

NOXUBEE NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

for

January, February, March, April - 1954

U.S. DEPARTMENT OF THE INTERIOR  
Fish and Wildlife Service  
Brooksville, Mississippi

NOXUBEL NATIONAL WILDLIFE REFUGE

-PERSONNEL-

Permanent

Burton S. Webster-----Refuge Manager  
K. R. McMaster-----Forestry Aid  
Robert W. Spence-----Maintenance Man (Equip.)  
Al H. Woodson-----Maintenance Man (General)

W.A.E.

Hucert S. Livingston-----Maintenance Man (General)  
Grady H. White-----Maintenance Man (General)  
James H. Bearder-----Maintenance Man (General)  
Robert L. Shinn-----Unskilled Laborer

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NARRATIVE REPORT - PERIOD JANUARY 1 TO APRIL 30, 1954

NOXUBEE NATIONAL WILDLIFE REFUGE, BROOKSVILLE, MISSISSIPPI

I. GENERAL

A. WEATHER CONDITIONS:

Month	Precip.	Temperature*		Aver. Temp.		Water Levels	
		Max.	Min.	Max.	Min.	Max.	Min.
Jan.	6.87	75	25	57.8	36.6	1.31	.54
Feb.	1.76	80	22	67.8	41.6	1.30	.35
Mar.	1.97	84	27	67.9	43.4	1.45	.98
Apr.	<u>4.48</u>	88	34	79.6	36.7	1.40	.48
Total	15.08						

\*Readings from State College, 17 miles north of refuge.

The difference between State College rain fall and that measured at the refuge was 1.04" for the period. General rains were very scarce and the 15.08" of rain measured at hdqtrs. is by no means indicative of what fell over the entire refuge. Above normal temperatures <sup>formed</sup> the early development of vegetation and thus we consider this spring one of the earliest yet.

B. WATER CONDITIONS:

The usual hard general rains did not occur this year and there were no bad floods. Refuge water holes and ponds did not get enough rain to completely fill them.

Dust from Texas settled over this part of the country during Feb. and March and every one agrees that we want no part of Texas here in Mississippi.

C. FIRES:

Fire No.	Average	Damage	Cause
1-54	8	\$160.00	Incendiary
2-54	*2	00.00	Debris burning
3-54	12	120.00	Debris burning
4-54	15	150.00	Incendiary
5-54	2	00.00	Incendiary
6-54	19	00.00	Incendiary
7-54	2	00.00	Incendiary
8-54	6	00.00	Incendiary
9-54	0.5	00.00	Incendiary
Total	66.5	\$430.00	7 incendiary 2 Debris burning

The loss of 66.5 acres exceeded our entire 1953 loss by 15.81 acres. Seven of the nine fires were incendiary and set primarily for grazing purposes we believe. As our development progresses we will fence more and more of the refuge and eventually eliminate trespass grazing and reduce the incidence of incendiary fires.

Fire No. 6 promised to be a terrific fire. It was set about 8 o'clock PM in a 30-40 MPH wind and in dry sedge, the fastest burning fuel we have. All personnel and equipment were out on other fires and our first knowledge of the fire was a bright red glow several miles away. Between our temporary fire breaks and heavy mist which begin to fall just before we get to the fire, the acreage burned was held to 19 acres and no damage was done to timber.

## II. WILDLIFE

### A. MIGRATORY BIRDS:

#### 1. Population and behavior:

a. Ducks. No unusual changes in duck population were noted during the period. Inventory revealed 5392 ducks present on the refuge. This low figure was due to lack of water.

b. Geese. Thirty five geese remained with the decoys until mid-February. Forty geese believed to be different birds spent the period March 7-20 on the refuge. The rye grass was grazed down to bare ground.

#### 2. Feed and Cover:

Feed was scarce for ducks due to low water. An occasional enterprising black duck was seen feeding on oat mast on high ridges along Noxubee River.

Geese confined their feeding to the rye grass and oats planted adjacent to Bluff Lake and to beds of 3-squares in the lake.

Supplemental feeding of corn was done for the benefit of the decoys and mallard ducks were quick to get to free handouts. We finally resorted to feeding geese in a box-like self feeder.

#### 3. Botulism - none

4. Lead poisoning and Other diseases:

Twenty five Canada geese decoys were attained from Savannah Refuge in late Feb. and on March 12 we noticed sickness. Six geese died and two sick ones were immediately taken to the Miss. Livestock Sanatory Board Diagnostic Laboratory at Jackson where J.W. Brown, D.V.M. performed tests and post mortems.

Findings: Liver rusty, GI tract irritated, gizzard eroded and bloody, cecal and intestinal coccidiosis.

Laboratory--Positive for Pasteurella (chain type)

Diagnosis--Positive for Pasteurella ( fowl cholera)

The balance of the flock was treated according to the vets advice and all birds seem healthy now. A new goose pin is being built on Doyle Arm of Bluff Lake and will take in at least 4 acres.

Doves:

Doves are believed to have increased greatly. We see more along the road sides than at any time in the last 5 years.

Woodcocks:

One woodcock was seen on January 20 on the north levee. No further findings were made.

B. UPLAND GAME:

Turkey: For the first time in years we can report an increase in turkey. Tracks were seen on the J.W. Smith tract, which is being developed as goose range, toms were heard gobbling in back of Bluff Lake and on the Jolly tract in Section 11 T16 R14 and along Cedar Grove Road. We don't know the principle factors in the increase but like to believe that our predator control was of prime importance. Of course goose range development helped as did other activities affecting habitat such as fire line construction, water holes and etc.

Quail: Population seems normal and are low. No economical method is apt to be found where by quail can be restored to the abundance of 30 years ago when this part of Mississippi was known as one of the better quail areas of the South.

2. Food and Cover

Turkey range is improving. The younger stands of timber are thinning themselves out by natural means and the dense underbrush is beginning to be shaded out. On the south side of the refuge areas of sedge and briers are regenerating to pine and if we can keep fire out of the area another 10 years, the turkey range will be vastly improved.

3. Disease: None observed.

C. BIG GAME ANIMALS:

Deer continue to increase and it is probable that an open season will be necessary in 1956 in order to keep the herd in balance. Unless we do control them, our goose management will take a sever set back for deer like oats, soybeans and etc. as well as corn.

1. Disease: None noted.

D. FUR ANIMALS:

Raccoon populations continue to decline. Five were taken during our predator control activity.

Fox populations rise and fall. We catch them our for a few weeks and before we realize it, a heavy population has moved in. 107 were taken during the period, 30 of which were reds indication an increase in this species.

Bobcats populations are fairly low. Sixteen were taken during the period.

House Cats are not as common as one might suppose. Two were taken in traps.

Skunks populations are low. Four were taken in predator control.

Opossum populations are on the upswing. Five were caught in steel traps and 6 taken at headquarters because of our fox terrier.

Dogs are scarcer than ever before. Twenty strays were taken during the period. Dogs we could identify were released but most of the time we could not identify the dogs.

Beavers we are saturated with them.

Predator Control:

During the past two years constant predator control by use of steel traps has been practiced and we believe that the current increase of deer and turkey is due to predator control to a large extent.

Trapping has a beneficial effect on lessening proching as local hunters like to hunt with dogs and they would rather not hunt than to let their dog fouled up in a steel trap.

E. IRREPROBABLE BIRDS:

No change has been noted in the hawk and owl populations. Crows are a pest where we feed geese corn.

F. FISH:

Early season bass fishing was good but doesn't last long. Everyone believes that the bulk of the fish in Bluff Lake are shad. The Mississippi Game and Fish Commission is about to remedy the situation.

III. REFUGE DEVELOPMENT MAINTENANCE

A. Physical Development.

1. Rebuilt equipment shed.
2. Built new lumber shed
3. Built 1500 gallon diesel fuel tank.
4. Painted wood work on new equipment building and shed.
5. Built canopy for butane tank.
6. Built and installed cattle guards at Nixabee River Bridge and at Elmo Brown property line.
7. Installed attic fans at quarters 1 and 4.

Equipment Maintenance.

Received TD 24 tractor with Isaacson hydrolic dozer from Atomic Energy Commission. Repaired and placed this tractor in operating condition. This included new cylinder head, new wiring and over all adjustment.

Received a Home Master 24-28 disk plowing harrow from Atomic Energy Commission. This is an 8,500 pound disk and will be very valuable here.

Received a Galion Model 101 Motor Grader from Army at Fort Benning. This is a very good machine and will be of great value here.

Had Super L converted to liquid petroleum fuel and built a butane-propane tank trailer. Conversion is working fine and liquid petroleum fuel are economical and promote long engine life.

Washed, greased and inspected motor equipment as mileage or service indicated.

Project 712-c-2 Goose Range Development:

1. Cut isolated trees on J.W. Smith tract.
2. Plowed and disked 57 acres- 25 acres old field and 32 acres sod field.
3. Sold pulwood (old field pine) on 60 acres adjacent to Smith tract.

Project 170 - S & M:

1. Purchased and spread 8 tons 30% phosphate, 1 ton 50% potash and 84 tons lime.

B. PLANTINGS.

1. Aquatics and Marsh Plants: None
2. Trees and Shrubs.

Planted 150 Chinese Chestnut (*Castanea mollissima*) in 3 plots on the clay hills soils of Devils Hill.

3. Upland herbaceous plants:

Planted 100 pounds *Crotalaria striata* on field we want to keep open and on which we cannot at this time control grazing.

Planted 23 acres soybeans as cover crop on J.W. Smith tract. Balance of field was too wet to plant.

4. Cultivated Crops; None

C. COLLECTIONS:

No collections of any kind were made.

D. RECEIPTS OF SEED AND NURSERY STOCK:

275 bushels soybeans from Reelfoot Lake.  
20 bushels shelled corn from Wheeler.  
600 pounds *Serecia* from Sandhills  
200 pounds *Crotalaria striata*, local purchase.  
25 pounds Bermuda grass, local purchase.  
150 Chinese Chestnut from Bureau of Entomology and Plant Quarantine.

IV. ECONOMIC USE

A. GRAZING:

Tripletts pasture is our pride and joy as well as being attractive to deer and turkey. It has contributed a lot to the increase of turkey.

B. Haying - None during the period.

C. Fur <sup>har</sup>vest - None

D. Timber Removal - by R.R. McMaster, Forestry Aid.

Timber removal this period consisted of the following activities: Marking 1375 MBF of exchange timber, marking 150 MBF of pine sawtimber to be put up for sale during the next period, salvaging 98,250 bd. ft. of dead pine sawlogs, completing a 10 year forest management plan, marking approximately 5,000 pine fence post, marking and supervising felling and sawing of approximately 50,000 bd. ft. of bridge timber for county supervisor, and making a one week field trip of Southern Forest Experiment Station and private wood using industries.

Return from sales are as follows: 158.3 acres of land for 186 MBF pine, \$2,585.37 for 127,455 bd. ft. pine, 57½ units of pine pulpwood and 662 pine fence post.

E. OTHER USES: None

V. FIELD INVESTIGATION

A. Mr. Eugene Cypert spent a few days here on his ground cover study.

VI. PUBLIC RELATIONS

A. RECREATIONAL USES:

Fishing 4425 - March 15 to April 30  
Picnicing 3000 - Jan. 1 to April 30  
Total----7425

B. REFUGL VISITORS:

- 1/12/54 - Norman Hutchinson. USGMA - 1 hr. violations.
- 1/18/54 - R. Dittman. Regional Engineer USFWS, Atlanta - 1 day structures.
- 1/22/54 - Ralph Robertson, Assist. Ext. Forester, O.F. Parker, Oktibbeha County Agent, Johnnie Sarter, Assist. County Agent, Noxubee County, C.E. Ming, Assist. County Agent, Winston County and E.W. Garrison, Assist. County Agent, Oktibbeha County, 3 hrs. 4-H Club Demonstration Plot.
- 2/5/54 - Prof. Ed Roberts and 12 students, Forestry Dept., State College - 3 hrs. field trip.
- 2/15/54 - Mrs. C.H. Green. Writer, Raleigh, N.C. - 8 hrs. refuge trip.
- 2/16/54 - R. E. Corthell & William Ash, Lands, Atlanta 2/16-2/26 Acquisition.
- 2/17/54 - C.M. Hudson, Banker, Brooksville - 1 hr. land trade.
- 2/22/54 - William Endersbee, Secretary's Office & Dr. L.C. Morley, FWS, Washington - 3 hrs. Soil and Moisture.
- 3/3/54 - R.M. Currie, SCS, Macon, Mississippi - 2 hrs. Soil testing and Farm Plans.
- 3/3/54 - E. Cypert, Biologist FWS, Paris Tenn. - 3 days Ground Cover Studies.
- 3/10/54 - SCS crew - 4 hrs. lay out ditches.
- 3/13/54 - P.J. Van Huizen, White River - Attend refuge Management Conference.
- 3/20/54 - P. Sturm, Refuge Manager, Cape Romain, transfer truck.
- 3/20/54 - J. Morton, Refuge Manager, Big Lake - Visit.
- 3/26/54 - J. Ball, FWS, Washington & J.S. Givens, FWS Atlanta - 8 hrs. inspection.
- 3/27/54 - W.L. Towns, Branch of Lands, Atlanta - 2 days acquisition.
- 4/5/54 - R.D. Hudson, Calhoun City, Miss. Apply for job.
- 4/6/54 - B.C. Johnson, Biologist, Miss. G. & F. Commission - wildlife matters.
- 4/13/54 - Prof. R.T. Clapp, Head Forestry Dept., State College - 1 hr. land trade.
- 4/28/54 - Dr. Van Suetter, Starkville, Miss. - 1 hr. Boy Scout work.

C. REFUGE PARTICIPATION:

1. Forestry Aid, R.R. McMaster is president of the Betheden Community Club and as such has participated in all community activity. Four meetings.

2. Al H. Woodson is a member of the Craig Spring Community Club and attended all these meetings and functions. Four meetings.

3. Refuge Manager, Burton S. Webster is Vice-President of the Oktoc Community Club and attended all their meetings and functions. Four meetings.

In addition Refuge Manager, Webster attended the Noxubee County Soil Conservation District meeting at Macon on Feb. 1, 1954 and got a Cooperative Agreement signed. Plans to hold the April meeting at Noxubee Refuge were changed because of an unplanned farmers tour on April 5, 1954. The district will hold a meeting here in early summer to review our soil conservation activity.

Refuge Manager, Webster accompanied Prof. Ed Roberts and class of forestry students on a refuge field trip.

Mrs. C.M. Green of Raleigh, N.C. gave Noxubee Refuge a good write up in the Raleigh news paper in March.

Refuge Manager, Webster gave talk to the Noxubee County Coordinating Council on March 25, 1954.

Refuge Manager, Webster talked to 32 Starkville Boy Scouts on April 30, 1954.

D. HUNTING:

Quail hunting is getting worse each year. Duck hunting was the worst ever due to lack of water.

Squirrel hunting - Oct. 7-17, 1953.

Due to lack of clerk we did not report the 1953 squirrel hunt in the Sept. - Dec. report. 5 year comparison hunt is as follows:

	Permit	Used	Unused	Returned	% Returned	Hrs. Hunted	Total	
							Grey	Fox
1949	1200	619	291	910	75	4740	3077	99
1950	845	516	176	681	84	4604	3246	130
1951	655	376	143	519	79	2756	1350	71
1952	943	384	195	579	62	3817	2683	0
1953	1094	581	180	761	70	5327	2824	92
Crippled & Lost	wolves	Lactating	% Lactating	% Crippled	Aver. kill per hunter			
324	5	169	5.4	10.2	5.13			
387	1	65	1.9	11.5	6.64			
139	6	99	6.3	9.8	3.80			
360	0	32	.01	13.1	7.20			
393	4	189	6.5	13.7	4.80			

Hunting conditions were very difficult due to the extreme drought that prevailed.

E. FISHING:

4425 people paid \$2170.00 for the privilege of fishing in Bluff Lake. Success was fair but catches of game fish ought to be better. The State Game and Fish Commission are planning to really manage Bluff Lake fish.

F. VIOLATIONS:

State Warden, J. E. Stewart was assaulted by Ement Abernethy, negro, on Jan. 6 when he apprehended him for hunting in the refuge. Efforts were made to get the case in Federal Court but failed. Case was tried in State Court and a fine of \$50.00 given.

VII OTHER ITEMS

A. Acquisition:

L.K. Spair Tr# 1849, 113 acres posted as part of the refuge and vendor moved from land. This was a very worthwhile addition to the refuge.

H.M. Spruell Tr# 1850, a 191.92 acres. This tract was negotiated for in late Dec. and the agreement signed Jan. 18, 1954. H.M. Spruell died shortly after. The acquisition of this tract will eliminate 3 1/2 miles of interior boundary, 1 family together with dogs, cows and horses. It is a very valuable addition to our turkey range.

Respectfully submitted

Approved: 15/ V. A. Miller  
Date: 6/2/54

Burton S Webster  
Burton S Webster, Refuge Manager



WATERFOWL  
(Continuation Sheet)

REFUGE NOXUBEE REFUGEMONTHS OF January TO April, 1954

(1) Species	(2) Weeks of reporting period								(3) Estimated	(4) Production		
	Mar. 14-20	21-27	28-3	Apr. 4-10	11-17	18-24	25-30	days use	waterfowl	Broods: Estimate	seen : total	
	11	12	13	14	15	16	17	18				
<u>Swans:</u>												
Whistling Trumpeter												
<u>Geese:</u>												
Canada	40	0	0	0	0	0	0	0				325
Cackling												
Brant												
White-fronted												
Snow	0	0	0	0	0	0	0	0				
Blue	0	0	0	0	0	0	0	0				
Other												
<u>Ducks:</u>												
Mallard	2000	1500	200	0	0	0	0	0				32700
Black	50	50	0	0	0	0	0	0				2350
Gadwall	0	0	0	0	0	0	0	0				460
Baldpate	0	0	0	0	0	0	0	0				
Pintail	0	0	0	0	0	0	0	0				70
Green-winged teal	0	0	0	0	0	0	0	0				1050
Blue-winged teal	0	0	0	0	0	0	0	0				60
Cinnamon teal	0	0	0	0	0	0	0	0				
Shoveler	0	0	0	0	0	0	0	0				
Wood	100	50	50	50	50	50	50	50				5750
Redhead	0	0	0	0	0	0	0	0				30
Ring-necked	0	0	0	0	0	0	0	0				400
Canvasback	0	0	0	0	0	0	0	0				90
Scaup	0	0	0	0	0	0	0	0				2
Goldeneye	0	0	0	0	0	0	0	0				
Bufflehead	0	0	0	0	0	0	0	0				
Ruddy	0	0	0	0	0	0	0	0				
Other	20	20	20	20	0	0	0	0				680
												44142
<u>Coot:</u>	800	800	200	100	100	50	20	20				9890
	2970	2920	470	170	(over) 150	100	70	70				

	(5)	(6)	(7)	SUMMARY
	Total Days Use	Peak Number	Total Production	
Swans				Principal feeding areas _____
Geese	2275			_____
Ducks	308994			Principal nesting areas _____
Coots	69230			_____
	380499			Reported by _____
	123845			
	504344			

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

- 55  
57
- (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)

Refuge NOKUBEE REFUGE

Months of January to April 1954

(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>										
<b>Great Blue Heron</b>			<b>50</b>	<b>March</b>						
<b>American Egret</b>			<b>20</b>	<b>April</b>						
II. <u>Shorebirds, Gulls and Terns:</u>										

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. <u>Doves and Pigeons</u> : Mourning dove White-winged dove					
IV. <u>Predaceous Birds</u> : Golden eagle Duck hawk Horned owl Magpie Raven Crow					
Reported by.....					

#### 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.



## 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 NOXUBEE REFUGE

Year ending April 30, 1954

(1) Species  Common Name	(2) Density  Cover Types & Total Acreage of Habitat	Acres Per Animal	(3) Removals					(4) Disposition of Furs					(5) Total Popula- tion	
			Hunting	Fur Harvest	Predator Control *	For Re- stocking	For Re- search	Share Trapping			Furs Destroyed			
								Permit Number	Trappers Share	Refuge share		Total Refuge Furs Shipped		Furs Donated
Beaver	40,000			0	25								2000	
Skunk				0	0								200	
Mink				0	0								270	
Fox, Grey	40,000			0	118								100	
Fox, Red				0	56								20	
Squirrel, Grey			2524	0	0								15000	
Squirrel, Fox			92	0	0								2000	
Rabbit				0	0								2000	
Opossum				0	16								1000	
Bobcat				0	23								35	
Stray Dog				0	51								20	
House Cats				0	12								60	
REMARKS:														
Beaver Mink	4,000 1,000	10		0				0	0	0	0	0	0	500

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

## INSTRUCTIONS

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

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

## REFUGE GRAIN REPORT

Refuge NOXUBEE REFUGEMonths of January through April, 1954

(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	15	20	35	0	0	15	15	20	0	20	0
Soybeans	0	275	275	0	46	0	46	229	229	0	0
Lespedeza Sarcocolla	0	60 lbs.	60 lbs.	0	0	0	0	60 lbs.	60 lbs.	0	0
Crotalaria	0	200 lbs.	200 lbs.	0	100 lbs.	0	100 lbs.	100 lbs.	100 lbs.	0	0
Bermuda grass	0	25 lbs.	25 lbs.	0	25 lbs.	0	25 lbs.	0	0	0	0

(8) Indicate shipping or collection points Starkville, Mississippi(9) Grain is stored at Refuge crib at Hdqtrs.

(10) Remarks \_\_\_\_\_

\*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.

NOXUBEE NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

MAY, JUNE, JULY, AUGUST  
1954

U.S. DEPARTMENT OF THE INTERIOR  
Fish and Wildlife Service  
Brookville, Mississippi

NOXUBEE NATIONAL WILDLIFE REFUGE

-PERSONNEL-

Permanent

Burton S. Webster	.....	Refuge Manager
R. R. McMaster	.....	Forestry Aid
Roy D. Hudson	.....	Refuge Clerk
Robert W. Spence	.....	Maintenance Man (Equip)
Al H. Woodson	.....	Maintenance Man (Gen'l)

W.A.E.

Hubert S. Livingston	.....	Maintenance Man (Gen'l)
Grady H. White	.....	Maintenance Man (Gen'l)
James H. Bearden	.....	Maintenance Man (Gen'l)
Robert L. Shinn	.....	Unskilled Laborer

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NOXUBEE NATIONAL WILDLIFE REFUGE  
NARRATIVE REPORT

MAY-AUGUST 1954

I. GENERAL

A. Weather Conditions.

Month	Temperature		Average		Precipitation
	Max.	Min.	Max.	Min.	
May	93	42	77.7	56.0	4.07
June	102	51	93.4	68.2	.49
July	103	67	95.7	72.7	4.10
August	104	63	99.2	72.8	<u>1.13</u> 9.79

Extreme heat characterized the entire period and August was the hottest month on record. Office work in the day was impossible as temperatures were up to 110 degrees. We envied the Regional Office personnel their air conditioned offices and at times wondered why we didn't take the GI training for bartender so generously offered by the Government after World War II and wound up as proprietor of an air conditioned bar.

All crops were seriously impaired by the drought. The total rain of 9.79" does not reflect by any means what the actual rainfall was. That rain came from local showers that happened to fall on our rain gage. The 4.10 inches that fell in mid-July made our cover crops of soybeans and except for that rain, our cover crops would not have been worth anything.

Local cotton will average 5 acres per bale which ought to and does delight the Department of Agriculture, as they won't have to buy so much surplus cotton.

B. Water Conditions.

Water conditions were the lowest ever. People had to haul water from Bluff Lake for domestic and animal use. Streams dried up with the exception of a few water holes. All water holes dug in 1952 held water and were heavily used by deer and all forms of wildlife.

Bluff Lake was lowered July 5th. and at the end of the period water was 4 ft. below main spillway elevation. At this elevation 350 acres remains in water out of the 1200. Emergent water fowl food development potential is great.

C. Fires.

High hazard existed during most of the period and during late August it was necessary to employ lookouts. We had no fires but a few severe fires burned around us.

## II. WILDLIFE

### A. Migratory Birds.

#### I. Population & Behavior.

Woodducks were more abundant this period than we have ever before noticed. In late June an estimated 300 were using the 3 square beds in the back part of Bluff Lake. We don't know why the increase unless the reduction of predation due to declining raccoon populations.

In early August we noted the best flight of Blue Winged Teal ever. We estimated that a flock of 500 used the lake for about 8 days.

Doves. No change noted on refuge.

Woodcock none observed during period.

#### 2. Feed & Cover.

Drawn down began on Bluff Lake July 6th. to permit goose range development on Doyle and Dickerson Arms. By August 1st. the lake was down to a minus 4 feet, and approximately 900 acres of mud flat was exposed which has since developed a luxuriant growth of chufa and wild millet. While the chufa seems to be *Cyperus erythrorhizos*, it is still better than nothing as duck food.

Lowering the lake is the only way we have to economically control the filamentous algae in Bluff Lake. Beaver impoundments above the lake that are not drained now contained very little open water due to this algae, lotus and spatterdock.

Three square beds are seemingly doing well inspite of the fluctuation in Bluff Lake.

3. Botulism. None observed.

4. Led Poisoning & Other Disease. None

### B. Upland Game Birds.

Turkey were reported as increasing last period and this was substantiated by site records on the J.W. Smith tract in early May. These were the first wild turkey seen here in a long time. We believe 4 flocks are present now, tracks are seen on J.W. Smith tract often.

Quail populations seem normal but there is little to encourage this fine bird. Here a normal population means a small population.

2. Food & Cover.

Drought will again curtail the production of legumes and other native foods.

3. Disease. None noticed.C. Big Game Animals.

Deer are still increasing and unless unforeseen reduction in population occurs, we should by all means permit a public hunt in 1955. If and when we get a good rain, the State G & F Commission Biologists are going to run a deer count for us.

1. Food & Cover.

<sup>Signs</sup>  
~~Signs~~ of browsing is becoming evident on certain parts of the refuge. - In spite of this, the range is in good condition.

3. Disease. None noticed.D. Fur Animals, Predators, Rodents & etc.

Raccoon populations are not heavy.

Link populations are normal.

Squirrel populations are high, and public hunt is scheduled for October 7-17.

Gray Fox populations are high. Predator control doesn't seem to decrease their numbers appreciably.

Red Fox still persist on the refuge. Several were caught in steel traps.

Rabbit populations are high.

Beaver population is heavy.

Predator Control

Mr. Al Woodson's time during the period was devoted primarily to patrol and predator control. During the 4 months the following were taken.

	May-August '54	Jan.-August '54
Stray dogs	26	46
Red fox	6	36
Grey fox	24	101
House cat	2	4
Skunk	1	5
Opossum	23	34
Bobcat	13	29

E. Predaceous Birds.

Barred owl populations are high.

Great Horned owl populations are normal.

Redtailed & Red Shouldered hawks are common.

F. Fish.

Lowering Bluff Lake four feet reduced the area of water from 1200 to 350 acres and concentrated the total fish population so that predation must have been very heavy. Approximately 400 American Egrets spent the entire months of July and August on the shallow waters of Bluff Lake, and observations indicate the birds lived well on shad and other fish. This dewatering should improve fishing.

III. Refuge Development MaintenanceA. Physical Development.

Jobs done to equipment are as follows:

TD-24 New radiator.

Overhaul hydraulic track adjusters.

Galion Mod. 101 Motor Grader

Steam cleaned.

Replaced 2 front spindles.

Repair flat.

Other Jobs.

Built and installed cattle guard at J.W. Smith tract.

Improved 2 miles of road to Cunningham-Tate tract.

Improved 4 miles of road to Green Timber Reservoir site east of lake.

Installed 6 ton hydraulic vehicle lift.

Installed steam cleaner.

Built 2 miles of new road to F. Ewing tract and improved another 2 miles to section line road.

Improved 3 miles on Keaton Tower Road.

Improved 3 miles on Cedar Grove Road.

Pulled ditches and graded all refuge roads.

This road improvement is a very fine thing for all refuge objectives. It conserves equipment, cuts travel time to jobs and fire. We still need one road from the north levee of Bluff Lake to meet up with the Keaton Tower & Cedar Grove Road.

Goose Range Development.

J.M. Frisock tract 1818 - Plowed 102 acres, lined 78 acres.

J.W. Smith tract field number 1 - Completely cleared small stands of trees on 47 acres. dynamited stumps and burned brush.

J.W. Smith tract field number 2 - Sold pulpwood, burned brush, dynamited stumps and plowed with some motor disk. 90% complete.

Doyle Arm field - Sold pulpwood, dozed stumps, burned brush on 30 acres. 75% complete.

Planted 28 acres soybeans and plowed under in late August for Cover crops.

Dickerson Arm Bluff Lake - Planted 3 acres combine milo, planted 20 acres soybeans and plowed under for cover crop.

Church Roberson tract - Planted 8 acres combine milo, 52 acres soybeans and plowed under as cover crop. Beans here did not do well as no rain fell at proper time.

Triplett pasture - mowed 400 acres done by permittees.

B. Plantings.

1. Aquatica & Marsh Plants - None
2. Trees & Shrubs - None
3. Upland Herbaceous Plants - None
4. Cultivated Crops - See "Goose Range Development" above.

C. Collections.

1. Seed and Other Propagules - H.H. Triplett combined 300 bu oats on Church Roberson tract for use on his pasture in Sec. 10 & 15 T16N R14E.
2. Specimens - None

D. Receipts of Seed and Nursery Stock.

Received from Kentucky Woodlands 150 bu. wheat.

Received from Wheeler 500 bu. oats.

IV. Economic Use Of Refuge.

A. Grazing.

Drought conditions adversely affected pasture. The various community pastures are rapidly regenerating to pine and are less able to support cattle, even the local scrub stock that is almost worthless.

Trespass stock is still present and legal steps must be taken to correct the situation if we are to make any headway on goose range development.

B. Haying.

Due to drought, the hay crop was little and consisted mostly of the hardier weeds such as sedge, ragweed, and etc..

C. Fur Harvest. None.

D. Timber Removal by R.R. McMaster, Forester Aid.

Timber removal this period consisted of the following activities. Marking approximately 90 MBF of bridge timber for refuge and county use, supervising felling and sawing of 57 MBF of refuge bridge timber, disposing of 22,355 bd.ft. of dead pine sawlogs, removal of approximately 900 MBF of exchange timber on the Henry Spruill and C.M. Hudson et at land trades.

Mortality among pine trees has been very low this period considering the drought and high temperatures. Numerous stems of small red oak and black oak are dying in the Bevils Hill area of the Refuge.

E. Other Uses. None.

V. Field Investigation of Applied Research.

Biologist Cypert was here a few days to check ground cover study plots.

VI. Public Relations.

A. Recreational Uses.

Visitor Days are as follows:

Fishing	6411 actual count
Picnicking	5000 estimated
Sight seeing	<u>1000 estimated</u>
	12411

B. Refuge Visitors.

5/3/54 C.V. Fermanich, FWS. Atlanta, Inspection. 2 days.  
 5/21/54 Prof. J.C. McWhorter, State College & class in Agriculture Engineering to see TD-24 & Rome Master Disc. 3 hours.  
 6/2/54 Al Horn, Forester, State College, examine dying oaks. 2 hrs.  
 6/24/54 Roy Grizzle, Kentucky Woodlands, came for load of lumber.  
 6/21/54 L.S. Givens & Van Dyke, FWS, Atlanta, Ga., Paris, Tenn., farm plans. 3 days.  
 8/3/54 Frank Sessums, Predator & Rodent Control, FWS, State College. Predator control. 2 hours.  
 May-August B.C. Johnson, District Biologist, Miss. G & F Commission, Columbus, Miss. Several calls regarding wildlife.

C. Refuge Participation.

The refuge manager attended the monthly meetings of our local Community Club of which he is vice-president. Other personnel did the same thing.

D. Hunting.

No hunting this period but plans for the annual squirrel hunt in october were approved.

E. Fishing.

6411 fisherman paid the Miss. G & F Commission \$3124.50 for the privilege of fishing in Bluff Lake. The state does not spend but a small portion of this money on the lake and the public is getting wise to that fact and increasing their demand for action. There are no satisfactory boat landings, sanitary facilities are most unsanitary and suitable parking areas are lacking. Corrective measures have been suggested.

The State G & F Commission authorized a commercial fisherman to net rough fish. his take was few. Carp are not abundant.

F. Violations.

Aside from minor fishing violations, there was little activity. Student Assistant Flannery assisted State Wardens in arresting four out of season dove hunters at Brooksville, Miss.

VII. Other Items.

A. Items of Interest.

Roy D. Hudson reported for duty as Refuge Clerk on May 11, 1954. John S. Flannery, Student Assistant, from the Cooperative Wildlife Research Unit at Auburn, Alabama spent the last half of August here on refuge work.

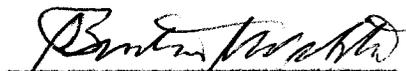
Acquisition.

Deeds to tracts 1929,a & 1848 were vested in U.S.. Tract 1848 1100 acres will complete our ownership for the green timber reservoir. We now have a splendid potential water foul area.

Respectfully submitted

Approved by: (sgd) Edward A. Miller

Date: Sept. 27, 1954



Burton S. Webster  
Refuge Manager

WATERFOWL

REFUGE HOIUSKE

MONTHS OF May TO August, 1954

(1) Species	(2) Weeks of reporting period									
	3-8	9-15	16-22	23-29	30-5	6-12	13-19	20-26	27-3	4-10
	1	2	3	4	5	6	7	8	9	10
<u>Swans:</u>										
Whistling										
Trumpeter										
<u>Geese:</u>										
Canada										
Cackling										
Brant										
White-fronted										
Snow										
Blue										
Other										
<u>Ducks:</u>										
Mallard										
Black										
Gadwall										
Baldpate										
Pintail										
Green-winged teal	0	0	0	0	0	0	0	0	0	0
Blue-winged teal	0	0	0	0	0	0	0	0	0	0
Cinnamon teal										
Shoveler										
Wood	50	150	150	150	150	150	150	300	300	150
Redhead										
Ring-necked										
Canvasback										
Scaup										
Goldeneye										
Bufflehead										
Ruddy										
Other										
<u>Coot:</u>										

WATERFOWL  
(Continuation Sheet)REFUGE                     MONTHS OF                      TO                     , 19                    

(1) Species	(2) Weeks of reporting period								(3) Estimated	(4) Production	
	<u>11-17</u> 11	<u>18-24</u> 12	<u>25-31</u> 13	<u>1-7</u> 14	<u>8-14</u> 15	<u>15-21</u> 16	<u>22-28</u> 17	<u>29-31</u> 18	waterfowl days use	Broods: seen	Estimate total
<u>Swans:</u>											
Whistling											
Trumpeter											
<u>Geese:</u>											
Canada											
Cackling											
Brant											
White-fronted											
Snow											
Blue											
Other											
<u>Ducks:</u>											
Mallard											
Black											
Gadwall											
Baldpate											
Pintail											
Green-winged teal											
Blue-winged teal	0	0	0	500	0	0	0	00	0000		
Cinnamon teal											
Shoveler											
Wood	100	100	100	100	100	100	100	100	10,000		
Redhead											
Ring-necked											
Canvasback											
Scaup											
Goldeneye											
Bufflehead											
Ruddy											
Other											
<u>Coot:</u>											

(over)

	(5)	(6)	(7)	
	Total Days Use	Peak Number	Total Production	SUMMARY
Swans				Principal feeding areas <u>Bluff Lake &amp; Beaver Impoundments</u>
Geese				
Ducks	<u>22,100</u>	<u>750</u>	<u>100</u>	Principal nesting areas _____
Coots				

Reported by Burton S. Webster

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)

Refuge ~~XXXXXX~~ Months of ~~May~~ to ~~August~~ 195~~6~~

(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>										
Great Blue Heron	resident		100	July						100
American Egret	resident		400	August						400
Wood Ibis	10	July	100	August						100
II. <u>Shorebirds, Gulls and Terns:</u>										

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. <u>Doves and Pigeons</u> : Mourning dove White-winged dove					
IV. <u>Predaceous Birds</u> : Golden eagle Duck hawk Horned owl Magpie Raven Crow					
					Reported by.....

#### 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 ~~NOXUBEE~~ Months of ~~May~~ to ~~August~~, 19~~4~~~~6~~

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
						Hunting	For Re- stocking	For Research		
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'vd.	Estimated Total	Percentage				Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
<b>Turkey</b>	<b>40,000</b>					o	o	o	<b>4 flocks 25 birds</b>	<b>2 site records</b>
<b>Quail</b>	<b>40,000</b>		<b>20</b>			o	o	o	<b>200</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.

## REFUGE GRAIN REPORT

Refuge ~~MISSISSIPPI~~Months of ~~May~~ through ~~Aug.~~, 1954

(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	20 bu.	0	20 bu.	0		20	20	0	0	0	0
Soybeans	229 bu.	0	229 bu.	0	229	0	229	0	0	0	0
Lespedeza sericea	60 lbs.	0	60 lbs.	0	60	0	60	0	0	0	0
Crotalaria	100 lbs.	0	100 lbs.	0	100	0	100	0	0	0	0
Wheat	0	150 bu.	150 bu.	0	0	0	0	150	150	0	0
Oats	0	500 bu.	500 bu.	0	0	0	0	500	500	0	0
Vetch	0	1000 lbs.	1000 lbs.	0	0	0	0	1000 lbs.	1000 lbs.	0	0

(8) Indicate shipping or collection points Starkville, Mississippi(9) Grain is stored at Refuge Crib at Headquarters

(10) Remarks \_\_\_\_\_

\*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.



Soybeans cover crop - Doyle <sup>farm</sup> Bluff Lake. In spite of drought, this was a good crop.



Cortalaria striata - J.W. Smith tract. Drought hurt this cover crop. Wild turkey have been using this field.



Plowing under cover crop of soybeans - Dickerson  
Arm Bluff Lake.



Good stalks of soybeans - Doyle Arm Bluff Lake.  
Beans were inoculated prior to planting.



Seeding oats and eye grass - Dickerson Arm Bluff  
Lake. Note dust which was 4 to 10 inches deep  
and precluded use of cultipacker.



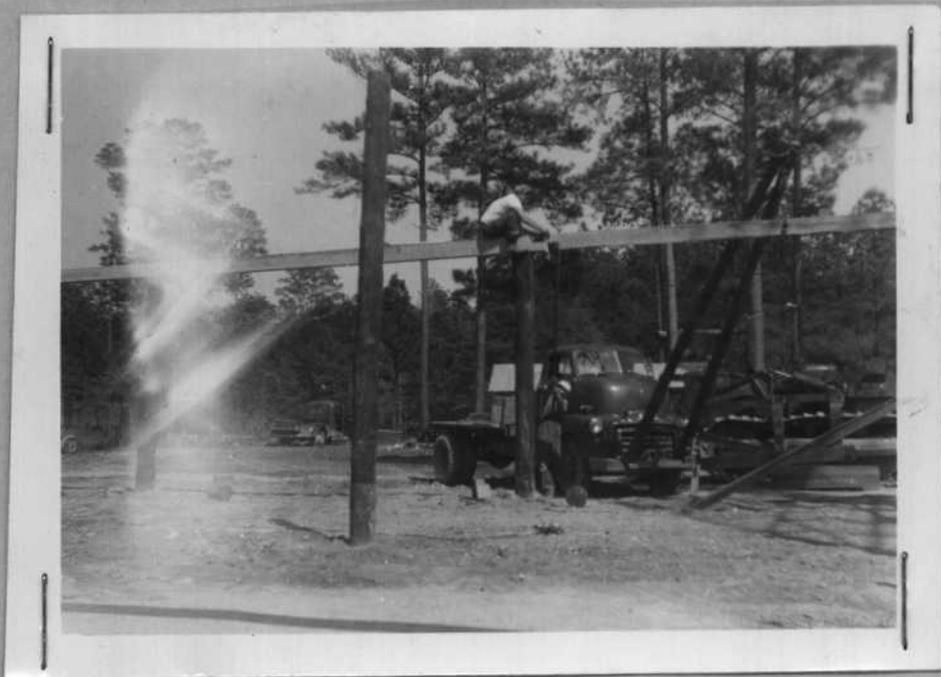
Carp & Catfish removed from Bluff Lake. Carp weight 18 to 42 pounds each.



Maintenance man R.W. Spence overhauling TD-24.



Part of new equipment building and shop and New Dorcey tilt to load  
10 ton trailer. A very useful trailer.



Building new equipment shed. Improvised stiff leg on GMC.



Equipment shed completed except for painting. Provision for 5 ton hoist is in south end of shed.



New 1500 gallon diesel tank and TD-24. This TD-24 is a mighty tractor.

NOXUBEE NATIONAL WILDLIFE REFUGE  
NARRATIVE REPORT  
SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER  
1954

U.S. DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
BROOKSVILLE, MISSISSIPPI

NOXUBEE NATIONAL WILDLIFE REFUGE

--PERSONNEL--

Permanent

Burton S. Webster	.....	Refuge Manager
R. R. McMaster	.....	Forestry Aid
Roy D. Hudson	.....	Refuge Clerk
Robert W. Spence	.....	Maintenance Man (Equip)
Al H. Woodson	.....	Maintenance Man (Gen'l)

W.A.E.

Hubert S. Livingston	.....	Maintenance Man (Gen'l)
Grady H. White	.....	Maintenance Man (Gen'l)
James H. Bearden	.....	Maintenance Man (Gen'l)
Robert L. Whinn	.....	Unskilled Laborer
Mavis C. Woodson	.....	Fire Control Aid
Kate C. Spence	.....	Fire Control Aid

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NOXUBEE NATIONAL WILDLIFE REFUGE  
NARRATIVE REPORT

SEPTEMBER-DECEMBER 1954

I. GENERAL

A. Weather Conditions.

	Precipitation	Temperature		Average		Water Level	
		Max.	Min.	Max.	Min.	Max.	Min.
September	.77	102	52	93.8	65.6	-4.1	-4.5
October	2.46	96	32	79.5	54.4	-3.5	-4.1
November	3.10	75	20	65.0	41.2	-1.4	-3.5
December	<u>3.43</u>	74	22	56.6	35.1	0	-1.4
Total	<u>9.76</u>						

Drought and heat characterized September and October. No cover crops could come up until October 14 and 15 when 1.50 inches of rain fell. After that, frequent showers kept cover crops growing nicely. A difference of 4.06 inches rain was noticed between State College guage and the Refuge gauge.

B. Water Conditions.

All creeks and Noxubee River ceased to flow until late December when Noxubee River began to flow feebly. Bluff Lake was below spillway elevation during the entire period. It was possible however to put 2½ ft. of water in the lake by blasting beaver dams above the lake. This was done between November 10 and November 30.

C. Fires.

Sometimes we shudder at the thought of a fire last fall. It was so dry and windy that even with good luck, the suppression of a fire would have been difficult and costly. Things were strangely quiet on the fire front and we often wondered what the boys were up to. This quietness is not natural here as records of past years reveal and neither was it quiet around us or in the rest of the State where some outfits like International Paper averaged 300 fires a month. We had one fire (No. 10) which burned .6 acres of refuge land. Action was taken on 15 more fires threatening Government Land. We believe this has been the best year Noxubee ever had as far as fires are concerned. We hope we can keep the lid on this "power keg" again in 1956.

The fact that 1954 was the best fire year yet does not lessen our need for equipment and funds for detection and improvement. What we are doing, is building up a fuel reserve which can hurt us badly in event of fire.

Fire danger during the period is described below:

	Class of fire day				
	1	2	3	4	5
September	9	13	8	0	0
October	9	16	6	0	0
November	8	14	8	0	0
December	<u>10</u>	<u>14</u>	<u>6</u>	<u>1</u>	<u>0</u>
	36	57	28	1	0

## II. WILDLIFE

### A. Migratory Birds.

#### 1. Population & Behavior.

Duck populations hit an all-time high on the refuge and the populations are just a start on what this place can hold with development work. The duck population built up most spectacularly during the weeks of November 6 and December 4. We believe we had every duck in the country here as farmers who normally have a few on their ponds reported they had no ducks at all or very few. The fact is that the farm ponds had no feed for ducks and aside from Bluff Lake and local stock ponds, there was no water in the country. More Canvas-back were noted than ever before.

Geese: Our Canada Goose population did not do so well. On October 23, 150 spent the night here and left for parts unknown. On Thanksgiving week end 18 came to stay and at the end of the period 35 wild birds were here. Perhaps the open winter in the north has influenced the geese.

Coots: The coot population has not changed since November 6 when 1,000 were present.

#### 2. Feed and Cover.

Food conditions in Bluff Lake were the best ever due to dewatering the lake bed, which began on July 6. At a minus 4.5 feet there is about 900 acres of mud flat exposed, leaving about 300 acres of water. The most abundant emergent food was Chufa (*Cyperus erythrorhizos*). This occupied the lowest portion of the mud flats.

Wild millet was next in abundance and the least abundant was smartweed.

The gradual raising of water levels kept the ducks very happy and concentrated on the lake where the public could see them. We felt flattered with reports of "millions of ducks" but actually knew there were about 12,000 on the lake.

Oak mast was abundant but it was unavailable to ducks during the period because of low waters. When the proposed green timber reservoir is built, we will have abundant duck food. Ducks used 800 acres of beaver impoundments above the refuge during the period.

#### 3. Botulism. None.

#### 4. Lead Poisoning & Other Disease. None observed.

Five goose decoys have been killed by a predator, probably a Great Horned Owl.

B. Upland Game Birds.

1. Quail: No change is noted in refuge populations.

Turkey: No change of populations has been noted since last report except that 4 gobblers from Piedmont refuge were released December 21.

2. Food & Cover.

Cover for quail is too thick due to the exclusion of fire.

Turkey cover is improving each year. Thickets that 5 or 6 years ago were almost impenetrable are thinning themselves out naturally and with reasonable protection from wild fire should develop into open, park like woods within the next 10 years.

Foods: Oak mast is plentiful as are wild grapes and hawthorne. Native legumes are non-existent due to drought conditions.

3. Disease. None observed.

C. Big Game Animals.

Deer: A gratifying increase in deer is most apparent and is due largely to the predator control activity and habitat development for geese. The oat fields are particularly attractive to deer and this ~~this~~ fall has been the first time we would take visitors out and show them deer.

No evidence of disease has been noted.

D. Fur Animals.

Raccoon populations are seemingly on the decline; this is good.  
Opossum populations are normal.

Mink populations are normal.

Beaver populations are high and seem to increase. Local timber land owners condemn the beavers.

Red Fox populations are probably increasing. We caught more of them than we did a year ago.

Grey Fox populations are about constant.

Bobcat populations fluctuate considerably. We trap them out of an area and within a few weeks we see as many tracks as before. We don't see them often in the day time any more which probably indicates a slight decline.

Skunk populations are low.

Muskrat populations are low due to dewatering of Bluff Lake.

Grey Squirrel populations are high. See VI-D

Fox Squirrel populations show no change.

Predator Control:

The following is a summary of animals taken during the period and during 1954.

	Sept.-Dec.	1954
Bobcat	6	35
Gray Fox	83	184
Red Fox	36	72
Dogs	14	60
House Cats	4	8
Skunk	1	6
Opossum	12	41

The value of predator control is often a controversial subject but on Noxubee is seems to be very much worthwhile. We have occasionally incurred fox wrath of the fox hunters, but even they can see the increase in wildlife, particularly deer. We have caught a lot of dogs, a few of which were good ones. But they were mostly the wild homeless "muts" which are a curse to the local wildlife and live stock.

E. Predaceous Birds.

Crow populations are increasing. As we expand the goose range development, we will increase local crow populations. We are thinking of building a pen-type crow trap.

Owl populations, both barred and great horned remain high.

Hawks no change is noted in the soaring species. Cooper's and Sharp-shinned hawks are scarce.

Bald Eagles - 2 pair are using Bluff Lake.

F. Fish.

Little is known about fish in Bluff Lake. Many advise complete drainage or complete poisoning, or both. This would be very expensive. We are sure of one thing, that is the fishing is very poor because it takes an hour to catch any fish of any kind.

During 1954 fishermen paid \$6,005.00 for 12,271 fishing days.

III. REFUGE DEVELOPMENT MAINTENANCEA. Physical Development.

Jobs on equipment:

International TD-24

Overhaul motor - sleeves, pistons, heads, and rod bearings.

TD-9

Install new main bearing oil seal.

New clutch and pressure plate.

Overhaul both track adjustment assemblies.

Overhaul electric starter.

Install one new brake band.

Jeep I-49276

Install new rings and rod bearings.

Jeep I-17356

New water pump.

New universals.

Daily and periodic maintenance on 3 crawlers and farm tractors (2), 4 jeeps, 2 pickups, one 2½ ton truck and one passenger car.

Goose Range Development.

Spread 491 tons lime on 245 acres.

Cleared 65 acres.

Seeded 336 acres in winter grains.

Fertilized 200 acres.

Built 7 miles of fences.

B. Plantings.

1. Trees and Shrubs - none planted.

2. Upland Herbaceous Plants - none.

3. Cultivated Crops.

The 336 acres of oats, vetch, wheat and rye grass planted in Sept., Oct. and Nov. are looking very good and are considered some of the best in this entire area.

The 100 acres planted on the H.H. Triplett Pasture with a "Pasture Dream" are looking good. This Pasture Dream and similar seeding implement work well and the cost per acre for seeding winter cover crops is much less than complete seedbed preparation. However seeding is best done after frost according to Mr. Triplett.

Triplett Pasture - Permit # 51-693.

Mowed 250 acres.

Spread 20 tons lime @ 2 tons per acre.

Planted 100 acres oats with "Pasture Dream".

Applied 4½ tons amonium nitrate to oats when planted.

Planted 5 acres "Rescue" grass.

Other cultivated crops, corn, etc. grown by our few permittees were not good due to drought and improper tillage. None of our permittees have the equipment or capital to raise corn properly. Their philosophy is "If a man can afford to fertilize like that, he doesn't need to farm". This is an enlightening thought to say the least. But it shows what we are up against when we try to negotiate a decent cropping agreement.

C. Collections. None.

D. Receipts of Seed and Nursery Stock.

This is summarized on Refuge Grain Report.

IV. ECONOMIC USE OF REFUGEA. Grazing:

Grazing is summarized on NR-10. Due to drought all pastures were very poor. Grazing except that done on Triplett's Pasture is a losing proposition and gradually we are reducing the number of permittees and number of cattle on the refuge.

Income from grazing was \$384.05 for 1494 animals months grazing.

B. Haying:

The main part was wild hay and the chief function of haying is to keep certain areas open until we can better manage them. The hay was of poor quality. 66 tons were cut of 358 acres, total income \$136.00.

C. Fur Harvest:

None due to low fur prices.

D. Timber Removal: R.R. McMaster

Salvaging of dead pine sawtimber and scaling timber being exchanged for land continued to constitute the bulk of work accomplished this year. Of the 2,279,479 bd. ft. removed this year 1,653,430 ft. was exchanged for land, 248,350 ft. was salvaged dead timber, 176,147 ft. was cut for county bridge timbers, and 201,513 ft. was removed for clearings and regular sales. There was a total of 577.2 units of pulpwood removed, most of which was tops resulting from exchange timber and the remainder was clearings.

It appears that the last 3 extreme drought years have influenced the mortality of pine as well as small red oak. Usually a suppressed or weak tree will die and attract ever present insects, (usually Ips) and they spread to the nearest trees etc. until several trees are killed. In numerous cases as many as 15 trees of merchantable size are killed before the insect cycle is interrupted. By the time the outbreak is noticed (by brown foliage) several nearby trees have already been attacked and are in a dying condition. A few adjoining land owners have attempted certain controls but the operation cost too much to be practical as nature usually controls it before over  $\frac{1}{2}$  acre is demolished.

The Forestry Aid GS-5 position at this Refuge was vacated November 20, 1954 by R.R. McMaster to become Assistant Refuge Manager. This position is expected to be filled before February 1, 1955 but it is impossible for one man to properly mark, supervise and otherwise administer the timber sales as provided by our new forest management plan. Pressure from local timber dealers is increasing, therefore, the need for additional help in preparing timber sales.

See NR-11 for specific data.

## V. FIELD OF INVESTIGATION

A. No activity during this period. The only study going on here is Mr. Cyperts burning and ground cover study.

## VI. PUBLIC RELATIONS

### A. Recreational Uses:

Visitor days are as follows:

Fishing	1435
Hunting	2100
Picnicking	600
Sight Seeing	1200

While we don't endorse the multiple use principle of land use for a wildlife refuge, we can see nothing but increased human use of refuges and this ought to be recognized and provided for.

### B. Refuge Visitors.

- 9/14/54 L.S. Givens, FWS, Atlanta, project Soil & Moisture Work.
- 9/17/54 Supervisor T.C. Gray, District 5, Oktibbeha County. 3 hours to discuss bridge repair.
- 9/30/54 Conservationist, SCS, Macon Miss. 6 hours on farm plans and capability maps, R.M. Currie.
- 10/12-20 D.E. Booth, Branch of Engineering, FWS, Atlanta. Survey green timber reservoir.
- 10/18-25 R.E. Lines, Branch of Lands, FWS, Atlanta. Land acquisition.
- 10/26/54 B.C. Johnson, district Biologist, Mississippi Game & Fish Commission. Several calls during period on mast studies and game matters.
- 10/28/54 R.M. Currie, SCS, Macon Miss. 2 hours drainage on Smith Field No. 2.
- 11/2/54 Messrs H.A. Miller & L.S. Givens, FWS, Atlanta, 2 hours - refuge inspection.
- 11/21/54 Professors Ed Roberts & Morris called. Just a friendly visit. 3 hours.
- 11/26/54 Supervisors Hull & Sanders, Winston County called regarding roads.
- 11/30-12/11 Mr. William Ashe, Branch of Lands, FWS, Atlanta. Timber marking.
- 12/21/54 Mr. Adams, Piedmont Refuge, 3 hours, delivered 4 turkey gobblers.
- 12/15/54 Supervisor B.G. Hull, District III Winston County called regarding bridge timber.

C. Refuge Participation.

- 10/21/54 Refuge Manager took 35 6th. graders on a 4 hour tour of refuge. Many student came back with their parents later.
- 10/28/54 Refuge Manager took 26 6th. graders on tour of refuge.
- 11/2/54 Refuge Manager spoke to Macon, Miss. Rotary Club on Noxubee Refuge.
- 11/3/54 6th. grade, Starkville High School gave the school assembly an hour program on Noxubee Refuge.
- 11/5/54 Starkville 6th. grade gave a 30 minute radio program on Noxubee Refuge at 7 PM over WSSO.
- 12/12/54 Refuge Manager attended Forestry Section of State College Experiment Station meeting.

Two short news releases were prepared for local papers.

Frank Vestal (Sport Writer) Memphis Commercial Appeal wrote an article about our goose project. We never got the 50 geese he mentioned. The article stirred lots of local attention.

D. Refuge Hunting:

Squirrel hunt: The best squirrel hunt yet was held during October 7-17. Data for the hunt is as follows:

	Permit	Used	Unused	Returned	% Returned	Hrs. Hunted	Total	
							Gray	Fox
1949	1200	619	291	910	75	4740	3077	99
1950	845	516	176	681	84	4604	3246	130
1951	655	376	143	519	79	2756	1350	71
1952	943	384	195	579	62	3817	2683	0
1953	1094	581	180	761	70	5327	2824	92
1954	1040	646	122	768	75	7378	5495	195

Crippled

Lost &	Wolves	Lactating	% Lactating	% Crippled	Aver. kill per hunter
324	5	169	5.4	10.2	5.13
387	1	65	1.9	11.5	6.64
139	6	90	6.3	9.8	3.80
360	0	32	.01	13.1	7.20
393	4	189	6.5	13.7	4.80
606	15	246	4.3	10.6	7.41

Quail Hunting:

Quail hunting is the worst yet. Even good hunters cannot produce. Foxes catch the blame but sooner or later the "Sportsmen" will come to note that what would best serve their needs is an outbreak of hoof and mouth disease.

Deer Hunting:

Deer hunting adjacent to the refuge improved this year.

Water Fowl Hunting:

Duck hunting was the worst yet and plenty of noise is going to be made to get a later season. The purchase of a duck stamp is considered a bad investment locally. The ducks were here, more than ever before, but they stayed on the refuge. There was no water elsewhere.

F. Violations.

Robert Livingston paid \$10.00 and cost for hunting without a permit.

Robert R. Fox paid \$10.00 and cost for hunting without a permit.

O.C. Spruell paid \$14.00 and cost for hunting on refuge.

William C. Jordan received a suspended sentence, for being in possession of a loaded gun on the refuge.

Our predator control activity has a good law enforcing affect in that raccoon hunters, fox hunters and other who hunt with a dog don't like to hunt them on the refuge because of steel traps.

VII. OTHER ITEMS.A. Items of Interest.

On Sunday October 3, 1954 4 mature bald eagles were perched in a pine at headquarters. As we were admiring these birds and thinking that here was the sight of a life time, along comes a local "sportsmen" in quest of a squirrel hunting permit. We pointed out the 4 eagles and told him he would probably never again see such a site. To this astonishment he replied. "What good are they, you can't eat them". This man with his practical philosophy ought to be the next President of the "Littlejohn Society".

Acquisition:

The matter of consolidating the refuge is progressing nicely. Five agreements to exchange timber for land were signed during the period.

Harry Cole	28 acres
Joe N. Hamill, Jr.	16 acres
Bledsoe Heirs	480 acres
Kathleen Shaskleford	120 acres
Nora Roberson	2 acres

The acquisition of this land will eliminate 4 families from the refuge.

County Public Relations:

This refuge furnished 118,635 bd. ft. of pine bridge timber to Oktibbeha and Winston Counties. This paid off well for the Service in many ways, particularly in political circles during the recent attempted land grab by State College. We also have some excellent new bridges around and within the refuge.

Personnel:

Forestry Aid R.R. McMaster was promoted to Assistant Refuge Manager in November.

Sam W. Barton has been appointed Forestry Aid. He will report for duty in early January.

Respectfully submitted

Approved by: C. V. Fennell Burton S. Webster  
 Date: 1/21/55 Burton S. Webster  
 Refuge Manager

PUBLIC USE - C. Y. 1954

Please supply figures, or your best estimates for the following categories when applicable to your refuge:

A. Noxubee National Wildlife Refuge.

B. Estimated total use of all types 25,166 visitor-days.

1. Hunting use (for those refuges having public or regulated hunting.)

Estimate visitor-days 2,100.

2. Fishing use.

Estimated visitor-days 12,271.

3. Miscellaneous use (lump such uses as picnicking, swimming, wildlife observation, birdwatching, as well as those on the area for business or official use, including economic uses such as farming or trapping.)

Estimate visitor-days 10,800.

C. Remarks.

January 24, 1955  
Date

Burton Webster  
Refuge Manager



Inspecting blast in beaver dam above Bluff Lake. Periodic blasting of dam enabled us to add 900 acre feet of water to Bluff Lake. The dam was diverting water around the lake into Noxubee River.  
Photo by R.D. Hudson



One of the 6th. grade class at Starkville on a tour of the Refuge. This class put on a 30 minute radio program featuring Noxubee.  
Photo by R.D. Hudson



Fire Control Aid Kate Spence on duty - Bluff Lake Tower.  
Photo by R.D. Hudson



Major bridge repair - R.R. McMaster, our new Assistant Refuge Manager.  
Photo by R.D. Hudson



West end - Bluff Lake showing growth of Chufa, Wild Millet and Smartweed. This emergent growth is the reason why Bluff Lake held more ducks than ever before. Photo by R.D. Hudson



Turkey release 12/21/54. 4 Gobblers from Piedmont were released.  
NW $\frac{1}{2}$  Section 24, T16N, R14E. Photo by R.R. McMaster.

WATERFOWL

REFUGE NOXUBEE

MONTHS OF SEPTEMBER TO DECEMBER, 1954

(1) Species	(2) Weeks of reporting period									
	9/8 1	9/11 2	9/18 3	9/25 4	10/2 5	10/9 6	10/16 7	10/23 8	10/30 9	11/6 10
<u>Swans:</u>										
Whistling										
Trumpeter										
<u>Geese:</u>										
Canada								150		
Cackling										
Brant										
White-fronted										
Snow									500	
Blue									200	1
Other										
<u>Ducks:</u>										
Mallard							8	150	400	1500
Black									300	500
Gadwall										
Baldpate										
Pintail										
Green-winged teal									300	300
Blue-winged teal										
Cinnamon teal										
Shoveler										
Wood									250	500
Redhead										
Ring-necked										80
Canvasback										
Scaup										
Goldeneye										
Bufflehead										
Ruddy										
Other										
<u>Coot:</u>										
						15	50	250	700	1000

WATERFOWL  
(Continuation Sheet)REFUGE                      MONTHS OF SEPTEMBER TO DECEMBER, 1954

(1) Species	(2) Weeks of reporting period								(3) Estimated	(4) Production
	11/15	11/20	11/27	12/4	12/11	12/18	12/25	1/1	waterfowl	Broods: Estimate
Species	11	12	13	14	15	16	17	18	days use	seen: total
<b>Swans:</b>										
Whistling										
Trumpeter										
<b>Geese:</b>										
Canada	4	5	18	25	25	25	35	35	2,254	
Cackling										
Brant										
White-fronted										
Snow									3,500	
Blue	1	0	0	0	0	0	0	0	1,414	
Other										
<b>Ducks:</b>										
Mallard	6000	6000	6000	8000	8000	8000	8400	8400	426,000	
Black	800	800	800	800	800	800	800	800	41,300	
Gadwall				600	600	600	600	600	21,000	
Baldpate										
Pintail				50	200	200	300	300	7,350	
Green-winged teal	500	500	500	500	500	500	500	500	32,300	
Blue-winged teal										
Cinnamon teal										
Shoveler					25	40	40	40	1,015	
Wood	500	750	750	750	750	750	750	750	45,500	
Redhead					60	60	60	60	1,600	
Ring-necked	50	350	350	350	350	350	350	350	18,000	
Canvasback					200	200	250	250	6,800	
Scaup				700	700	700	700	700	24,500	
Goldeneye							10	10	140	
Bufflehead										
Ruddy										
Other										
Hooded Merganser	6	175	300	300	300	350	350	350	14,917	
<b>Coot:</b>	1,000	1000	1000	1000	1000	1000	1000	1000	70,105	
	8856	9575	9700	12750	(over) 13185	13250	13910	13910		

	(5)	(6)	(7)	SUMMARY
	Total Days Use	Peak Number	Total Production	
Swans				Principal feeding areas _____
Geese	7168	799		
Ducks	639,908	15,318		Principal nesting areas _____
Coots	70,105	1,000		

Reported by Burtan S. Webster

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)

Refuge MOORE Months of September to December 1951

(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	
<b>I. Water and Marsh Birds:</b>										
Double Crested Cormorant	15	9/23	400	Nov.						
Great Blue Heron			75	Resident						
American Egret			400	Sept.						
Wood Pecker			600	Sept.						
<b>II. Shorebirds, Gulls and Terns:</b>										
Herring Gull			6	Sept.						

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. <u>Doves and Pigeons</u> : Mourning dove White-winged dove		600	Oct.		
IV. <u>Predaceous Birds</u> : Golden eagle Duck hawk Horned owl Magpie Raven Crow Bald Eagle		50  4000 4	Resident  Loc. Resident		
				Reported by <u>Burton E. Webster</u>	

#### 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 NOXUBEEMonths of September to December, 1954

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
						Hunting	For Re- stocking	For Research		
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd.	Estimated Total	Percentage				Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Turkey	40,000								4 flocks 29 birds	4 tom turkeys from Piedmont released 12/21/54.
Quail	40,000		20			0	0	0	500	

## 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

NOXUBEE

Calendar Year 1954

(1) Species	(2) Density	(3) Young Produced	(4) Removals					(5) Losses			(6) Introductions	(7) Estimated Total Refuge Population		(8) Sex Rati
			Hunting	For Re- stocking	Sold	For Research	Predation	Disease	Winter Loss	Number		Source	At period of Greatest use	
Deer	40,000	150	0	0	0	0	0	0	0	0		500	500	49% 50%

Remarks:

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

## 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

~~NOX~~

Year 1954

## Botulism

## Lead Poisoning or other Disease

Period of outbreak \_\_\_\_\_

Period of heaviest losses \_\_\_\_\_

## Losses:

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

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

(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

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

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

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

Remarks None noted.

Kind of disease \_\_\_\_\_

Species affected \_\_\_\_\_

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

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

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

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

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

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

Remarks None noted.



DIRECTIONS FOR PREPARING FORM NR-8  
CULTIVATED CROPS

Cultivated Crops Report Form NR-8 should be prepared on a calendar-year basis for all crops harvested or utilized during the calendar year and submitted with the December 31 refuge report.

Permittee - List each permittee separately. If lands of the refuge are farmed by refuge personnel or hired labor, this should be indicated in the Permittee column.

Permit No. - List the number of the Special Use Permit issued to the individual.

Use or Location - The Unit No. or name specified in the Economic Use Plan should be listed in this column.

Crops Grown - A separate line of the form should be used for each crop grown by each permittee or by refuge personnel. This is important, since if each crop grown by each operator is not specifically enumerated, the report will be of no value for statistical purposes.

Average Yield per Acre - It is important that the average yield per acre of each crop grown by each operator should be shown.

Permittee's Share - Only the number of acres harvested or 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. It is requested that all crops harvested be reduced to bushels wherever possible, or, as in the case with the harvesting of seed such as that of sweet clover, alfalfa, bromegrass, etc., the total harvested crop in pounds may be shown. Timothy, alfalfa, or other hay harvested by the permittee should be shown on Form NR-10 and should not be shown in the Permittee's Share column.

Government's Share or Return - Harvested - Show the number of bushels harvested for the Government and the acreage from which this share is harvested, both for grain raised by refuge personnel and by permittees. Unharvested - show the exact number of acres of crops allowed to remain unharvested as food and cover for wildlife. An estimate of the number of bushels of grain that is available for the wildlife in such unharvested crops should be shown in the Bushels column.

Compensatory Services, or Cash Revenue - Show other services received by the Government in cooperative farming activities; the number of acres of food strips planted for wildlife, the amount of wildlife crops not otherwise reported that are planted by cooperators for the Service, or the cultivation of wildlife plantations. If the permit is on a fee basis, the total cash revenue received by the Service.

## REFUGE GRAIN REPORT

Refuge NOXUBEEMonths of September through December, 1954

(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
Eye grass, Italian	5000#	None	5000#	none	5000#	0	5000#	0			
Oats, Ferguson & Fullgrain	0	790#	790#	none	790#	0	790#	0			
Wheat, Clarkan	36 1/3 bu.	113 2/3	150 bu.	none	145 bu.	5	150 bu.	0			
Hybrid Ear Corn	0	75 bu.	75 bu.	none	0	30	30	45		45	
Hairy Vetch <sup>o</sup>		1000#	1000#	none	1000#	0	1000#	0			

(8) Indicate shipping or collection points Starkville, Mississippi(9) Grain is stored at Refuge Grain rib

(10) Remarks \_\_\_\_\_

\*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.

Refuge

~~NOXUEE~~Year 1954

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Animal Use Months	Tons of Hay Harvested	Period of Use		Rate	Total Income	Remarks
						From	To			
E.E. Alewine	Nox-357	P-25	30 1/2	12		5/1/54-10/31/54		.25	\$3.00	2 head of cattle
Laura Brown	Nox-365	P-7	180	24		5/1/54-10/31/54		.25	6.00	4 head of cattle
Elmo Brown	Nox-369	P-15	8	48		5/1/54-10/31/54		.25	12.00	8 head of cattle
Glenn Bevil	Nox-367	P-7	180	102		5/1/54-10/31/54		.25	25.50	17 head of cattle
Bill Coleman	Nox-344	Sec. 32 E17N, R14E	25		15	4/7/54-12/31/54		.50	12.50	25 acres of hay
J.F. Coleman	Nox-358	Tr. 1825, 1826 & 1827	287	42	42	4/8/54-12/31/54		.10	109.50	1000 bales of hay
John W. Cook	Nox-355	P-25	30 1/2	6		5/1/54-10/31/54		.25	1.50	1 horse
John Bailey	Nox-342	P-16	80	108		1/1/54-12/31/54		.25	27.00	9 head of cattle
L.C. Edwards	Nox-350	Sec. 24	1		1	5/1/54-9/30/54		1.00	1.00	1 acre of wild hay
<del>XXXXXXXXXX</del>	<del>NOX-352</del>	<del>E16N, R13E</del>								
Milton Glenn	Nox-364	P-14	20	36		5/1/54-10/31/54		.25	9.00	6 head of cattle
Ozzie B. John	Nox-370	P-20	320	42		5/1/54-10/31/54		.25	19.50	7 head of cattle
E.W. Jones	Nox-374	Tr. 273	35			5/1/54-9/30/54		.50	17.50	35 acres of oats and lespedeza
E.W. Jones	Nox-375	Tr. 273	100	144		1/1/54-10/31/54		.25	36.00	16 head of cattle
C.K. Hargh	Nox-352	Sec. 25 E16N, R13E	6		6	4/1/54-12/31/54		.50	3.00	6 acres of hay
John Logan	Nox-376	P-10	10 <del>XXXX</del>	19 1/5		5/1/54-5/1/55		.25	4.80	8 head of cattle
Mrs. B.B. Nowell	Nox-349	P-23	30	12		5/1/54-10/31/54		.25	3.00	2 head of cattle
Charlie Oberson	Nox-362	P-23	60	66		5/1/54-1-31/54		.25	16.50	11 head of cattle
Robert Spruill	Nox-354	Sec. 28 E17N, R14E	4		2	5/1/54-10/31/54		.50	2.00	4 acres wild hay
Easter Spruill	Nox-353	P-8	200	42		5/1/54-10/31/54		.25	10.50	7 head of cattle
H.H. Triplett	Nox-61-693	S. 10 & 15 E16N, R14E	180	875		4/1/54-10/31/54		.25	218.75	125 head of cattle

Totals:

Acreage grazed 1198 Animal use months 1494 1/5 Total income Grazing \$384.05Acreage cut for hay 358 Tons of hay cut 66 Total income Haying \$136.00

Refuge

NOXUBEE

Year 1954

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
C.H. Hearon Jr.	Nox-331	Comp. 24	180	60 units	\$3.25	\$195.00	Tops	Pine
John L. Heard	Nox-360	Comp. 12	60	100 units	4.30	468.70	Clearing	Pine
John L. Heard	Nox-396	Comp. 14	50	166 units	4.30	713.80	Clearing	Pine
R.S. Quinn	Nox-396	Comp. 25	200	149.5 units	3.50	523.25	Pulpwood tops	Pine
Sturgis Lumber Co.	4-302	Comp. 10	80	150,000 B.F.				Pine
				4,650 B.F.	Lump-Sum	4,965.00	Designated	Gum
				2,195 B.F.				Oak
American Creosote Works	Nox-337	Comp. 4	4	828 fence posts	.02	16.56	Designated	Pine
Walter Sherrod	Nox-373	Comp. 8	Scattered	3,980 bd. ft.	15.00	59.40	Dead	Pine
Roger McGee	Nox-371	Comp. 25	Scattered	6,780 bd. ft.	15.00	101.70	Dead	Pine
Isom Porter	Nox-369	Comp. 6	Scattered	3,104 bd. ft.	15.00	46.56	Dead	Pine
H.L. Fuller	Nox-381	Comp. 12	Scattered	5,050 bd. ft.	8.00	40.40	Designated	Oak
				8,510 bd. ft.	25.00	212.75	Designated	Pine
E.E. Alewine	Nox-380	Comp. 5	Scattered	9 units	2.00	18.00	Tops	Pine
R.L. Sides	Nox-379	Comp. 23	Scattered	45.75 units	3.00	137.25	Tops	Pine
Deane Collins	Nox-334	Comp. 24	Scattered	12,907 B.F.	15.00	193.60	Dead	Pine
Walter Sherrod	Nox-335	Comp. 5	Scattered	7,128 B.F.	12.00	86.25	Dead	Pine
Henry Edwards Jr.	Nox-336	Comp. 1	Scattered	2,356 B.F.	20.00	47.72	Dead	Pine
Albert Glenn	Nox-338	Comp. 4	Scattered	5,426 B.F.	15.00	81.40	Dead	Pine
Henry Edwards Jr.	Nox-347	Comp. 1	Scattered	1,714 B.F.	15.00	25.72	Dead	Pine
L.B. Sherrod	Nox-339	Comp. 9	Scattered	2,450 B.F.	15.00	36.75	Dead	Pine
H.L. Fuller	Nox-340	Comp. 3	Scattered	7,967 B.F.	15.00	119.51	Dead	Pine
Hubert S. Livingston	Nox-343	Comp. 14	3	1,500 B.F.	20.00	30.00	Designated	Pine
				500 B.F.	10.00	5.00	Designated	Oak
Walter Sherrod	Nox-346	Comp. 5	Scattered	5,964	15.00	89.46	Dead	Pine
Isom Porter	Nox-345	Comp. 7	10	2,925 B.F.	15.00			
				3.25 units	3.00	53.62	Fire damaged	Pine

Total acreage cut over \_\_\_\_\_ Total income \_\_\_\_\_

No. of units removed B. F. \_\_\_\_\_ Method of slash disposal \_\_\_\_\_  
 Cords \_\_\_\_\_  
 Ties \_\_\_\_\_

Refuge

NOVEMBER

Year 1954

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
Moss Sherrod	Hex-405	Comp. 29	Scattered	2,735 B.F.	10.00	27.35	Dead	Pine
H.L. Fuller	Hex-406	Comp. 16	Scattered	27,455 B.F.	10.00	274.55	Dead	Pine
Eugene Ellis	Hex-407	Comp. 28	Scattered	2,735 B.F.	10.00	27.35	Dead	Pine
Isom Porter	Hex-408	Comp. 14	Scattered	14,205 B.F.	10.00	142.05	Dead	Pine
Russell Ewing	4-272	Comp. 24	40	100,000 B.F.	Land Exchange		Designated	Pine
Jones Carter	4-282	Comp. 24	20	86,000 B.F.	Land Exchange		Designated	Pine
				Over run				
				6,965	36.00	250.74		
William H. Spruell	4-290	Comp. 26	80	164,000 B.F.	Land Exchange		Designated	Pine
				Over run				
				27,675 B.F.	36.00	996.30		
C.H. Hudson et al	4-287	Comp. 24, 25, 9, 2	550	1,220,000 B.F.	Land Exchange		Designated	Pine
				Over run				
				42,790 B.F.	36.00	1756.44		
Bridge timber for refuge use		Comp. 5	30	57,512 B.F.			Designated	Pine
T.C. Gray, Supervisor	4-279	Comp. 23	60	66,000 B.F.	No charge county		bridge timber	Pine
T.C. Gray, Supervisor	4-274	Comp. 24	20	16,000 B.F.	No charge county		bridge timber	Pine
				5,000 B.F.				
B.G. Hull, Supervisor	4-285	Comp. 6	30	33,675 B.F.	No charge county		bridge timber	Pine
E.E. Parks	Hex-377	Comp. 6	Scattered	4,485 B.F.	36.00	166.98	Designated	Pine
Joe White	Hex-378	Comp. 14	Scattered	995 B.F.	20.00	19.90	Designated	Pine
Refuge use		Comp. 14	2	1,200 post			Designated	Pine

Total acreage cut over 1661Total income \$14,355.96No. of units removed B. F. 2,279,479Method of slash disposal ops sold for pulpmood.Units 577.2

Ties

Post 2028