lake Levee.

Periodic inspection of gravel trucks for clean windshields.

Bought and posted \$100.00 worth of safety posters, stickers, etc.

4. Record to date.

Last lost time accident April 6, 1959.

Number of calendar days since last lost time accident -  
1,486 1/2.

Number of man hours worked since last lost time accident -  
109,073.

5. Future Safety Plans.

Continue to hold bi-weekly meetings.

Invite safety engineers in from TVA and Mississippi State University.

Periodic inspections (weekly) for hazardous conditions.

Purchase additional safety sign material from the National Safety Council.

6. Acquisition of protective clothing or equipment.

Bought safety hats for all employees.

Bought gloves.

Bought first aid and snake bit kits.

VII.

OTHER ITEMS

A. Acquisition.

Some local opposition has been expressed to our acquisition of the Boyd Land and Joe Lee Jones Land. Opposition was chiefly by those who used the Byd Land as a private hunting preserve.

B. Vandalism.

Warden Dawkins tells of this incident which occurred on Sunday April 28th. A party, man, wife and two children, completed their picnic dinner at the spillway picnic ground, after putting away their paraphernalia, the head of the family proceeded to break 10 pop bottles on the concrete picnic table, littering the table and immediate vicinity with broken glass. We conclude that the guy must be "sick" and in need of a psychiatrist. His family must indeed have been proud of him. Imagine! The skill required to break 10 consecutive bottles on a concrete table without a miss and to come thru the ordeal without a scratch. His children and wife must indeed have been misty eyed with admiration for so noble a fete. We wonder if he also didn't drink the 10 bottles of pop all by himself.

APW signs have caused particular interest.

Personnel contributing to this report are as follows -

Lundy for Sections III B, IV A, B, and C, and the NR Forms.

Bays for III D, E, F, and IV D.

Photographs and balance of the report by Webster.

Report completed and respectively submitted on May 13, 1963.

Approved by Burton S. Webster  
Burton S. Webster,  
Refuge Manager

Date MAY 16 1963

Approved by Vernon H. Foy

Vernon H. Foy  
Regional Refuge Supervisor  
Title \_\_\_\_\_

W A T E R F O W L

REFUGE Noxubee National Wildlife

MONTHS OF January 1 TO April 30, 1963

(1) Species	(2) Weeks of reporting period									
	1	2	3	4	5	6	7	8	9	10
<u>Swans:</u>										
Whistling Trumpeter										
<u>Geese:</u>										
Canada	54	80	54	54	92	92	84	84	146	70
Cackling Brant										
White-fronted Snow										
Blue							2	2		
Other										
<u>Ducks:</u>										
Mallard	4,500	4,500	4,500	80,000	80,000	20,000	6,000	4,000	6,000	2,000
Black	1,000	500	500	400	400	400	50	200	50	20
Gadwall	1,500	750	300	1,000	1,500	500				
Baldpate	3,000	500	500	200	2,500	1,000	1,500	800	1,200	400
Pintail	20	14	10	2,000	400	50				
Green-winged teal	1,500	1,000	750	2,500	2,500	1,000	200	100	200	50
Blue-winged teal										
Cinnamon teal										
Shoveler	10		6		20	10				
Wood	7,500	8,000	8,000	8,000	8,000	8,000	4,000	4,000	3,000	1,500
Redhead										
Ring-necked	2,500	1,000	1,000	2,000	1,500	500	1,000	1,000	1,500	500
Canvasback	10	5	10	40	40	40				
Scaup	2,000	1,500	1,500	2,500	2,000	750	750	200	500	150
Goldeneye	20				20	10			2	
Bufflehead	50	50	10	50	50	20	10	20		
Ruddy	125	50	50	200	200	50	50	25	10	3
Other (Hooded Merganser)	1000	500	500	500	750	500	250	200		
(Common Merganser)	75		200	200	200	50				
<u>Coot:</u>										
Int. Dup. Sec.,	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,000	300

3 -1750a

Cont. NR-1

(Rev. March 1953)

WATERFOWL  
(Continuation Sheet)

Page # 22

REFUGE Nezamee National WildlifeMONTHS OF January 1 TO April 30, 19 63

(1) Species	(2) Weeks of reporting period								(3) Estimated waterfowl days use	(4) Production Broods: Estimated seen : total	
	11	12	13	14	15	16	17	18			
<b>Swans:</b>											
Whistling											
Trumpeter											
<b>Geese:</b>											
Canada	80	79	79	79	64	64	64	64	9,263		
Cackling											
Brant											
White-fronted											
Snow									28		
Blue											
Other											
<b>Ducks:</b>											
Mallard	250	50	150	10	6	6	6	6	1,474,864		
Black									22,640		
Gadwall									35,850		
Baldpate									75,200		
Pintail									17,418		
Green-winged teal									65,600		
Blue-winged teal	50	200	100	50	40	40	40	40	3,760		
Cinnamon teal											
Shoveler									302		
Wood	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	483,000		
Redhead											
Ring-necked	30		50						83,060		
Canvasback											
Scaup									78,950		
Goldeneye									324		
Bufflehead									1,720		
Ruddy									5,091		
Other (Hooded Merganser)									22,400		
(Common Merganser)		10							5,370		
<b>Coot:</b>	300	300	300	300	300	200	50	25	102,825		
	2130	2060	2100	1868	(over) 1812	1746		1536			

	(5)	(6)	(7)
	Total Days Use	Peak Number	Total Production
Swans			
Geese	9,291	146	
Ducks	2,307,869	100,080	
Coots	102,425	1,500	
	2,419,585		

SUMMARY

Principal feeding areas Green timber reservoirs,  
refuge fields, overflow timber lands.

Principal nesting areas Hollow trees.

Reported by Bernice C. Lundy

Notes: Geese used as decoys remained throughout the period.

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).

3-1751  
Form NR-1A  
(Nov. 1945)

MIGRATORY BIRDS  
(other than waterfowl)

Page # 23

Refuge Nommos National Wildlife Months of 1/1 to 4/30 1951 63

(1) Species  Common Name	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production			(6) Total Estimated Number
	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	
I. <u>Water and Marsh Birds:</u>										
Pied Bill Grebe			40	1/2/63	4	4/30/63				
D. C. Cormorant	350	January	375	1/1/63	300	4/30/63				
Great Blue Heron	200	January	200	April	200	April				
American Egret	20	January	175	April	75	April				
II. <u>Shorebirds, Gulls and Terns:</u>										
Killdeer	600	January	575	April	400	April				
Wilson Snipe			12	March	1	April				
Herring Gull	15	March	150	April	10	April				
Spotted Sandpiper			175	April						

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. <u>Doves and Pigeons:</u> Mourning dove White-winged dove		12,000	March & April		
IV. <u>Predaceous Birds:</u> Golden eagle *					
Duck hawk					
Horned owl		75			
Magpie					
Raven					
Crow		12,000	Jan.		

\* A golden eagle was seen from time to time during the period.

Reported by *Bennie C. Lundy*

#### INSTRUCTIONS

- (1) Species: Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. 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. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiformes)  
II. Shorebirds, Gulls and Terns (Charadriiformes)  
III. Doves and Pigeons (Columbiformes)  
IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)
- (2) First Seen: The first refuge record for the species for the season concerned.
- (3) Peak Numbers: The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge record for the species during the season concerned.
- (5) Production: Estimated number of young produced based on observations and actual counts.
- (6) Total: Estimated total number of the species using the refuge during the period concerned.

UPLAND GAME BIRDS

Refuge Hosmer National Wildlife Months of January 1 to April 30, 19 63

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'd.	Estimated Total		Hunting	For Re- stocking	For Research		
Quail	43,000	17							3,000	Pertinent information not specifically requested. List introductions here.  Two male found dead after the hunt and appeared to be shot during the hunt.  This was the 2nd hunt for the refuge.
Wild Turkey	43,000					7			300	

## 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 Norcross National Wildlife Year ending April 30, 1963

(1) Species  Common Name	(2) Density		(3) Removals					(4) Disposition of Furs					(5) Total Popula- tion	
	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				
Raccoon	40,000				30									2,000
Mink	4,000													200
Beaver	4,000				273									900
Otter	4,000				2									3
Muskrat	4,000				64									600
Skunk	40,000													150
Opossum	40,000				34									230
Bobcat	40,000				13									100
Grey Fox	40,000				14									350
Red Fox	40,000				4									100
Grey Squirrel	40,000		1392**											25,000
Fox Squirrel	40,000		430**											2,600
Rabbits - Cotton Tail Sump	40,000		24		1									4,000 2,000

\* List removals by Predator Animal Hunter

REMARKS: \* caught accidentally.

\*\* Total kill from 955 permits returned out of 1,695 issued.

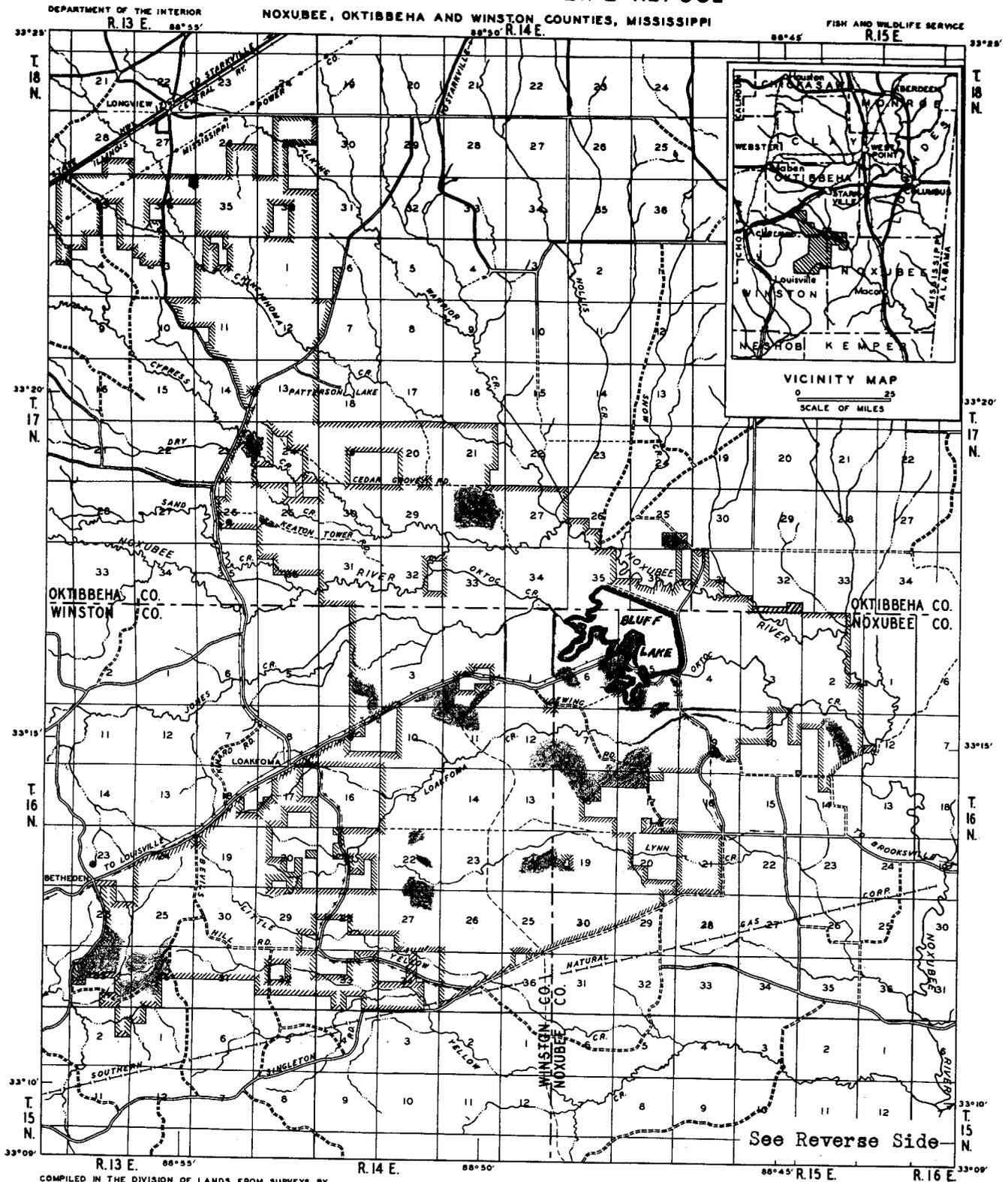
Reported by *Bessie C. Lewis*

## 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.

# NOXUBEE NATIONAL WILDLIFE REFUGE



DEPARTMENT OF THE INTERIOR  
 R. 13 E. 88° 55' 88° 50' R. 14 E. 88° 45' R. 15 E. R. 16 E.

CHOCTAW MERIDIAN



See Reverse Side

Compiled in the Division of Lands from surveys by F.W.S., S.C.S., G.L.O. and aerial photos by A.A.A. MARCH 1948

51 NOX AA

**Winter Burns 1962-1963**

SPORT FISHING REGULATIONS - 1962

NOXUBEE NATIONAL WILDLIFE REFUGE  
Brooksville, Mississippi

Sport fishing on the Noxubee National Wildlife Refuge is permitted at Bluff Lake, Betts Pond, Keaton Tower Pond, Parker Slough, Pete Slough and those portions of Cypress Creek, Oktoc Creek and Noxubee River that are within the Refuge. These open areas comprise 1,277 acres or 3 percent of the total area of the Refuge. Sport fishing is subject to the following conditions:

- a. Species permitted to be taken: Bass, bream, crappie, catfish and other minor species permitted by State regulations.
- b. Daily creel limits:  
Bass           15  
Bream          50  
Crappie        30  
Aggregate daily limit of all kinds shall not exceed 75 per day.
- c. Open season: March 1, 1962 through October 31, 1962  
Daylight hours only.

Other Applied Rules

1. Pole and line, artificial baits and lures, trotlines, grappling in accordance with State regulations. Snaglines prohibited.
2. Boats and motors permitted.
3. Hand grabbing for catfish and other non-game fish from May 1, 1962 through July 31, 1962 as permitted by State regulations.
4. All State regulations must be obeyed while fishing on the Refuge and fishing license must be carried on the person to be exhibited to Federal or State Officers upon request. No special Refuge permit is required.
5. A daily permit (.50) is required by the Mississippi Game and Fish Commission to fish in Bluff Lake and tail waters of the big and little spillways.

The provisions of this special regulation supplement the regulations which govern fishing on wildlife refuge areas generally which are set forth in Title 50, Code of Federal Regulations, Part 33.



Roll 3-63 Exp. 1 Personnel carrier obtained from Surplus.  
This ideal for transporting labor crews.



Roll 3-63 Exp. 4 You cannot get many more culls per acre  
than this. Culls have been killed and  
the ample natural regeneration will soon  
take over the site.



Roll 3-63 Exp. 13 APW job of graveling roads. This was a very worthwhile pproject.



Roll 3-63 Exp. 19 5 ton dynamite house completed under APW



Roll 5-63 Exp. 33 Lee beans left after wintering waterfowl failed to utilize them. Doves and deer used them heavily in late March and April but did not use them all.



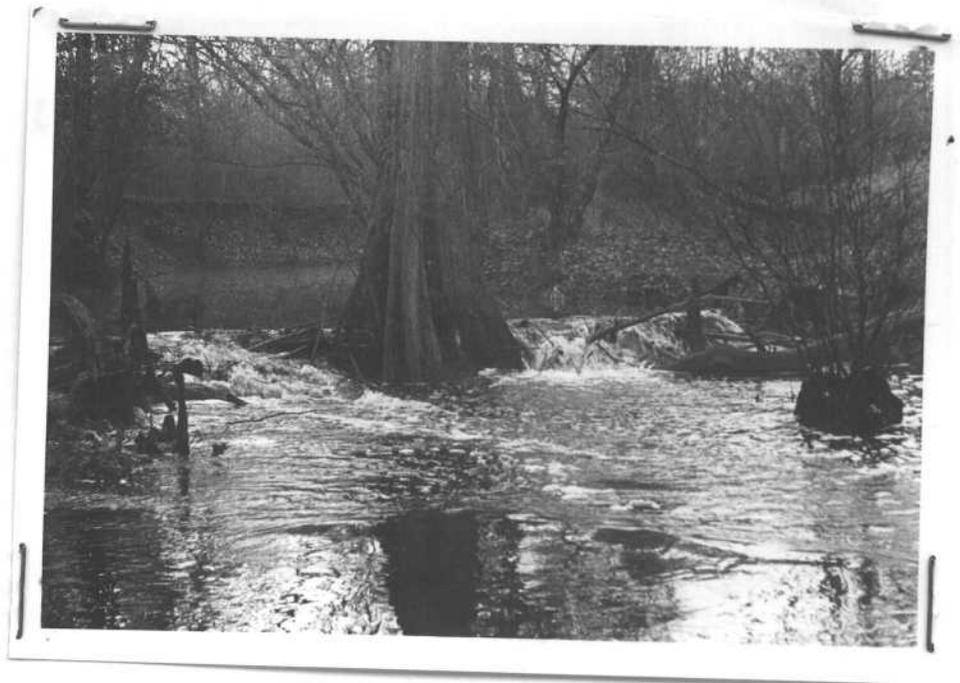
Roll 5-63 Exp. 22 TSI Crews getting additional safety instruction to keep them out of stump holes, away from snakes and yellowjacket and in short to take care of themselves in the woods.



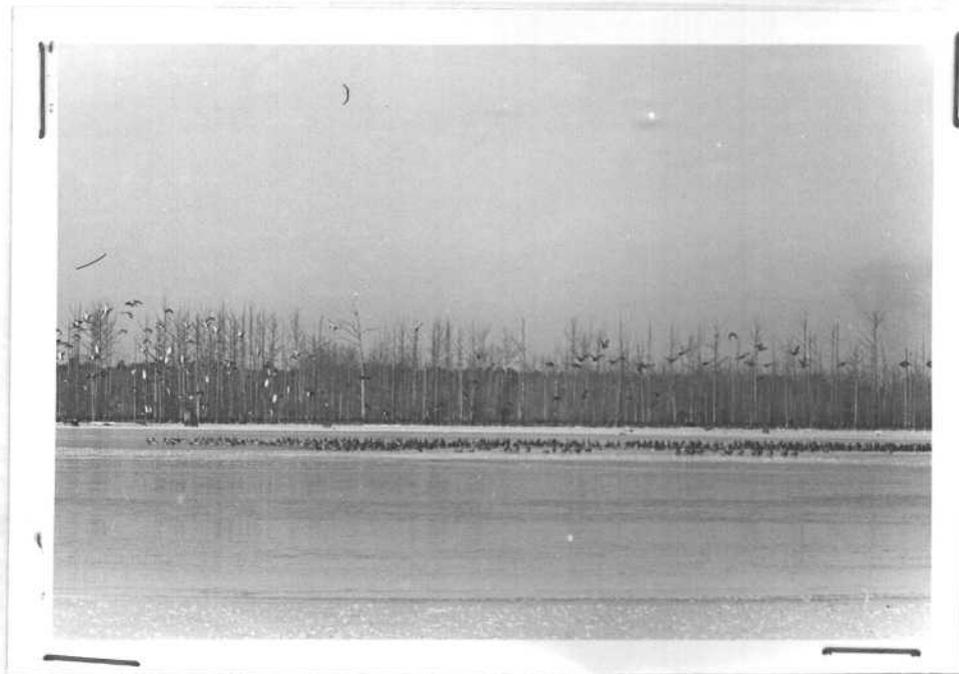
Roll 5-63 Exp. 31 Cherry browse stimulated by prescribe burn. Cherry browse varies in value from unpalatable in Texas to excellent in Michigan and Pa.



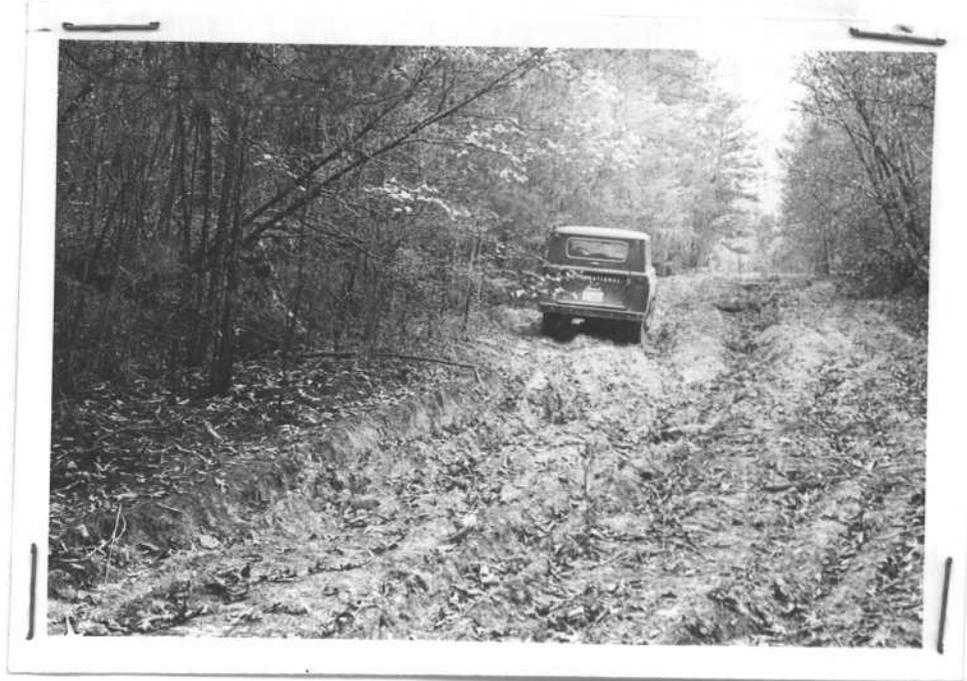
Roll 5-63 Exp. 27 Hurricane Mistblower used to spray onions and turnips on rye grass to be harvested.



Roll 1-63 Exp. 40 This type of beaver dam does no  
particular damage to timber. Oktoc Creek.



Roll 1-63 Exp. 11 Ducks on ice at Bluff Lake. Max.  
population estimated at over 100,000



Roll 7-63 Exp. 20 Roads in the Devils Hill area are an abomination and will require atleast \$100,000.00 to place in shape.



Roll 7-63 Exp. 2 Temporary bridge built of surplus bridge members obtained from surplus. 3 were installed during period.



Roll 7-63 Exp. 25 Residual Stand of pine in Comp. 3 after winter logging. Basal area was reduced from 120 to approx. 90 sq.ft.



Roll 7-63 Exp. 28 Residual stand of Mixed Hardwood in Comp 3 after Cull Tree Removal



Roll 7-63 Exp. 42 One of five Accelerated Public Works signs erected on refuge projects. These are red, white and blue and very attractive.



Roll 7-63 Exp. 40 Spillway constr. on Green Tree Reservoir Levee # 1 Bags are filled with sand and cement which hardens to make permanent rip-rap



Roll 7-63 Exp. 38 W.W.Dempsey, Starkville, Miss. with one of the 11 gobblers harvested on refuge



Roll 7-63 Exp. 34 Timber Rattlers destroyed by TSI crews. Larger reptile measured 65" which may be near a record for this area.



Roll 4-63 Exp. 15 Odd things are often uncovered by fires.  
This was refreshments for fire fighters.  
This is next to Refuge Lands.



Roll 4-63 Exp. 36 Part of Ziman TSI crew APW Program  
This work is a real investment



Roll 5-63 Exp. 28 Orphan beaver



Roll 6-63 Exp. 6 <sup>A</sup>ice field type levee in bottom land hardwood Green Timber Reservoir. SCS engineered the levees on lands of the Memphis Plywood Co. east of Tunica, Miss. These would be practical on some of our bottom lands and in Jones Creek Agri. Area

TIMBER REMOVAL

Refuge Noxubee National Wildlife Refuge Year 1963

Permittee	Permit No.	Unit or Location	Acreage	No. of Units Expressed in B. F., ties, etc.	Rate of Charge	Total Income	Reservations and/or Diameter Limits	Species Cut
Montgomery Bros.	32411	28	60*	17,000 B.F.	Lump Sum	136.00	Designated	Oak
T.T. Rives	32415	5	12	12,813 B.F.	Lump Sum	90.91	Designated	Pine-hardwood
Montgomery Bros.***	32623	28	60*	170,000 B.F.	(\$5,100.00 exchanged for 80 acres)			Pine
E.M. Dukes	32418	28	60*	20 cords	\$1/cord	20.00	Pulp from tops	Pine-gum
Seitz Lbr. Co.**	32682	28	17 1/4	514,827 B.F.	Bid Sum	15085.50	Designated	Pine-hardwood
Leon Fuller	32419	21	22	21,013 B.F.	Lump Sum	196.10	Designated	Pine-hardwood
Seitz Lbr. Co.	32688	19	70	110,000 B.F.	Bid Sum	2020.50	Clear cut for Ross Impoundment	Pine-hardwood
T.T. Rives	32420	2	13	13,665 B.F.	Lump Sum	118.31	Designated	Pine-hardwood
John Barton	32699	14	350	1,032,000 B.F.	Bid Sum	20813.20	Clear cut for Lookfoma Lake	Pine-hardwood
Bill Haines	32698	14	120	2,000 cords				Pine-hardwood
				463,000 B.F.	Bid Sum	9010.00	Clear cut for Lookfoma Lake	Pine-hardwood
T.T. Rives	32601	2	12	92 cords				Pine-hardwood
Seitz Lbr. Co.	R.O. 2	6	222	9,598 B.F.	Lump Sum	81.34	Designated	Pine-hardwood
J.H. Buckner	32602	14	10	306,000 B.F.	Bid Sum	7086.00	Designated	Pine-hardwood
Leon Fuller	32604	21	22	14 cords	Lump Sum	38.50	Designated	Pine-gum
Warran Glenn	32605	14, 16, & 17	26	20,111 B.F.	Lump Sum	280.67	Designated	Pine-hardwood
Freeman Livingston	32603	21	22	26,000 B.F.	Lump Sum	494.00	Designated R/W	Pine
John L. Heard	32606	12	90	21,684 B.F.	Lump Sum	325.31	Designated	Gum
T.T. Rives	32607	2	14	122 cords	Bid Sum	335.50	Designated	Pine
Refuge****		14	7	14,001 B.F.	Lump Sum	130.68	Designated	Pine-hardwood
Seitz Lbr. Co.	R.O. 9	12	230	7,000 B.F.	(Est. value)	175.00	Refuge use	Pine
Leon Fuller	32612	16	7	247,000 B.F.	Bid Sum	3547.50	Designated	Pine-hardwood
Freeman Livingston	32613	6	40	6,921 B.F.	Lump Sum	82.86	Designated	Pine-gum
Leon Fuller	32614	2	13	19,467 B.F.	Lump Sum	224.91	Designated	Pine-gum
R. L. Sides	32616	23	22	12,699 B.F.	Lump Sum	190.49	Designated	Pine
				23 cords	Lump Sum	52.72	Designated R/W	Pine-hardwood

TIMBER REMOVAL

32 Cont '8

Refuge Norubee National Wildlife Refuge Year 1963

Permittee	Permit No.	Unit or Location	Acreage	No. of Units Expressed in B. F., ties, etc.	Rate of Charge	Total Income	Reservations and/or Diameter Limits	Species Cut
John L. Heard	32617	12	131	179 cords	Bid Sum	462.40	Designated	Pine
Leon Fuller	32618	2	21	21,536 B.F.	Lump Sum	315.79	Designated	Pine-gum
John Barton	R.O. 18	12	470	620,000 B.F.	Bid Sum	13860.52	Designated	Pine-hardwood
Seitz Lbr. Co.	R.O. 25	14	60	272,000 B.F.	Bid Sum	8100.75	Clear cut for agriculture	Pine-hardwood
James Rives	32620	2, 15 & 18	19	25,585 B.F.	Lump Sum	221.66	Designated R/W	Pine-hardwood
Freeman Livingston	32781	2, 3 & 12	32	31,831 B.F.	Lump Sum	399.75	Designated	Pine-hardwood
T. T. Rives	32783	2	11	11,393 B.F.	Lump Sum	107.79	Designated	Pine-hardwood
Leon Fuller	32784	15 & 18	32	31,341 B.F.	Lump Sum	284.10	Designated	Pine-hardwood
Isom Porter	32785	6, 7 & 8	5	4,555 B.F.	Lump Sum	60.00	Designated	Pine-gum
T.T. Rives	32786	18	17	16,639 B.F.	Lump Sum	126.67	Designated	Gum-oak
T.T. Rives	32787	2	10	9,252 B.F.	Lump Sum	115.05	Designated	Pine-gum
H.P. Pearson	R.O. 38	12	338	341,000 B.F.	Bid Sum	7640.40	Designated	Pine-hardwood
Albert Glenn	32788	4, 5, 7, & 9	8	7,274 B.F.	Lump Sum	74.11	Designated	Pine-gum
Willie D. Roberson	32790	6	10	10 cords	\$1/cord	10.00	Pulp from tops	Pine-gum

\* Three covering the same acreage with three different type of operations - recorded as one acreage in totals  
 \*\* Re-sale of 1962 timber SUP # 32423 (\$17,627.00 for 503,827 B.F. on 174 acres).. subtracted from Totals by 1963 bid sums rather than the 1962 sums.  
 \*\*\* Timber-land exchange SUP - exchange value is recorded in the Total Income of this form.  
 \*\*\*\* Refuge use - estimated value of products is recorded in the Total Income of this form.

Total acreage cut over 2,722 - 174 = 2,548 Total income \$97,144.99 - 15,085.50 = \$82,359.49 (See above notations)

No. of units removed B. F. 4,437,268 - 511,827 = 3,922,441 Method of slash disposal Tops are sold for pulpwood, if possible.  
 Cords 2,571  
 Ties None

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
BUREAU OF SPORT FISHERIES AND WILDLIFE  
NOXUBEE NATIONAL WILDLIFE REFUGE  
ROUTE # 1, BROOKSVILLE, MISSISSIPPI

NARRATIVE REPORT - 1963

September 1 to December 31, 1963

Inclusive

PERSONNEL

BURTON S. WEBSTER . . . . . REFUGE MANAGER  
BENNIE C. LUNDY . . . . . ASS'T. REFUGE MANAGER  
EDWARD F. FOLSOM. . . . . ASS'T. REFUGE MANAGER  
KENNETH W. TENNYSON . . . . . ADMINISTRATIVE ASSISTANT  
ROBERT W. BRITT . . . . . FORESTER  
CHARLES L. GOUDELOCK. . . . . FORESTER  
ROBERT W. SPENCE. . . . . WILDLIFE TECHNICIAN  
JACOB J. SMITH. . . . . AUTOMOTIVE MECHANIC  
WILLIS C. SMITH . . . . . MAINTENANGEMAN  
HUBERT S. LIVINGSTON. . . . . MAINTENANGEMAN  
JOHN E. WOODS . . . . . WILDLIFE AID  
FRAZIER PARKES. . . . . LABORER (FARM)  
ROBERT L. SHINN . . . . . LABORER (FARM)  
GRADY H. WHITE. . . . . LABORER (FARM)  
RUFUS HUNT. . . . . CONSTRUCTION REPRESENTATIVE

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Report was written by Manager Webster except III B, III C, IVA, IVB, IVE, IVF, written by Assistant Refuge Manager Lundy; VA and V B written by Assistant Refuge Manager Folsom; III D, III E, III F, and IV D written by Forester Goudebeck.

## I. GENERAL

### A. Weather Conditions.

	Rainfall	Gauge Readings		TEMPERATURE		TEMPERATURE	
		Max.	Min.	Aver. Max.	Aver. Min.	Max.	Min.
September	1.14	-3.00'	-3.80'	83.9	69.0	94	47
October	.08	-2.75'	-3.25'	83.2	55.6	94	38
November	4.33	-3.25'	-4.85'	65.7	44.2	79	26
December	4.85	-4.00'	-1.30'	46.1	27.3	67	12

September - Cool dry weather continued thru September. The five showers that occurred totaled only 1.14" and was not enough to give rye grass and fescue much incentive to grow. At the end of September we were 7.20" below normal for the 1st nine months of 1963.

October - October was warm and dry and average air temperature was 3.7° above normal. Since only .08" rain fell, October was one of the driest months on record and at the end of the month we were 9.41" below normal for the first 10 months of 1963.

November - Temperatures and rainfall were slightly above normal but even so, we were 8.21" below normal for the first 11 months of 1963. Air temperature was one degree above normal.

December - December was the coldest on record, average temperature being 10.6 degrees below normal. Heavy sleet and snow fell on December 22 and 9.5" of snow fell on December 31. We narrowly missed a white xmas. Precipitation was about normal but we finished 1963 8.44" below normal.

### B. Habitat Conditions.

#### 1. Water.

September and October were very dry and all our wet lands were dry. Our impoundments were short of water up to December 28th because of the extreme drawdown necessitated by Construction of Levee # 3. This is not to imply that all our habitat was unattractive since we diverted water from Noxubee River and flowed it down Oktoc to fill Green Timber Reservoir # 3. We also were able to divert enough water to Green Timber Reservoir # 1 which even though not completely filled was attractive to ducks. Bluff Lake itself was more attractive to ducks and geese this period than ever before. We note that the ideal waterlevel for optimum attractiveness to both ducks and geese is - 2.00'. This gives the geese mud bars to rest on and ducks seem to enjoy the same.

## 2. Food and Cover.

Refuge crops with the exception of millet were the best ever, thanks to heavy July's 9.2" of rain. Heavy July rains did not permit millet planting until late August in the wetter fields and when they became dry enough to plant, they became so dry that we estimate our crop to be 60% of normal. Deer ate the millet in the Dry Creek Agricultural Area. Browse was ample and attractive during period but it was not until after November 1st that it became luxuriant.

Bluff Lake and all green timber reservoirs froze on December 19th and remained largely frozen until December 23rd. During this period ducks and geese kept small areas of the lake open and fed heavily on corn in all fields. We noted that the ducks used dwarf corn without it being knocked down.

## II. WILDLIFE

### A. Migratory Birds.

Of special interest was the arrival of 23 to 29 White-fronted geese during the week of October 27th and their staying at the refuge throughout the period. In years gone by, these geese would stay a week or a few days and move on.

#### Canada geese:

Fifty migrants arrived the week of October 6th and during the week of December 8th one hundred more came. These geese seemed to segregate themselves into three different groups. During same period 1962 the migrant Canadas varied from 11 to 54.

All geese used Bluff Lake and Doyle Arm. Water was scarce this fall and Bluff Lake was low and many mud bars which were attractive to geese were available. We observed that Bluff Lake can make its best contribution to geese and ducks when water is 2 to 3 feet below the spillway elevation. When Lake Locksma is completed, we believe it would be to our interest to manage Bluff Lake for waterfowl.

#### Ducks

Mallards first appeared in late September and by late December had built up to 50,000 - 5,000 more than last year. We had saved enough water from July rains in Ross Branch Reservoir to flood 15 acres of standing corn in Jones Creek Area which was heavily used by waterfowl. Green Timber Reservoir # 1 even tho not full of water, was attractive to Mallards. However, Bluff Lake and the vast beds of Chufa (Red-rooted sedge) and wild millet created by summer draw down was the most attractive single area we had.

Wood duck

Wood duck were abundant and furnished more shooting for hunters than any other species.

Total ducks did not quite approach the 1962 figures.

Doves.

Doves were very abundant on the corn fields where mechanical harvesters were used and on soy bean fields where combine left an estimated three bushels per acre.

Wood-cock.

Wood-cock were seen on only one occasion and local quail hunter reported several good hunts in the vicinity of Longview.

Cormorant.

Cormorant population is much less this year. We wonder if the removal of shad in Bluff Lake in 1961 and before is a reason.

B. Upland Game Birds.

Turkey are more abundant than ever before. Refuge personnel recorded turkey observations 25 times during the period and it was the opinion of hunters that they had increased considerably.

Quail populations are quite high.

C. Big Game.

Although the refuge kill was less than last year, deer are in the opinion of most hunters more abundant than last year. The harvest of many deer on November 25th and 26th gave the deer a lesson they did not forget. There was a decided drop in number of hunters after the "any" deer season. The decline of hunters was due to abundance of deer outside of the refuge. Nearly every wood lot of 40 acres in size holds a few deer and hunters prefer to hunt the wood lots where briars are not so dense and they can use dogs to drive deer from cover.

D. Fur Animals, Predators, Rodents, and other Mammals.

Beaver:

Beaver head the list of animals that give us trouble. No sooner had Levee # 3 been completed than beaver gave it a going over. They seemed to attack in mass and 18 were shot in the vicinity of the outlet structure. While we deplore this necessary destruction, we cannot let them undermine and destroy Levee # 3. Trappers are not too enthusiastic this season. Local prices are off since the Mississippi Legislature removed beaver from the furbearer list and classified it as a "predator".

Otter:

Otter populations show no change.

Fox:

Populations, red and grey are normal. We have a lot of foxes.

Opossum:

Opossum populations are low.

Mink:

Mink population seem normal.

Weasel:

Weasels are rare. No one here has ever seen a weasel.

Muskrat:

Muskrat populations are quite low due to draw down for construction purposes and the dearth of water resulting from rainfall deficiency.

Rabbit:

Rabbit populations are not excessive.

Raccoons:

Raccoons are most abundant and bold. A few seem to have no fear of people any more and act more like pet raccoons than wild ones.

F. Hawks, Eagles, Owls, Crows, Ravens, and Herons.

Hawk population on refuge vary. Accipiters are practically never seen while Buteos population are high. Red-shouldered, Red-tailed and Broad-winged are the most common.

North hawks are seen occasionally in the vast fields of Jones Creek area and are considered rare on Noybee. Even in the Black Belt Prairies where they were common 15 years ago, they are scarce. One Osprey was noted in mid October.

Three immature bald eagles appeared on Noybee in December after a year's absence. They show no interest in the old eagle nest. We think they are too young for such interests.

Crows have a roost in Section 25, Township 16 North, Range 14 East and is estimated to contain a couple of thousand birds.

F. Other Birds.

No comments.

G. Fish.

Sport fishing was good throughout the period.

H. Reptiles.

According to James Hartman, graduate student Zoology Department Mississippi State University, who made a study of the Amphibians and Reptiles on Noybee National Wildlife Refuge for his Master Degree, we have twenty one species of reptiles on Noybee. We did not know we had that many and when time and space permits, we will make a collection of Noybee Reptiles since everyone is interested in snakes in one way or another.

I. Disease.

One doe deer was seen by a hunter which had a very large growth on her forehead. The hunter was unable to say whether or not the growth, which was big enough to impede her movement, was on her neck, chest, or forelegs.

III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development.

The period was one of great progress. Work was continued on all APW Contracts and several projects were completed.

1. Lake Loakfoma Levee was completed except for <sup>rip rap</sup> rip rap.
2. Green Timber Reservoir # 3 Levee and structure was completed.
3. Green Timber Reservoir # 4 Levee and structure was completed.
4. New 8" well was drilled and cased.
5. East Levee of Bluff Lake was rebuilt which required 31,000 cu. yds. of fill.
6. East Levee and south banks of Bluff Lake were rip rapped (60,000 sq. ft. with dry mix).
7. Shaped and removed debris from 34,400 sq. ft. of the south bank of Bluff Lake where erosion by wave action is so rapid.
8. New levee and lake bank slopes were fertilized, seed to fescue and mulched.
9. Diversion ditch, GTR # 1 was fertilized and seeded to rye grass.
10. 75% of new Loakfoma Dam was rip rapped.
11. 150 acres of Loakfoma Lake Area was cleared, brush piled and burned.
12. Built 5 miles of road in Compartment # 10 and # 13 (South side of Refuge) and 3/4 miles in Compartment # 23 from Roach Place to newly acquired Kinard Camp. Bridges, culverts and gravel were not placed.

New shop, office, well house and residences are progressing nicely and should be completed by March 1964.

B. Plantings

1. Aquatics and Marsh Plants

None.

2. Trees and Shrubs

On February 20, 1962, we planted 25 saw-tooth oaks (*Q. Acutissima*) furnished by the Soil Conservation Service for Wildlife food and cover. Two seedlings died the first year; one was cut two inches above ground-line probably by a rabbit and the other died from the process of replanting. At present 23 seedlings are living and all seem healthy.

Water and willow oak acorns were planted on 18 acres of bottom-land "gumbo" soil in Compartment # 21 (T17N, R14E, Section 26, Oktibbeha County). The site was prepared with a chisel plow and acorns dropped at 6 x 6 feet spacings. Our regeneration method was a failure, probably because the acorns were not treated with repellents for birds and rodents.

3. Upland Herbaceous Plants

None.

4. Cultivated Crops

Refuge personnel mowed, fertilized and disked 126 acres of land previously planted to rye grass so that it would be ready for geese to browse when they arrived. In spite of the dry weather a sufficient stand of rye grass germinated and begun furnishing the needed attraction and browse for waterfowl. The area in Loakoma Lake Bed that had been cleared by the middle of December was sowed to rye grass using a cyclone seeder and germinated pretty good.

During the period thirty acres in fields 18, 19, 20, 21, 22, and 23 of Compartment # 14 and field 3 of Compartment # 11, were limed, disked, fertilized and seeded to fescue, KY-31 and Ladino clover. Dry weather delayed germination of the fescue and also delayed planting and germination of the clover. Due to dry weather the clover was not planted until the middle of November when moisture fell. The moisture was not sufficient to get a stand of clover but it is hoped that enough of it will survive the winter for a stand.

Rye grass was sowed inside the goose pen replacing the millet that served as browse for the goose decoys.

A bushel of Chufa contributed to the refuge by the Zoology Department of Mississippi State University and planted in field 26 of Compartment # 14, made a good yield and has been utilized by turkey and deer.

Farming operations continued among the cooperators, with harvesting operations getting underway as soon as possible. The yield of corn has ranged from 10 to 85 bushels per acre with the cooperator doing the best job of land preparation, fertilization, planting and cultivation receiving the greater returns for his money. Soy beans have yielded an estimated 17 bushels per acre.

Harvesting operations are complete except for one cooperator. Douglas C. Miller, Agreement # 40, says that there remains approximately 40 acres of soy beans in Compartment # 19. Harvesting will be complete as soon as possible.

One planting of 30 acres of corn received a decrease in yield due to dry weather and a deficiency of Zinc in the soil showing up during the dry period. Mrs. Lula B. Croft under Cooperative Agreement # 35 with 36 acres of corn failed to produce the possible yield of corn on that area. The 36 acres averaged about 10 bushels per acre while land adjacent to it averaged 85 bushels per acre. It is evident that a lack of land preparation and cultivation is responsible for the difference in the yield of the two areas. One cooperator harvested the refuge share of 16 acres of corn and delivered approximately 100 bushels to refuge headquarters. The 16 acres under this agreement did not produce as most of the others did. Five cooperators averaged 65 to 85 bushels per acre, which is above the average for this area.

Interest in our cooperative farming is increasing each year in that acreage available is less than interested persons are asking about. It may be that we will get a better job done with this type of operation. Cooperative farmers are making a worthy contribution toward feeding wildlife in this area.

### C. Collections and Receipts.

#### 1. Seed or other Propagules.

The refuge received 100 bushels of ear corn, from Cooperative Agreement # 36, to be used in the trapping program and feeding geese decoys. One thousand pounds of fescue, Ky-31 and 50 pounds of Ladino Clover was purchased and planted. Fifteen hundred pounds of milo picked up at Wheeler Refuge is being used in the duck trapping program.

2. Specimens.

None.

D. Control of Vegetation.

Total acres receiving timber stand improvement treatment by annual work, soil and moisture, and APW funds was 6,122 acres which cost \$33,377.24 and averaged \$5.45 per acre.

Both Reuel Little Tree Injectors and Jim-Gem Injectors were used with good results, each method has advantages over the other. In Jim-Gem Injectors a poison concentrate is used which reduces the amount of time in refueling guns and less poison is required to service guns, while a mixture (1 gallon of 2-4-5 T to 14 gallons of diesel) is used in the Reuel Injectors which requires transportation and handling. In the future we plan to use only Jim-Gem Injectors, we believe this will reduce the average cost per acre.

Hardwood clumps and individual trees were retained throughout pine and hardwood stands for mast production and den trees. All wood duck nesting trees and potential trees were left in areas that might be used by wood ducks. Caution and prudence were exercised in all cases where wildlife food, cover and protection were marginal in the treated areas. Retention or release of natural foods was stressed in all areas.

E. Planned Burning.

During 1963 there were 3,524 acres prescribed burned. Of this, 210 acres of marsh were burned for waterfowl improvement; 318 acres of sedge fields were burned for improvement for wildlife and reduction of fire hazard; and 3,347 acres of pine and pine hardwood timber types were burned to reduce litter, control undesirable hardwood, and to open range for turkey, quail and deer.

Eighteen separate days were used to burn 3,524 acres: In March, 7 days and 2,028 acres; In December, 11 days and 1,496 acres. The average cost per acre was \$0.36 and average burn was 195 acres per day.

F. Fires.

There were four fires this period: Three were incendiaries and one caused by smoking. Value of timber damaged or destroyed was \$230.00 and suppression cost to refuge was \$82.00. Twenty-three acres burned on refuge lands, none on private land.

Fire # 63-5 was set by a local resident who was drunk. This fire was investigated by the State Fire Marshall but not enough evidence was found for a conviction.

Fires # 63-6 and 7 were thought to be incendiary fires; however, we lacked evidence to support any legal action.

Fire # 63 - 8 was believed set by hunters.

The acreage burned by wildfires this calendar year was low in our estimate. The fire season was long and dry with great potential for large fires. We were lucky. Credit should be given to the Mississippi Forestry Commission for excellent detection and suppression services. Most of our fires occurred at night or weekends and were detected and suppressed by Forestry Commission personnel.

<u>Fire No.</u>	<u>Cause</u>	<u>Acreage</u>	<u>Damage</u>	<u>Cost</u>
63-1	Prescribed Burning	10.0	\$ 72.20	\$ 47.00
63-2	Lightning	23.0	165.00	28.85
63-3	Refuge Burning	1.5	9.00	9.20
63-4	Smoking	200.0	1,500.00	103.84
*63-5	Incendiary	0.1	N C	21.00
*63-6	Incendiary	2.0	20.00	21.00
*63-7	Incendiary	20.0	200.00	20.00
*63-8	Smoking	<u>1.0</u>	<u>10.00</u>	<u>21.00</u>
		257.6	\$1,976.20	\$451.89

\* September - December Period

IV. RESOURCE MANAGEMENT

A. Grazing.

Five permittees grazed 361 acres of land with 118 cows, yielding an actual cash revenue of \$341.70. One permittee pays a fee of \$289.00 and applies lime and fertilizers valued at \$947.00 annually which brings the total cash value of his operation to \$1,236.00 annually. Adding the value of lime and fertilizer applied would increase the value received by the refuge in an increase of vegetation for Brouse as well as fertility of the soil. Permits were checked during the period and found to conform to the conditions described therein.

B. Haying.

Eight haying permits yielded a cash value of \$210.25 and removed excess growth from 97 acres of land. The operation benefited in that the permittees received needed hay for feeding livestock and the cost of mowing was absorbed in the operation, relieving the refuge of time and expenses involved.

C. Fur Harvest.

Five trappers are removing beaver. Extreme cold in December interfered with their endeavor. Trapper enthusiasm is not great since there is only one local fur buyer and since he doesn't have to compete with Sear's any more, he pays about what he pleases for raw fur. Thus the fur game is a "skin" game in more than one sense of the word.

D. Timber Removal.

During 1963 the refuge harvested 4,437,268 board feet of sawtimber and 2,571 cords of pulpwood from 2,722 acres bringing a total revenue of \$97,444.99.

Nine large sales accounted for \$87,164.37 and 28 small sales accounted for \$10,280.62. The Branch of Realty issued one special use permit to Montgomery Brothers on a land-timber exchange (170,000 B. F. or \$5,100.00 exchanged for 80 acres). Most small sales resulted from areas cleared for roads and buildings and from timber damaged by wind, lightning, insects, and beaver.

This year we sold \$97,444.99 worth of timber and 4,437,268 B. F. as compared to \$79,408.70 and 3,366,789 B. F. for last year. However, one large bid permit was a re-sale of timber marked in 1962 and reduces our 1963 sale totals to: \$82,359.94 total income: 3,922,441 board feet of saw timber and 2,548 acres.

Markets for pine pulpwood were almost non-existent this spring with dealers only buying pine a few days each week. During the summer, logging activity was good. Three small sawmills and seven independent logging crews were removing sales from refuge lands.

Sawtimber markets are increasing slowly in demand and stumpage prices are fluctuating but are still below what we would like. Pine bid prices range from \$20.00 to \$32.00 per thousand board feet and hardwood bid prices range from \$7.00 to \$20.00 per thousand board feet while pulpwood is \$3.00 per cord).

Two hickory handle mills have set up on refuge land. This has improved the market for low grade hickory and has helped our program to release oaks in areas where the two species compete for light, moisture and space.

<u>Type</u>	<u>Number</u>	<u>Board Feet</u>	<u>Cords</u>	<u>Income</u>
Large Sales	9	3,905,827	2,203	\$87,164.37
Small Sales	28	531,441	368	10,280.62
Timber -Land Exchange	1	170,000		
Refuge Use	<u>38</u>	<u>4,614,268</u>	<u>2,571</u>	<u>\$97,444.99</u>

E. Commercial Fishing.

No activity.

F. Other Uses.

During the period 16,410 pounds of scrap iron and 10 junk batteries were sold to the Louisville Junk Company, Louisville, Mississippi yielding \$92.05. The scrap iron yielded \$87.05 (16,410 pounds @ .50 per hundred weight) and the batteries \$5.00 (10 at 50¢) making the total receipts of \$92.05.

## V. FIELD INVESTIGATION OR APPLIED RESEARCH

### A. Research

A meeting was held on Friday, December 13, 1963, with Messrs Givens and Hankle from the Regional Office, Webster and Britt from this refuge and Arner and Ellis from Mississippi State University along with graduate student John Woods. This meeting was held to discuss the wood duck study being conducted by Mr. Woods. At this time problems concerning objectives and work load of this study were ironed out.

### B. Duck Banding

During this period a total of 159 ducks were banded. This included: 60 wood ducks, 97 mallards, 1 black, and 1 ring neck. During most of this period water conditions were such that none of the permanent trap sites were either in or near water.

On Monday, December 9, 1963, the experimental geese escaped through a hole made by a board warping and pulling off of its nails.

No attempt was made to recapture these birds since their wings had been pulled on November 15, 1963, and they were scheduled for release.

## VI. PUBLIC RELATIONS

### A. Recreational Uses

See MR-6, Public Relations, form.

942 fishermen paid the Mississippi Game and Fish Commission \$465.25 for the privilege of fishing in Bluff Lake. Fishing was good. An estimated 2,500 people enjoyed picnicking at Bluff Lake inspite of the dust which would cover everything every time a car went by. An estimated 5,000 visitor days were created by the public for bird watching, noting progress on refuge projects, and to inquire about hunting on the refuge.

B. Visitors.

Mr. C. M. Hudson, President, Bank of Brooksville, Brooksville, Mississippi.

Messrs. McKnight and Frank Bonner, Delta Branch Southern Forest Experiment Station, Stoneville, Mississippi. Discussed regeneration of beaver killed forest - Green Timber Reservoir # 3.

Messrs. Lawson and Conner, Engineers, U. S. Fish and Wildlife Service, Atlanta.

Messrs. Therrell, Robertson, and <sup>Mumford</sup> ~~Manfoot~~, Extension Foresters, made a tour of refuge forest activities.

Mr. Lawson, U. S. Fish and Wildlife Service, Atlanta - APW contracts.

October 11th, U. S. Game Management Agent, Wm. R. Edwards, Jackson, Mississippi - law enforcement.

October 24th, Mr. Conner, U. S. Fish and Wildlife Service, Atlanta - Engineering.

October 28th, Mr. Key, Assistant Refuge Supervisor, Fish and Wildlife Service, Atlanta.

November 13th, Mr. Brown, Surveyor, Fish and Wildlife Service, Atlanta.

November 19th, Mr. Carthell, Branch of Realty, Fish and Wildlife Service, Atlanta - land acquisition.

November 26th, Mr. Wm. R. Edwards, U. S. Game Management Agent, Jackson, Mississippi - deer patrol.

November 26th, Mr. Wm. Turcotte, Chief of Game, Mississippi Game and Fish Commission - law enforcement.

December 3rd, Messrs. Taylor and Barrineau, Fish and Wildlife Service, Atlanta - APW contracts.

December 11 - 13th, Messrs. Hankla and Givens, Fish and Wildlife Service, Atlanta, Georgia - Refuge inspection and wood duck study.

December 27th, Mr. Wm. R. Edwards, U. S. Game Management Agent, Jackson, Mississippi - deer patrol and law enforcement.

C. Refuge Participation.

September 12th, Brooksville, Mississippi business men were given a show me trip by refuge personnel. They stayed on for supper since they brought their own food and even fed refuge personnel.

September 30th, Manager Webster showed refuge slides to Professors Club, Mississippi State University.

October 5th, Manager Webster assisted in lost person search. The lost was found as always, safe and sound. However, close kinsmen, particularly newly weds, always figure the worst and to us at Noxabee are the worst champion pessimists.

October 18th, Manager Webster talked to Siloam Springs Community Club in Clay County on refuge hunting and activities.

October 22nd, Messrs. Webster, Britt and Goudelock attended a Cooperative Fire Control Meeting held by Mississippi Forestry Commission at Philadelphia, Mississippi. After the meeting they visited the Indian Services Choctaw Reservation with Forester Walter Weldy, BIA.

October 31st, Manager Webster took Oktoc Garden Club thru refuge to show and explain developments.

November 5 - 8th, Forester Goudelock attended Hardwood log grading school at Louisiana Tech., Ruston, Louisiana sponsored by the National Lumber Manufacturers Association and Delta Branch, Southern Forest Experiment Station.

On the 2nd Friday of each month, K. W. Tennyson presided at Oktoc Community Club meeting since he was Club President in 1963.

December 13th, Messrs. Webster and Britt met with Dr's Arner and Ellis, and Graduate Student John Wood, Messrs. Givens and Hankla, Branch of Refuges, Fish and Wildlife Service, Atlanta to develop and clarify wood duck study.

D. Hunting

Squirrel Hunting

554 hunter trips were checked out of an estimated 1,750 hunter trips. Three squirrels were killed for every four hours hunting. Hunters averaged three hours per trip. Total kill is estimated at 5,250 squirrels, 10% of which were fox squirrels. Since October was the driest on record, the harvest was less than 1962. Weather is a big factor in squirrel hunting.

Deer Hunting

The 1963-64 deer hunt was held November 25 to 30th and December 26, 1963 thru January 1, 1964, except Sunday December 29th. On November 25 and 26th, any deer could be taken and this coupled with the closure of Government Offices and many private concerns on account of the funeral of President Kennedy really packed the hunters in here. In fact there were accidents (car wrecks) caused by anxious hunters. The first few hours of the season sounded like a dove shoot in the vicinity of the Smith and Ewing Fields and the deer learned a lesson they never forget. They made themselves scarce for the balance of the season.

Hunting pressure was off too after the any deer days. We are alarmed over the decline in hunting pressure since an adequate harvest is essential to good deer management and we are not getting it. The reason for this decline is hunting pressure is the fact that this part of Mississippi has more deer than hunters to hunt them. Every wood lot and soil banked field has ample deer to hunt. In order to properly harvest our deer we may have to hunt "any" deer and lengthen the season.

Harvest was 151 antlerless and 175 antlered deer. We feel we should remove at least 800 deer per year from the refuge. Deer conditions now in many areas are not unlike a bad neighbor's goats.

E. Violations.

The following cases were made during the period by refuge and state personnel:

Frank Livingston, Louisville, Mississippi - over limit on squirrels \$15.00.

Early Creeley, State College - hunting out of season on refuge - \$30.00.

Jerry Dozier, State College - hunting out of season on refuge - \$30.00.

Bobby Sherffield, State College - hunting out of season on refuge - \$30.00.

Monroe Talbert, Philadelphia, Mississippi - hunting after killing legal deer - \$15.00.

C. C. Ernest, Eupora, Mississippi - hunting after killing legal deer - \$30.00.

Ozie Savage, Brooksville, Mississippi - Headlighting deer - \$155.00.

Charlie D. Roberson, Rt # 5, Louisville, Mississippi - Headlighting deer - \$105.00.

Ison Porter, Rt # 5, Louisville, Mississippi - Headlighting deer - \$105.00.

T. J. Vinson, Starkville, Mississippi - hunting out of season on refuge - \$30.00.

Dexter D. Roberts, Starkville, Mississippi - hunting out of season on refuge - \$30.00.

Edward McFarland, Noxapater, Mississippi - hunting with unplugged gun - \$15.00.

We enjoy excellent cooperation with wardens of the Mississippi Game and Fish Commission and U. S. Game Management Agent's.

F. Safety.

Four one-hour safety meetings were held during the period which covered topics on driver cautions, vehicle maintenance, public hunting, use of hand tools, water rules, and lightning precautions. Films, slides and other visual aids were used to improve the quality of discussions. A Question-and-answer period was held at each meeting to insure that our men would correct any hazardous condition that was known to exist on or off the refuge. Safety publications were placed in each man's hands for himself and his family's benefit.

One lost time accident happened in the period. During a hot spell in September Mr. W. T. Hill suffered heat exhaustion while doing manual labor in sandbagging Bluff Lake Levee. He returned to full time work after a brief period of light duty. Since then we have had 108 days free of accidents.

One hazard was reduced when duck banding drive lands in Green Timber Reservoir # 1 were brushed-out and stump holes filled so drivers could concentrate on driving rather than worrying about getting cold ears hit by low limbs or getting dunked in cold water by a sunken log or stump hole.

VII. OTHER ITEMS

Mr. R. H. Anthony, Sr. long time farm laborer died on December 7th from heart attack.

Land acquisition has slowed a bit. Deeds to three Boyd Tracts were signed and to the Robert F. Glenn, Tract 1913. Local ninrods have gone nutty over the prospect of an acre or so in the county to serve as a base from which they pollute the entire countryside with litter. Worse than that, they have offered some fantastic prices for an acre or so. This hurts our program.

By Burton Webster  
Refuge Manager Burton S. Webster

Approved JAN 20 1964  
(Date)

By Victor W. Kay  
Acting Regional Refuge Supervisor

Title \_\_\_\_\_

W A T E R F O W L

REFUGE NOXUEE NATIONAL WILDLIFE

MONTHS OF September 1 TO December 31, 1963

(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						50	50	20	60	53
Cackling Brant										
White-fronted Snow							24		24	24
Blue Other						5				
<b>Ducks:</b>										
Mallard						50	50	50	2,500	3,000
Black Gadwall						10	10	20	20	200
Baldpate Pintail						50				
Green-winged teal									2	
Blue-winged teal	200	1,000						50		
Cinnamon teal										
Shoveler										
Wood	1,500	1,500	1,500	1,500	1,700	1,800	1,800	1,000	1,000	1,000
Redhead										
Ring-necked Canvasback										200
Scaup									300	300
Goldeneye										
Bufflehead										20
Ruddy									400	400
Other										
<b>Coot:</b>								10	400	400
Int. Dup. Sec..	1720	2500	1500	1500	1700	1910	1860	1130	4670	5520

3 -1750a  
 Cont. NR-1  
 (Rev. March 1953)

WATERFOWL  
 (Continuation Sheet)

REFUGE NOUBEX NATIONAL WILDLIFE MONTHS OF September 1 TO December 31, 1963

(1) Species	(2) Weeks of reporting period								(3) Estimated waterfowl days use	(4) Production Broods: Estimated seen : total	
	11	12	13	14	15	16	17	18			
<b>Swans:</b>											
Whistling Trumpeter											
<b>Geese:</b>											
Canada	63	63	62	62	150	150	150	100	6,831		
Cackling Brant											
White-fronted	24	24	29	29		27	27	27	1,705		
Snow Blue		1				2			56		
Other											
<b>Ducks:</b>											
Mallard	8,000	7,000	7,000	20,000	45,000	48,000	50,000	40,000	1,454,550		
Black	500	300	300	1,000	450	500	500	400	27,870		
Gadwall					20	200	200	200	3,540		
Baldpate				2,500	4,000	5,000	5,000	3,000	124,850		
Pintail				20	20	500	200	100	5,480		
Green-winged teal			20	300	800	200			9,254		
Blue-winged teal									8,750		
Cinnamon teal											
Shoveler				10					70		
Wood	1,000	800	800	1,200	3,500	3,500	3,500	3,500	210,700		
Redhead					4				28		
Ring-necked	400	300	200	8,000	5,000	5,000	5,000	4,500	183,600		
Canvasback				20			20	50	430		
Scaup	600	300	300	2,000	2,000	3,000	3,000	2,500	90,100		
Goldeneye											
Bufflehead		30			1	200	50	200	2,707		
Ruddy	200	50		200	200	200	200	500	14,450		
Other (f. Mergansers)			300	2,500	5,000	5,000	5,000	5,000	139,600		
<b>Coot:</b>	400	200	200	1,000	1,500	1,500	1,500	1,500	54,270		
	11300	8240	9120	38750	(over)	72800	74170	61450			

	(5)	(6)	(7)
	Total Days Use	Peak Number	Total Production
Swans			
Geese	8,592	179	
Ducks	2,275,979	72,670	
Coots	54,270	1,503	

2338 #91

SUMMARY

Principal feeding areas ~~Principal feeding areas this~~  
~~period were OR # 3, Polesok Field Improvement and Bluff~~  
~~Lake. Other highly used areas were OR # 1 and # 2.~~  
 Principal nesting areas

~~No nesting observed this period.~~

Reported by Edward F. Folsom  
 Edward F. Folsom, Assistant 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).

3-1751  
Form NR-1A  
(Nov. 1945)

MIGRATORY BIRDS  
(other than waterfowl)

- 21 -

Refuge ~~NOXUBEE NATIONAL WILDLIFE~~ Months of ~~September 1~~ to ~~December 31~~ 19~~6~~<sup>7</sup> ~~63~~

(1) Species	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production			(6) Total
	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. <u>Water and Marsh Birds:</u>										
Double Crested Cormorant	4	Oct. 20	150	Dec.	50	Dec. 31				200
Great Blue Heron		Resident	100							150
American Egret		Resident	200							250
Wood Ibis	50	Sept. 1	50		50	October				50
II. <u>Shorebirds, Gulls and Terns:</u>										
Killdeer	200	Sept. 1			500	December 31				600
Heron Gulls	40	Oct.			20	December 31				100
Spotted Sandpiper	75	Sept. 1			100	December 31				100

(over)

(1)	(2)		(3)		(4)		(5)			(6)
III. <u>Doves and Pigeons:</u> Mourning dove White-winged dove	12,000	Sept.	12,000	October		December				
IV. <u>Predaceous Birds:</u> Golden eagle Duck hawk Horned owl Magpie Raven Crow Bald Eagles			50	Estimated						
	3	Dec.	3	Dec.	3	Dec.				

Reported by

*Edward F. Folsom*

Edward F. Folsom,  
Assistant Refuge Manager

#### INSTRUCTIONS

- (1) Species: Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. 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. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiformes)  
II. Shorebirds, Gulls and Terns (Charadriiformes)  
III. Doves and Pigeons (Columbiformes)  
IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)
- (2) First Seen: The first refuge record for the species for the season concerned.
- (3) Peak Numbers: The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge record for the species during the season concerned.
- (5) Production: Estimated number of young produced based on observations and actual counts.
- (6) Total: Estimated total number of the species using the refuge during the period concerned.

3-1752  
 Form NR-2  
 (April 1946)

UPLAND GAME BIRDS

Refuge NOQUETTE NATIONAL WILDLIFE Months of September 1 to December 31, 19 63

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specificoally requested. List introductions here.
<b>Quail</b>	<b>43,000</b>								<b>3,000</b>	
<b>Turkey</b>	<b>43,000</b>								<b>375</b>	

## 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.

3-1753  
Form NR-3  
(June 1945)

BIG GAME

Refuge NOXON NATIONAL WILDLIFE

Calendar Year 1963

(1) Species	(2) Density	(3) Young Produced	(4) Removals				(5) Losses			(6) Introductions		(7) Estimated Total Refuge Population		(8) Sex Ratio
			Hunting	For Re- stocking	Sold	For Research	Predation	Disease	Winter Loss	Number	Source	At period of Greatest use	As of Dec. 31	
Common Name	Cover types, total Acreage of Habitat	Number												
Deer (Whitetail)	43,000	1,450	1 32				30 / 200	250				3,830	2405	50:50
							400 migrants							

Remarks:

Reported by *Edward F. Tolson*

## INSTRUCTIONS

Form NR-3 - BIG GAME

- (1) SPECIES: Use correct common name; i.e., Mule deer, black-tailed deer, white-tailed deer. It is unnecessary to indicate sub-species such as northern or Louisiana white-tailed deer.
- (2) DENSITY: 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 total number of young produced on refuge.
- (4) REMOVALS: Indicate total number in each category removed during the year.
- (5) LOSSES: On the basis of known records or reliable estimates indicate total losses in each category during the year.
- (6) INTRODUCTIONS: Indicate the number and refuge or agency from which stock was secured.
- (7) TOTAL REFUGE POPULATION: Give the estimated population of each species on the refuge at period of its greatest abundance and also as of Dec. 31.
- (8) SEX RATIO: Indicate the percentage of males and females of each species as determined from field observations or through removals.

Refuge NOXUBEE NATIONAL WILDLIFE Year 19 63

Botulism

Lead Poisoning or other Disease

Period of outbreak None

Kind of disease None

Period of heaviest losses None

Species affected None

Losses:

	Actual Count	Estimated
(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

Number Affected Species	Actual Count	Estimated
_____	_____	_____
_____	_____	_____
_____	_____	_____

Number Hospitalized	No. Recovered	% Recovered
(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

Number Recovered \_\_\_\_\_

Number lost \_\_\_\_\_

Areas affected (location and approximate acreage) \_\_\_\_\_

Source of infection \_\_\_\_\_

Water conditions \_\_\_\_\_

Water conditions (average depth of water in sickness areas, reflooding of exposed flats, etc.) \_\_\_\_\_

Food conditions \_\_\_\_\_

Condition of vegetation and invertebrate life \_\_\_\_\_

Remarks None observed

Remarks None observed

## PUBLIC RELATIONS

(See Instructions on Reverse Side)

- 2 -

Refuge NOKUREF NATIONAL WILDLIFECalendar Year 1968

## 1. Visits

a. Hunting 20,000      b. Fishing 25,000      c. Miscellaneous 45,000      d. TOTAL VISITS 90,000

## 1a. Hunting (on refuge lands)

TYPE	HUNTERS	ACRES	MANAGED BY
Waterfowl	-	-	-
Upland Game	<b>1,800</b>	<b>43,000</b>	<b>FWS</b>
Big Game	<b>2,100</b>	<b>43,000</b>	<b>FWS</b>
Other			

Number of permanent blinds 0Man-days of bow hunting included above 0Estimated man-days of hunting on lands adjacent to  
refuge 10,000

## 1b. Fishing (area open to fishing on refuge lands)

TYPE OF AREA	ACRES	MILES
Ponds or Lakes	<b>1,200</b>	-
Streams and Shores	-	<b>30</b>

## 1c. Miscellaneous Visits

Recreation	<u>39,000</u>	Official	<u>58</u>
Economic Use	<u>16,000</u>	Industrial	<u>-</u>

## 2. Refuge Participation (groups)

TYPE OF ORGANIZATION	ON REFUGE		OFF REFUGE	
	NO. OF GROUPS	NUMBER IN GROUPS	NO. OF GROUPS	NUMBER IN GROUPS
Sportsmen Clubs	<b>1</b>	<b>12</b>		
Bird and Garden Clubs	<b>1</b>	<b>15</b>		
Schools	<b>2</b>	<b>150</b>		
Service Clubs	<b>1</b>	<b>16</b>		
Youth Groups	<b>2</b>	<b>40</b>		
Professional-Scientific	-	-	<b>4</b>	<b>660</b>
Religious Groups	-	-		
State or Federal Govt.	-	-		
Other	<b>1</b>	<b>40</b>		

## 3. Other Activities

TYPE	NUMBER	TYPE	NUMBER
Press Releases	<b>10</b>	Radio Presentations	<b>5</b>
Newspapers (P.R.'s sent to)	<b>13</b>	Exhibits	<b>-</b>
TV Presentations	<b>1</b>	Est. Exhibit Viewers	<b>-</b>

## INSTRUCTIONS

Item 1: Total of a, b, and c, equal d.

"Visit" - definition. Any person who is on refuge lands or waters during a day or part thereof for the purpose of: hunting, fishing, bird-watching, recreation, business or economic use, official visit, or similar interest. INCLUDE - those who stop within the refuge while traveling on a public highway because of an interest in the area. EXCLUDE - persons engaged in oil or other industry not directly related to the refuge, persons using refuge as most direct route or principal avenue of traffic, and those boating on navigable rivers or the Intercoastal Canal, unless they stop to observe wildlife on the refuge.

Computing visits. Where actual counts are impractical, "sampling" is used with midweek and week-end samples varied by season or weather. A conversion factor of 3.5 (of passengers per car) is used when accurate figures are not available. Each refuge will develop a conversion factor for boats based on range of usage. Count a camper once for each 24-hour period or fraction thereof.

Item 1a: Acres - of refuge open for each type of hunting.

Managed hunts require check in and out of hunters, issuance of permits, or assignment of blinds.

Other - INCLUDE crow, fox, and similar hunting.

Lands adjacent to refuge: Normally considered within 1 mile or less of boundary, unless established sampling procedures cover a wider area. For big game hunting, the distance may be greater.

Item 1b: Acres of streams open to fishing, if practical; otherwise just miles open. Information on "shores" is primarily for coastal fishing.

Item 1c: Recreation. INCLUDE photography, observing wildlife, picnicking, swimming, boating, camping, visitor center use, tours, etc. TOTAL Recreation, Official, and Economic Use visits under Item 1.

Industrial. INCLUDE persons engaged in industry, i.e., oil industry or factories. EXCLUDE these from Item 1.

Item 2: INCLUDE the "On Refuge" groups in Items 1c and 1. In "Off Refuge" column include only those group meetings in which refuge employees actually participate. EXCLUDE these from Items 1c and 1.

Item 3: Exhibits - INCLUDE displays, fairs, parades, and exhibits OFF the refuge; EXCLUDE those ON.

3-1757  
 Form NR-7  
 (April 1946)

PLANTINGS  
 (Marsh - Aquatic - Upland)

Refuge.....Nominee National Wildlife.....Year 1973

Species	Location of Area Planted	Rate of Seeding or Planting	Amount Planted (Acres or Yards of Shoreline)	Amount & Nature of Propagules	Date of Planting	Survival	Cause of Loss	Remarks
NONE								

TOTAL ACREAGE PLANTED:

Marsh and aquatic.....  
 Hedgerows, cover patches.....  
 Food strips, food patches.....  
 Forest plantings.....

3-1758  
Form NR-8  
(Rev. Jan. 1956)

Fish and Wildlife Service Branch of Wildlife Refuges

1963

CULTIVATED CROPS - HAYING - GRAZING

-47-

Refuge Nombee National Wildlife County Nombee State Mississippi

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water-fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu./Tons	Harvested		Unharvested				
			Acres	Bu./Tons	Acres	Bu./Tons			
Corn	108	8,448			50	3,512	158	Fescue	82
Millet					10.5	45	10.5	Rye Grass	119
Fescue	2.5	7	2.5	7			5	Ladino Clover	30
Rye Grass	30	160	30	160			30	Sericea Lespedeza	27
Chufa			2	40			2		
Sorghum	9.8	196			3.2	64	13		
	<u>160.3</u>	<u>8,811</u>	<u>34.2</u>	<u>227</u>	<u>63.7</u>	<u>3,621</u>			
								Fallow Ag. Land	13

No. of Permittees: Agricultural Operations 6 Haying Operations 5 Grazing Operations 0

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	GRAZING	Number Animals	AUM'S	Cash Revenue	ACREAGE
Sericea Lespedeza	80	27	\$95.00	1. Cattle				
Fescue	57	23	\$80.50		2. Other			
				1. Total Refuge Acreage Under Cultivation				476.5
Hay - Wild	20	18	\$13.50	2. Acreage Cultivated as Service Operation				315.5

DIRECTIONS FOR PREPARING FORM NR-8  
CULTIVATED CROPS - HAYING - GRAZING

Report Form NR-8 should be prepared on a calendar-year basis for all crops which were planted during the calendar year and for haying and grazing operations carried on during the same period.

Separate reports shall be furnished for Refuge lands in each county when a refuge is located in more than one county or State.

Cultivated Crops Grown - List all crops planted, grown and harvested on the refuge during the reporting period regardless of purpose. Crops in kind which have been planted by more than one permittee or this Service shall be combined for reporting purposes.

Permittee's Share - Only the number of acres utilized by the permittee for his own benefit should be shown under the Acres column, and only the number of bushels of farm crops harvested by the permittee for himself should be shown under the Bushels Harvested column. Report all crops harvested in bushels or fractions thereof except such crops as silage, watermelons, cotton, tobacco, and hay, which should be reported in tons or fractions thereof.

Government's Share or Return - Harvested - Show the acreage and number of bushels harvested for the Government of crops produced by permittees or refuge personnel. Unharvested - Show the exact acreage and the estimated number of bushels of grain available for wildlife. If grazing is made available to waterfowl through the planting of grain, cover, green manure, grazing or hay crops, estimate the tonnage of green food produced or utilized and report under Bushels Unharvested column.

Total Acreage Planted - Report all acreage planted, including crop failures.

Green Manure, Cover and Waterfowl Grazing Crops - Specify the acreage, kind and purpose of the crop. These crops and the acreage may be duplicated under cultivated crops if planted during the year, or a duplication may occur under hay if the crop results from a perennial planting.

Hay - Improved - List separately the kinds of improved hay grown. Annual plantings should also be reported under Cultivated Crops, and perennial hay should be listed in the same manner at time of planting.

Total Refuge Acreage Under Cultivation - Report total land area devoted to agricultural purposes during the year.

3-1758  
Form NR-8  
(Rev. Jan. 1956)

Fish and Wildlife Service Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge ROBERT NATIONAL WILDLIFE County OSHERA State MISSISSIPPI

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water-fowl Browsing Crops Type and Kind	Total Acreage
	Acres	Bu. / 1944	Harvested		Unharvested				
			Acres	Bu. / 1944	Acres	Bu. / 1944			
Corn	19.5	938	4	100	2.5	169	26		
Millet					3	475	3		
Soy Beans (Grain)	23	291					23		
Soy Beans (Hay)	73	160 tons			7	119	80		
	<i>42.8</i>	<i>1788</i>			<i>30.5</i>	<i>767</i>			
								Fallow Ag. Land	
								39	

No. of Permittees: Agricultural Operations 2 Haying Operations 2 Grazing Operations 2

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	GRAZING	Number Animals	AUM'S	Cash Revenue	ACREAGE
				1. Cattle	13	125.5	\$28.10	46
				2. Other				
				1. Total Refuge Acreage Under Cultivation				154
Hay - Wild	31	29	\$21.75	2. Acreage Cultivated as Service Operation				

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CULTIVATED CROPS - HAYING - GRAZING

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Total Refuge Acreage Under Cultivation - Report total land area devoted to agricultural purposes during the year.

3-1570  
NR-89  
(4/54)

## REFUGE GRAIN REPORT

- 30 -

Refuge NOXUBEE NATIONAL WILDLIFE

Months of January through December, 1963

(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-Funks Seed		8	8		8		8				
Corn-Pfister, Seed		1	1		1		1				
Corn, Ear	120	100	220			150	150	70		70	
Rye, Grass		340	340		340		340				
Fescue, Ry-31	11	54	65		54	11	65				
Millet, Japanese	70		70		35		35	35	35		
Soy Beans	8		8			8	8				
Barley	30		30			30	30				
Saricea Lespedeza	40		40						40		
Clover, Ladino		1	1		1		1				
Milo		30	30			6	6	24		24	

(8) Indicate shipping or collection points \_\_\_\_\_

(9) Grain is stored at Headquarters

(10) Remarks Milo picked up at Wheeler National Wildlife Refuge.

\*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.



TIMBER REMOVAL

Refuge Norabee National Wildlife Refuge Year 1953

Permittee	Permit No.	Unit or Location	Acreage	No. of Units Expressed in B. F., ties, etc.	Rate of Charge	Total Income	Reservations and/or Diameter Limits	Species Cut
Montgomery Bros.	32411	28	60*	17,000 B.F.	Lump Sum	136.00	Designated	Oak
T.T. Rives	32415	5	12	12,843 B.F.	Lump Sum	90.91	Designated	Pine-hardwood
Montgomery Bros.***	32623	28	60*	170,000 B.F.	(\$5,100.00 exchanged for 80 acres)			Pine
E.M. Dukes	32418	28	60*	20 cords	\$1/cord	20.00	Pulp from tops	Pine-gum
Seitz Lbr. Co.**	32682	28	174	514,827 B.F.	Bid Sum	15085.50	Designated	Pine-hardwood
Leon Fuller	32419	21	22	21,043 B.F.	Lump Sum	196.10	Designated	Pine-hardwood
Seitz Lbr. Co.	32688	19	70	110,000 B.F.	Bid Sum	2020.50	Clear cut for Ross Impoundment	Pine-hardwood
T.T. Rives	32420	2	13	13,665 B.F.	Lump Sum	148.31	Designated	Pine-hardwood
John Barton	32699	14	350	1,032,000 B.F.	Bid Sum	20813.20	Clear cut for Lookfoma Lake	Pine-hardwood
Bill Haines	32698	14	120	2,000 cords				
				463,000 B.F.	Bid Sum	9010.00	Clear cut for Lookfoma Lake	Pine-hardwood
T.T. Rives	32601	2	12	9,598 B.F.	Lump Sum	81.34	Designated	Pine-hardwood
Seitz Lbr. Co.	R.O. 2	6	222	306,000 B.F.	Bid Sum	7086.00	Designated	Pine-hardwood
J.H. Buckner	32602	14	10	14 cords	Lump Sum	38.50	Designated	Pine-gum
Leon Fuller	32604	21	22	20,111 B.F.	Lump Sum	280.67	Designated	Pine-hardwood
Warran Glenn	32605	14, 16, & 17	26	26,000 B.F.	Lump Sum	494.00	Designated R/W	Pine
Freeman Livingston	32603	21	22	21,688 B.F.	Lump Sum	325.31	Designated	Gum
John L. Heard	32606	12	90	122 cords	Bid Sum	335.50	Designated	Pine
T.T. Rives	32607	2	14	14,001 B.F.	Lump Sum	130.68	Designated	Pine-hardwood
Refuge****		14	7	7,000 B.F.	(Est. value)	175.00	Refuge use	Pine
Seitz Lbr. Co.	R.O. 9	12	230	247,000 B.F.	Bid Sum	3547.50	Designated	Pine-hardwood
Leon Fuller	32612	16	7	6,921 B.F.	Lump Sum	82.86	Designated	Pine-gum
Freeman Livingston	32613	6	40	19,467 B.F.	Lump Sum	224.91	Designated	Pine-gum
Leon Fuller	32614	2	13	12,699 B.F.	Lump Sum	190.49	Designated	Pine
R. L. Sides	32616	23	22	23 cords	Lump Sum	52.72	Designated R/W	Pine-hardwood

Total acreage cut over 2,722 - 174 = 2,548 Total income \$97,444.99 - 15,085.50 = \$82,359.49 (See above notations)

No. of units removed B. F. 4,437,268 - 514,827 = 3,922,441 Method of slash disposal Tops are sold for pulpwood, if possible.  
Cords 2,571  
Ties None



Roll 25-63 Bluff Lake at minus 4 ft. showing mud flats. We think that mud flats and emergent vegetation created by draw-down of Bluff Lake is the reason the lake was so attractive to ducks and geese this fall.

- 34 -



Roll 25-63 Exp. 21 Ducks in dead timber portion of GTR # 3. Vegetation is Chufa (red-rooted sedge) and smartweed. This is a favorite roosting area

Roll 25-63 Exp. 20 Canada Geese on Doyle Arm of Burr Lake. Dwarf corn in background was little used by geese.



-36-



Roll 25-63 Exp. 26 <sup>D</sup>ucks in standing corn, Jones Creek Impoundment Area. In spite of the dry fall and deficiency in rainfall, we were able to flood part of Jones Creek area from new Ross Branch Storage Reservoir constructed with APW funds. Woodducks roosted in this inundated corn.



Roll 24-63 Exp. 41 White-fronted geese on Boyle Arm. From 23 to 29 of these birds spent entire period from late Oct. on Bluff Lake. This is the first winter these birds have stayed for any length of time.



Roll 26-63 Exp. 42 Black vulture caught in banding pen.



Roll 19063 Exp. 33 Stabilizing South Bank of Bluff Lake.  
After shaping, bank was rolled until firmly packed.



Roll 21-63 Exp. 3 Dry mix concrete was placed in sandbags and placed and shaped on bank. This job looks very neat and has sponsored more favorable public comment than any other job here.



Roll 19-63 Exp. 39 Plastic pipe was drilled every 10" to water dry mix of concrete and promote rapid hardening.



Roll 20-63 Exp. 24 Testing new well. 24 hr. pumping at 113 gallons per minute resulted in only a 15' drawdown. Well pumped 750 gallons per minute without noticeable drop. Well is 1600 ft. deep and taps Tuscaloosa formation water.



Roll 22-63 Exp. 33 Loakfoma Lake dam and site. Lake area will cover the timber on lower left. Bluff Lake in the distance.



Roll 23-63 Exp. 44 Releasing Ross Branch Reservoir Water to flood standing corn in Jones Creek Area.



Roll 21-63 Exp. 24 Oakfoma Lake site after timber removal by sale. This is the type of timber what we are clearing with brush blade. The presence of stumps increases costs considerably.



Roll 27-63 Exp. 3 Refuge D-3 with brush blade clearing on Oakfoma Lake site. Blade does an excellent job of clearing and cuts stumps off flush with the ground.



Roll 22-63 Exp. 3 Half mile of fire. Burning windrows on  
Loakfoma lake site. All burning was done at night  
due to extreme fire danger in daytime.



Roll 24-63 Exp. 2 Loakfoma lake site after piling and burning.  
Ground is smooth, no top soil is lost and piles  
burn completely after one repiling with brush rake.



Roll 27-63 Exp. 42 Details of stump splitter and cutting blade on brush blade. This implement was built by the BSW Mfg. Co., Aberdeen, Miss.



Roll 27-63 Exp. 41 D-8 with guards to protect operator and engine while using brush blade. Clearing in cutover land is particularly hazardous.



Roll 23-63 Exp. 1 Refuge share of corn and milo planted under Agreement # 38 in Morgan field east of Brooksville Road. Corn averaged 70 bu. per acre.



Roll 22-63 Exp. 24 <sup>40</sup> Corn harvest under agreement # ~~38~~ in Smith Field No. 2. This was a good year for corn due to heavy uly rains.



Roll 20-63 Exp. 10 Haying under SUP 32782 in Ewing Field.  
We have no trouble selling all the hay we can  
produce and thus save cost of mowing fields for  
turkey management.



Roll 20-63 Exp. 10 Haying under SUP 32782 in Ewing Field.  
Bluff Lake



Roll 23-63 Exp. 42 These guys were cussing because so many got away. They claimed that they landed only 1 out of every three they hooked.



Roll 26-63 Exp. 12 A 20 month old buck that almost had 6 points. Refuge deer seemed to be in good condition.



Exp. 10  
Roll 26-63/ Dirt stockpiled for future use on levee # 9 This  
will save further destruction of cover when repairs



Roll 21-63 Exp. 18 Drainage structure levee # 4



Roll 22-63 Exp. 42 It was necessary to divert Noxubee down  
Oktoe Creek to GTR 3, Huff Lake and thence to  
GTR's 1 & 2 this year.



Roll 23-63 Exp. 39 Grouted rip-rap and wing walls at Little  
Spillway of Huff Lake. Wingwalls are backfilled  
seeded and mulched.



Roll 18-63 Exp. 42 Buzzards in GTR # 3 At one time this  
bird represented most of Noxubee wildlife.



Roll 21-63 Exp. 17 <sup>4</sup> Looking south from Structure on  
Levee # 3



Roll 23-63 Exp. 4 Marsh burning on dead timber portion of GTR # 43  
Vast areas of cattail and plume grass were burned  
between GTR # 3 and Bluff Lake to increase waterfowl



Roll 23-63 Exp. 9 Marsh burning GTR # 3 and back part of Bluff Lake.



Roll 19-63 Exp. 25 Clearing woodduck drive lane in Green Timber Reservoir No. 1. Brush was thinned out, logs removed from lane and stump holes filled to prevent accidents.



Roll 27-63 Exp. 4 Fence cutting job at Noxubee-Winston County line on old Ewing Road. Perhaps they thought we locked a public road