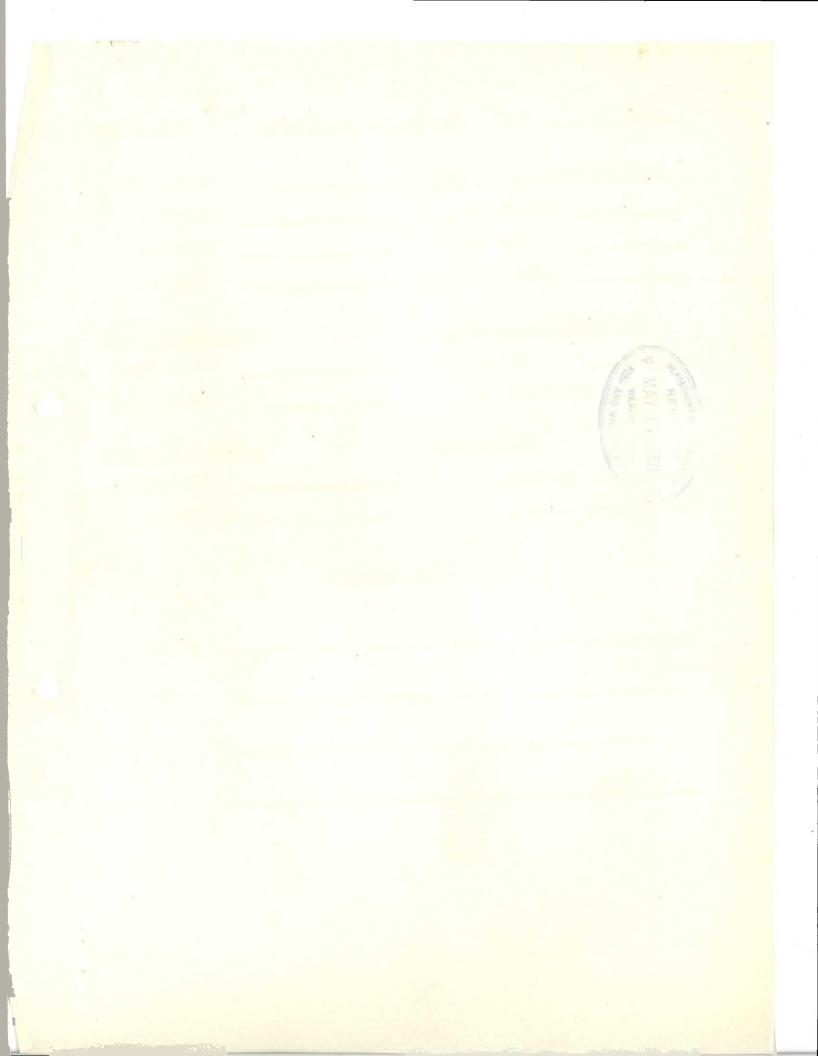
ROUTING SLIP	BRANCH OF LILDLIFE	REFUGES	DATE: May	17	194 50
MR. SALYER		SECTIO	N OF HABITAT	IMPRO	VEMENT:
MR. KRUMMES		М	R. CRIPPION	PEG	5-22
MR. DUMONT	P743	D	R. BOURN	-	
MISS BAUM		14	ISS COOK		
SECTION OF OPERATI	ONS:	SECTIO	N OF LAND MAN	IAGEMEI	VT:
MR. DALL		[M	R. KENT		4
MR RECAN		14	ACKERKNECI	FF	0a
SECTION OF STRUCTU		STENIOC	RAPHERS:		
MR. TAYLOR		DIENOG	tarmao.		
		_			
MIT. JUNNSTON		-			
	MADDA MITTER D	EDODM			
	NARRATIVE R	EPORT			
REFUGE:	OKENENONE OKENENONE	0,			
PERIOD:	JANUARY - APRI	IL 1950			NW



OKEFENOKEE NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

JANUARY - APRIL 1950.

	Table of Contents	Was go	Page
I.	GENERAL		1,2
	A. Weather Conditions		1
	B. Water Conditions	em qui gan	1
	C. Fires	en garget	1,2
II.	WILDLIFE		2,3,4
	A. Migratory Birds		2
	B. Upland Game Birds		3
	C. Big Game Animals	-	3
	D. Fur Animals, Predators, Etc.		3
	E. Predaceous Birds		3,4
	F. Fish	-	4
	G. Alligators	-	4
III.	REFUGE DEVELOPMENT AND MAINTENANCE		4,5
	A. Physical Maintenance	-	4
	B. Physical Developments		4,5
	C. Plantings	-	5
	D/ Collections		5
	E. Receipts of Seed and Nursery Stock	-	5
IV.	ECONOMIC USE OF REFUGE	0	5
	E. Other Uses	-	5
V.	FIELD INVESTIGATION OR APPLIED RESEARCH		6
	A. Control Burning		6
VI.	PUBLIC RELATIONS	otte gan like	6,7,8,9
	A. Recreational Uses		6
	B. Refuge Visitors		6,7,8
	C. Refuge Participation		8
	D. Hunting	-	8
	E. Fishing	600 gar gar	8
	F. Violations		8
	G. Enforcement	200 gar gar	9
VII.	OTHER ITEMS	-	9,10
	A. Items of Interest	-	9
	B. Photographs		10

NR FORMS

OKEFENOKEE NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

JANUARY - APRIL 1950.

I. GENERAL.

A. Weather Conditions.

	Descontation of the state of th	Max	Min.
Tomponer	Precipitation	Temp.	Temp.
January	•04		40
February	1.19	83	27
March	7.00	88	32
April	1.19	88	33
	9.42 Extrem	me s 88	27

Precipitation for the period was 4.71 inches below average for the corresponding periods during the preceding 11 years and 2.17 inches less than for the same period in 1949. Only .04 of an inch occurred during the entire month of January, being a low monthly record according to available data since 1939. Extremes in temperatures were slightly lower than for the same period in 1949.

B. Water Conditions.

Water levels for the period were almost identical with those for the same period in 1949 with the exception of the month of January when readings on the Camp Cornelia gauge dropped below 121.00. The 7 inches of precipitation which occurred during March had very little effect on the water level in the swamp. This is attributed to the fact that surrounding uplands and pine woods were so dry that very little if any, run-off occurred.

C. Fires.

Although two fires burned on refuge lands during the period the timber loss was small compared to lesses from fires in areas adjacent to the refuge. During February fires were set almost daily on adjacent areas. Fire No. 50-1 occurred on February 5th on the west side of the refuge and burned approximately 1,000 acres of refuge land and 800 acres of adjaining. The International Paper Company fire suppression unit assisted refuge personnel in controlling this fire.

Fire No. 50-2 occurred on February 8th on the east side of the refuge. This fire burned about 200 acres on refuge lands and 1,500 acres on adjoining lands of the Union Bag and Paper Company. This fire backburned through most of the acreage and did very little damage to timber. The Charlton County T.P.O., the Union Bag and Paper Company suppression units and refuge personnel cooperated in suppressing this fire. Both of the fires which occurred were of incendiary origin.

II. WILDLIFE.

A. Migratory Birds.

1. Populations and Behavior.

a. Canada Geese.

None observed during period.

b. Ducks.

The annual waterfowl inventory made on January 11th and 12th indicated approximately the same population figures as those for the corresponding period in 1949. However, in February ducks migrated into the refuge in numbers sufficient to greatly increase the period total over the total for the same period in 1949.

It is extremely interesting to note that most of the migrant ducks left the refuge early in February of 1949. Refuge personnel observed Mallard, Ringneck, Black Duck, Pintail and Blue-winged Teal on the refuge during the latter part of March. Patrolman Hall observed 8 Blue-winged Teal on Floyd's Island Prairie as late as April 22nd. Coot still remained at the close of the period.

The low water level was ideal for the wading birds and enormous increases were noted in the White Ibis, American Egret and Heron populations. The Florida Sandhill Crane population showed a decided increase. These birds are becoming very tame in the Buzzard Roost Lake area in Grand Prairie.

2. Food and Cover.

Due to ideal water levels food was abundant for waterfowl and wading birds. Brasenia appears to be increasing in Chase and Grand Prairies. New patches of the food were found in Sapling Prairie also.

3. Disease.

None.

B. Upland Game Birds.

1. Pepulations and Behavier.

Decided increases were noted in the quail and turkey populations on the east side of the refuge, especially on Chesser and Loyd's Islands. There were ample food and cover.

C. Big Game Animals.

1. Populations and Behavior.

a. White-tailed deer.

Another increase is indicated in the deer population. More and more sign is being observed on the islands and uplands surrounding the swamp. Eleven deer were observed on The Pocket on the west side in one morning's time. A great many deer have also been observed on Billy's and Floyd's Islands.

b. Black bear.

The bear population appears to remain static. Quite a few were killed by stock owners on areas adjacent to the refuge during the period. A few cubs were observed by refuge personnel.

2. Food and Cover.

An abundance of food appeared available for both door and bear. No indications of overgrazing were found and the animals observed appeared to be well fed.

3. Disease.

None.

D. Fur Animals, Predators, etc.

With the exception of the otter and raccoon, the populations of the other fur bearers remain static. Otters are definitely increasing as are raccoon. Otter slides can be seen on the canals and boat runs and also around some of the prairie lakes.

E. Predaceous Birds.

A slight increase is noted in the Osprey population. On April 2nd Under Manager Eadie and the writer saw an osprey dive into Monkey Lake and grab a large black bass. The fish was so large that the bird could hardly get off the water with it. After several attempts the osprey finally flew off with the bass. We estimated the fish to weigh

between 2 and 3 pounds. No increase in the bald eagle population is noted.

F. Fish.

Low water caused the fish to concentrate in the prairie pools and lakes, boat runs and canals. It was noted that the pan fish caught in the Suwannee Canal were much smaller than those caught in the prairie lakes and in the big lakes on the west side of the refuge.

G. Alligators.

We can rest assured that these reptiles are increasing more and more on the refuge. New lakes in prairies and 'gator holes can be observed wherever one travels in the remote areas. The big prairie lakes contain from 15 to 25 alligators compared to the 3 or 4 that used to inhabit the lakes not too long ago. The Suwanee Canal, Big Water, Minnie Lake and Billy's Lake all contain large concentrations. The reptiles have increased more and more on the boat run through Floyd's Island Prairie.

III. REFUGE DEVELOPMENT AND MAINTENANCE.

A. Physical Maintenance.

Control burning and patrol consumed a great deal of refuge personnel's time during the period. However, considerable progress was made on reroofing the lodge on Floyd's Island. At the close of the period the project was practically completed.

Some time was spent in cleaning logs and stumps from the boat run which was dynamited through the bay from Chase Prairie to Floyd's Island.

At the Cornelia headquarters personnel continued the "Penta" treatment for termites. This required holes to be drilled in the concrete
floor of the service building. Considerable difficulty was encountered
in obtaining equipment for drilling the holes. At the close of the period
plans were in progress for removing some of the bottom logs of the buildings for replacement either with new logs or with concrete aprons.

Maintenance of automotive equipment, boats and outboard motors continued under the 5000 mile Preventive Maintenance checkup and the 3000 mile Safety Inspection.

B. Physical Developments.

Telephone wire was salvaged from the swamp and a phone line was placed in operation between the fire patrolman's residence on Chesser Island and the Cornelia headquarters. This permits instant communication with the headquarters in the event of fire or night hunting on the island and prairie areas.adjacent thereto.

Residence No. 4, the guest cottage at Camp Cornelia, was modernized during the period. Water lines were connected and a hot water heater installed. The plumbing was repaired and new sewage facilities provided. Shelves and cabinets were built in the kitchen. Patrolman Cone rewired the cottage and installed electric outlets of the proper type.

C. Plantings.

None.

D. Collections.

None.

E. Receipts of Seed and Nursery Stock.

None.

IV. ECONOMIC USE OF REFUGE.

E. Other Uses.

Considerable progress was made by the Okefenokee Sportsman's Club, operating the guide concession at the Cornelia entrance, in cleaning up the Cornelia boat landing site and in rebuilding the parking areas and lead in roads. Plans for the administration building were submitted by the organization and approved by the Central Office. Ten more boats and five new outboard motors were placed in operation. This organization cooperates fully with refuge personnel in all matters.

Okefenokee Recreation, Inc., operating the guide's concession at Jones Island on the west side of the refuge succeeded in completing three overnight cabins and the dormitory building. A new manager was appointed and good progress was made in cleaning up the boat landing site and enlarging the boat basin. Parking areas were cleared of brush and earth was hauled in for fills along the roadway near the boat basin. The new manager showed an interest in the condition of the concession boats in having same repaired and painting. A temporary water pump was installed at the landing to provide facilities for washing out boats. Near the close of the period the organization and the new manager submitted for approval a sub-contract for operation of the concession under Contract No. I-6-fw-11066.

Some progress was made by the Okefenckee Association, Inc. in cleaning the boat trail from the Swamp Park to the northern boundary of the refuge. The organization purchased ten more aluminum boats and three new outboard motors.

V. FIELD INVESTIGATION OR APPLIED RESEARCH.

A. Prescribed burning began on February 7th on Chesser Island and areas adjacent to the Cornelia headquarters under Project 9 funds for control of brown spot and the southern pine beetle. This work continued on Loyd's Island on the east side and then equipment was moved to The Pocket on the west side of the refuge. Burning continued there under Project 11 funds. This burning was considered essential as a safety measure to the splendid reproduction of slash and long-leaf pine in that area. Approximately 64 miles of fire lines were plowed on the east side and about 80 miles on the west side. About 1500 acres were control burned and 50 acres treated for the southern pine beetle.

All burning was accomplished at night and excellent results were obtained.

VI. PUBLIC RELATIONS.

A. Recreational Uses.

Approximately 7,500 people visited the refuge during the period for fishing and sightseeing. Most of this number were sport fishermen although more and more camera fans are coming to the area. Registration records indicate only 7 persons used the Cornelia entrance to the refuge in January. In February the total number was 155. Then in March the total month's attendance was 825. Finally in April when fishing got better the monthly attendance went to 1,1725. Attendance figures on the west side were approximately the same indicating the general upward trend as fishing became better.

A total of 873 Boy Scouts from numerous councils in Georgia camped on Billy's Island during the period. The area is rapidly becoming very popular for Scout expeditions.

B. Refuge Visitors.

Messrs. H. A. Miller and R. E. Griffith arrived for conference on forest insect control and inspection of Cornelia area, Chesser Island and south end on February 2nd. They departed the evening of February 3rd.

On February 6th, Mr. Rush Gabrielson and party of 9 arrived and were escorted on inspection of east side of refuge by Manager Edwards, Under Manager Eadie and Maintenance Man Gay. They were escorted on an inspection of the west side on February 7th by Manager Edwards, and Patrolmen Hall and Cone.

On February 23rd, Dr. and Mrs. Alfred Levy, Dr. and Mrs. Nice (Margaret Nice - noted ornithologist) and Mr. Fred Hebard were escorted by Manager Edwards and Under Manager Eadie on an inspection tour on the east side of the refuge.

On February 27th, Mr. Door Green, Predator and Rodent Control, and Mrs. Green were escerted on inspection of the west side of the refuge by Patrolman Hall and Cone and were given a fish dinner and hush puppies on Billy's Island.

Mr. H. A. Miller arrived by plane at 3:50 P.M. on February 27th from Atlanta and was picked up by Manager Edwards. They spent the night in Jacksonville, Fla. and on February 28th contacted Mr. Paul Siggers and inspected Forest Insect Control work on east side of tefuge. On February 29th Messrs. Miller and Edwards inspected trucks in areas adjacent to Waycross used in hauling fire-fighting equipment. Mr. Miller departed on February 29th at 3:30 P.M. by plane for Atlanta.

On February 28th Mr. Paul V. Siggers, Pathologist, U. S. Department of Agriculture, arrived 9:30 A.M. at Jacksonville, Florida. He was picked up by Messrs, Edwards and Miller and was taken to the east side of the refuge for inspection of forest insect control work. He spent the night in Waycross and departed on the morning of March 1st.

On March 6th, Mrs. K. G. Skelton, writer, and Mrs. P. S. Barker and Mr. Richard A. Herbert, Ornithologists, were escorted on the east side of the refuge by under Manager Eadie. On March 8th, Manager Edwards escorted them to Jones Island and they were taken up to Big Water and on Billy's Island by Patrolmen Hall and Cone.

On March 17th and 18th Mr. Bruce Green of the F.B.I. visited Cornelia headquarters for conference on enforcement and firearms training.

On March 18th, Mr. and Mrs. Anthony F. Merrill visited the west side of the refuge. They were excorted to Big Water by Patrolman Cone.

On March 22nd, Mr. Robert V. Wade, Forester, from Piedmont Refuge arrived for preparation of timber type map. He departed on March 23rd.

On April 16th, Mr. Roy Moore of the Regional Office visited the refuge and was escorted into the south end of Grand Prairie by Manager Edwards.

On April 23rd, Refuge Supervisor Miller arrived at the refuge and spent the 24th with Manager Edwards inspecting the work progress on the Floyd's Island lodge and the 25th inspecting the concession site at Jones Island.

Mr. Walker T. Harrod, U. S. Game Management Agent, and Refuge Manager Ambrosen from the Piedmont Refuge, arrived at Okefenokee on April 28th. They were escorted on the east side of the refuge on the 29th and 30th by Manager Edwards and under Manager Eadie.

On April 28th Mr. Ira N. Gabrielson visited the east side of the refuge at Camp Cornelia.

C. Refuge Participtation.

None for period.

D. Hunting.

Quail and turkey hunting was excellent on areas adjacent to the east side of the refuge. Quail hunting was fair on areas adjacent to the west side. Deer hunting was excellent on the west side and poor on the east side. Hunters are of the opinion that numerour timber operations on areas adjacent to the eastern refuge boundary have scared the deer from available hunting areas.

E. Fishing.

Sport fishing for bass and eastern pickerel was fair during January and poor in February. However, bass and jack struck good during March and continued good throughout April. Shiner perch bit good in February and the early part of March. War-mouth perch started biting about the middle of March and afforded excellent fishing from then on.

F. Violations.

Otis A. Odom was apprehended trespassing on the Boone Lakes area by Patrolmen Hall and Cone on February 25th.

Richard F. Roberts apprehended by Patrolmen Hall and Cone on February 25th trespassing on the Boone Lakes area and fishing without license and was fined \$25.00 in Ware County Court.

S. M. Mixon was apprehended on April 10, fishing without license on the Suwannee Canal by Patrolman Jernigan.

Herman C. Todd was apprehended on April 12th driving a car 60 miles per hour on the Cornelia entrance road in a 25 miles per hour zone by under Manager Eadie.

Benjamin H. Lee, Vernon F. Lee and Ralph Davis, all of Folkston, Georgia, were apprehended on April 19th killing alligators on the refuge in Chase Prairie by Maintenance Man Gay and Manager Edwards. 6 alligators, 3 rifles, 3 headlights, 2 boats, an alligator hook and a hatchet were seized from the violators. The apprehension was effected through the use of 2-way FM portable radios and the squad method of patrol.

On April 29th, Leonard White of Manor, Georgia, R. L. Jansen of Macon, Georgia, G. L. Osborn of Cedartown, Georgia, A. H. Hilliard of Atlanta, Georgia, Homer Patton of Douglas, Georgia, E. L. Lett and W. A. Lott of Enigma, Georgia, and Lucius E. Posley of Tifton, Georgia were apprehended on Billy's Lake fishing without State license, by Patrolmen Cone and Hall.

G. Enforcement

Since Florida closed the season the year round on alligator hunting and the Georgia season remains closed, black market prices on alligator hides are reported to be \$3.75 per foot. Alligators are a definite asset to Okefenokee in keeping the prairies and boat runs free of vegetation and congestion. In an effort to protect the population that has built up during the past several years, refuge personnel went all out on patrol during the latter part of the period.

VII. OTHER ITEMS.

Clifford C. Cone entered on duty as a refuge patrolman with headquarters at Fargo, Georgia on January 1, 1950. Cone was appointed to fill the vacancy left by former Under Manager Coleman.

Manager Edwards attended the Refuge Managers Conference at Mattamuskeet Refuge during the middle of February and visited Piedmont Refuge and Carolina Sandhills Refuge enroute.

On April 2nd, a J-3 Piper plane, piloted by Douglas Stewart, of Jacksonville, Florida crashed in the refuge approximately one mile southwest of the southern tip of Floyd's Island. No one had any knowledge of the plane crashing in the swamp until August 9th when Stewart wandered into some scouts camping on Billy's Island. Stewart was given first aid by Patrolmen Hall and Cone at Jones Island, then moved to the hospital in Homerville. Stewart had lost about 46 pounds in weight during his period of wandering around on the refuge and his feet and legs were swollen and blistered.

The plane was located by C.A.P. planes on April 11th. Patrolman Jernigan and a C.A.P. pilot found the plane after several hours in the air.

Patrolman Hall guided a party of C.A.A. officials and insurance adjusters to the plane by boat and on foot on April 13th. Hall advised the plane had burned but the motor was not harmed in any way. At the close of the period action was being taken to salvage the motor from the plane.

Photographs.

(See Attached Sheets for Photographs)

Respectfully submitted,

Wm. R. Edwards
Acting Refuge Manager

May 11, 1950





Two prints of alligator hunters camp discovered in a remote area of Chase Prairie near "Round Top". Hunters using this camp were apprehended by refuge personnel on April 19th.

Photos courtesy of Mr. Eadie. 4/22/50

(1)	OL PRO	2)	(3)	1	14	1)		(5)	(6)
Species		grants Seen					Young	g_Produced	Total
			1 0411 001100	7110101011	Lab o Mig.	lan de boom	Broods	Estimated	Estimated
Common Name	_Number	Date	Number	Date	Number	Date	Seen	Total	for Period
	sentat.	ve_bregdin	Fareca, B	riggo boor	s should b	B BSGB GJ	MO OL W	pre-areas ag	fregering
1. Swans:		red number	a Agnus bi			7 5 49 1 5	nd actina	r counts on	Lebra-
Whistling swan				Section Section		to the standard			
						•			1
2. Geese:	The la	st refuge r	scord for t	te species		season c	oncerned	in the repo	ridug .
Canada goose									
Cackling goose									
Brant	- The gr	satest numb	ar of the a	pecies pre		Limited in	COLVAL O	f time.	
Snow goose									
Di			imber seen.					at species.	
Blue goose	The fi	rat refuge	record for	the specie		18 Season	concerns	d in the rep	DETING
3. Ducks:	2-1-07	an amana ah		CHT SHO MS		TTT TOUTON			
Mallard	report	present	1800	2/25	STILL	present	None	ttention sho	2000
Black Duck	In add	A STATE OF THE PARTY OF THE PAR	2000	2/25	10	benzes one	DIETUE O	n refuge dur	1500
Gadwall	4	3/8			4	5/8			
Baldpate				MOTEGNETAN	9		1. 18		
Pintail		present	500	2/18	7	5/20			750
Green-winged teal	4	•	200	2/18 2/25	2	3/8			200
Blue-winged teal			750	2/25	et111	pros exit		THE THE PARTY OF T	1000
Cinnamon teal								4	
Shoveller				n for					
Wood duck		· ·	2000	2/25					2500
Redhead			3800	S ASSETT	cipal nest	ing areas	this set		
Ring-necked duck Canvas-back		***	1500	2/25	-			1 10°	2600
Scaup			300	2/1	2	3/2			FF
Golden-eye					Series .				
Buffle-head				Area	s used by	concentra:	Lone	September 6 and	In here
Ruddy duck					waterfowl	numbera			
Mergarsers			180	5/1 Peal	5	5/2			250
	-	_			Materior		ILTUE be		
Geese Mess		NO.	" ,	Tota	- moreofor				
4. Coot: Lognerrow:			500	2/25	still	present			750 Form NR-1
3-1750		En Total		SUMMAKIE	3		4		
(June 1949)				(over)					

Total Production:		DATE ROTTE DEFENDED LOUW NE-T
GeeseMone		Total waterfowl usage during period
Ducks	200	Peak waterfowl numbers
Coots		Areas used by concentrations
Салуая-раси Беалр		3/2 3 3/2 a 3000 V
Rednead 1 ing-hecked duck	2005	Principal nesting areas this season
Nood duok		8/300 to 40 50000
		Reported by Rotus Rossonel
national and a second		INSTRUCTIONS
(1) Species:	reporting period should be	isted on form, other species occurring on refuge during the added in appropriate spaces. Special attention should be local and National significance.
(2) First Seen:		the species during the season concerned in the reporting n. This column does not apply to resident species.
(3) Peak Concentration:	The greatest number of the	species present in a limited interval of time.
(4) Last Seen:	The last refuge record for period.	the species during the season concerned in the reporting
(5) Young Produced:	sentative breeding areas.	broduced based on observations and actual counts on repre- Brood counts should be made on two or more areas aggregating Estimates having no basis in fact should be omitted.
(6) Total:		the species using the refuge <u>during the period</u> . This figure that used for peak concentrations, depending upon the nature

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since with section and section of the form.

Refuge Okefonekee

MIGRATORY BIRDS

(other than waterfowl)

Months of January to April

legosald bus payod III

(1) Species	(; First	Seen	Peak Nu	3) umbers		4) Seen		(5) Productio	n	(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. Water and Marsh Birds:									wk. owl _{eyn}	Duok b
Pied-billed grebe Cormorant Anhinga-anhinga Ward's heron Little blue heron Green heron Yellow night heron American egret Snowy Egret Wood Ibis White Ibis	2 5	Present 4/18 2/14 Present	100 100 300 500 300 400 150 1500	1/1 4/15 4/15 4/15 4/15 4/15 4/15 4/15	Still 2 Still	A/18 Present			ofg be becalled deal bel-	100 150 300 500 300 400 200 2000
Plorida Grano Plorida Gallinulo American Bittern	piring is	11	450 200 150	4/15 4/15 4/15 4/15 4/15	I STRUCT	i i i i i i i i i i i i i i i i i i i	the corre	seU	peciege	450 200 150
I. <u>Shorebirds, Gulls and</u> <u>Terns</u> :	toltinha bolteq an esissies	eto, '''tu Linoger e to those	"torn" during th be given	seagull" refüge a abould	na smret no gatriuo linella l	general pecies oc Specie	to Avoid , other s te spaces	1		
Wilson's smipe Woodcook Selitary sandpiper Greater yellowlegs Killdeer	2 (8 119 1 78 1 1 8 8	2/19 3/8 2/19	300 200 50 50 50	4/15 4/15 4/15 4/30 4/30	SZGE WIL SCHOOL WILL SVOOL WILL SVOOL WILL SVOOL WILL WILL WILL WILL WILL WILL WILL WIL	.aquo	eenecili			300 200 50 50 300
Black tern Herring Gull	to Invie	Present	25 26	4/15 4/30	the Epect	robel mar	first ref	The	lrst Seen	50 50
	.berned.	о ловрев	uring, illd	peoles d			nter desi		ineek vas	$\mathbb{L}_{j,j}(\{\Phi\})$
	Intriba bi	C EADIIN	reade no	bezed be		Today	the bates	Esti	noitotton	9 (3)
		122 93419	Ama Sira	(over)		1.000.000	1 20 100 100		2 2000	1367

(1)	(2	2)	(3	5)		1)		(5)	addition of the last of the la	(6)
II. <u>Doves and Pigeons</u> : Mourning dove White-winged dove	- Litroph	Present	500	3/1	8t111	Present	ooziate)	P. 0;	u'leA	500
(6) (6)	44	1 1	(A)	100	(3) Paak Nust	nen l	(2) First S		(I)	2
IV. <u>Predaceous Birds</u> : Golden eagle	Number T	Date 10	Tedwal	e tag	Tedes	Pate Pate	Techni		emsV not	TO TOTAL
Duck hawk Horned owl Magpie			AT AGE	403	2 - O			abil	datall by	10/23/0.1
Raven Crow southern		п	250	4/30	* 05				agaidas	250
Omproy Baid Eagle Barred Owl		***	150 50 500	4/30 4/30 4/30	***		3 2 3	** 4	erne diff basap top tyle dese	150 50 500 600
Red-Shouldered Hawk Red-Tailed Hawk Marsh Hawk			100 50	4/30 4/30 4/30	n		8		S and per	100
		1 1 1 1 1 1 1		III III III	THE STREET	Reporte	d 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 Gruiiformes)

II. Shorebirds, Gulls and Terns (Charadriiformes)

III. <u>Doves and Pigeons</u> (Columbiformes)

IV. <u>Predaceous Birds</u> (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.

Okefenekee Refuge_

Months of January to April , 198 50

				A Department	.91	HER ROMMOS	מפ מסדדפט פון	(1) SPECIES: Use correct				
(1) Species	(2) Density	in rem	(3) Young Produced	(4) Sex Ratio	ec d R	(5) Removals	(6) Total	(7) Remarks	(2)			
Cover types, total per acreage of habitat Bird			Number broods obs'v'd. Estimated	Fercentag	nting	For Restocking	Estimated number using Refuge	Pertinent informa specifically req List introduction	uested.			
Lautos	50,000 acres pine woods, fields and islands	16.6	on like to the set of	ossible. Fig	to a		lluona Y could	3,000	in april 1000			
Eastern turkey	Romarks.	83.6	2 16	50 11	0	0 0		e danondodar cingo.	(8)			
no s	, etc. Include dat	eżnece	rkdy, ph	y to wild tur	Litemit Ida	upplies produced to the seal of the seal o	his column street	SEE RATIO:	(A)			
	ne report period.	uring t	b bevome	h category re	in eac	redain L	ndicate tou	HIMOVALS	(5)			
	rt period. This ma							*LATOT	(9)			
osli				rmine populat rmation not				REMARKS:				
	The same state of the same sta			hould be used	s bere	voo belie	ple to the	nly columns applic				
erpr												

Form NR-2 - UPLAND GAME BIRDS.*

(1) SPECIES: Use correct common name.

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_

April 30, 194

(1) Species	(2) Density	nia beqi	Stra	Remo	3) vals	.ens	none	Di	sposi	(4) tion	of Fur	188	nove	8	(5)
di Horth	in the Theld Book ut	te found	bers.	i das Vacid	ours And	ri ees	uan no od "mi	Share 7	rappi	ng	ped		ted .	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator	For Restocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Dest	tion
Raccoon Declar	200,000 acres upland and swamp	8	0	0	0	0	0	•	0	0	0	0	C		25,000
	75,000 acres, uplands, islands and	160	0	0	0	0	0	0	0	0	0	0	C		500
Opessum	baye	150	0	0	0	0	0	0	0	0	0	0	Q		500
Grey squirrel	al entitle agriculture la	15	0	0	0	0	0	toto tes	0	0	0	0	O		5000
Fox squirrel	where possible, if	75	0	0	0	0	0	bisods	0	0	0	0	0		1000
Weasol ed Sarons	asets to sees elons	750	0	0	0	0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0	0	0	0		300
Rabbit	E fixed ents become	37.	5 0	0	0	0	0	0	0	0	0	O ALS	TONS	見	2000
Grey fox	il gnibial rabbs ani	500	0	0	0	0	0	200 an	0	0	0	0	0		250
Boboat	bna , engla la tougan.	250	0	0	B B S F	0	000	0 -33	0 00	0	100	0	SPC		500
Otter Mink	200,00 acres marsh and swamp	66. 150	0	0	0	0	0	0	0	0	0	0			500
		provide	rmuti	00 8	t at	envods	ed b	Luona. se.	rgenc				77		

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

REMARKS:

1615

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. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good reference, is now out of print, although a revision is scheduled for publication in the near future.)

(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, 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. Also show any removals not falling under heading 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 and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness 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

(1)	(2)	(3)	(4)	majory no	as Section		(6)	(7)			
VARIETY	ON HAND BEGINNING OF PERIOD	RECEIVED DURING PERIOD	TOTAL	TRANS- FERRED	GRAIN DI	FED	TOTAL	ON HAND END OF PERIOD	SEED	ROPOSED US FEED	SE SURP
Cob Corn	25	0	23	0	0	n	11	12		18	7 .
		1,1000	olumn 5.						-105		
	d) V soa	n of got	ans 2 and	2				15	C. C.		
Marten Curtoy	2) gabon		TAGRS LIGI				ORLOGO S	top an 144	egiter, abi	ILO-	100
on sectional	1) List domas	ro Elejo wop pibo	at Crain	sec sys	r corn		prose all	let sto R-9	Tooynee .	PIA .	
	ornir all orn (ear) sags-60		Dushels II be com Whent 6 >1-50 lb	licared Las Comp	igalvalan larloy—5 ias—60 li		raport, the tahel: Co lye-55 lb.	m (shelle	ombritus 0 1Pa 1) — 92 1P oscioz ra	ol	- 40
	his repor	pyra new	ner sti	ing Clayro ou	hand To		t grabosa	og gara	g the pe	104	
(8)	Indicate sl	nipping or	collecti	on point	Follos	ton, Geo	rgia			4	
(9)	Grain is s	tored at	Camp Corn	nelia Hea	dquarters	, Folkst	on, Georgia	1	A A		
(10)	Remarks										

NR-8a 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 lbs., Corn (ear)—70 lbs., Wheat—60 lbs., Barley—50 lbs., Rye—55 lbs., Oats—30 lbs., Soy Beans—60 lbs., Millet—50 lbs., Cowpeas—60 lbs., and Mixed—50 lbs. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

- (1) List each type of grain separately: Corn, wheat, proso millet, etc. 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 breakdown by varieties of grain listed in Column 6.
- (8) Nearest railroad station for shipping and receiving.
- (9) Where stored on refuge: "Headquarters grainary", etc.
- (10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.