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	MARATIVE REPORT		
REFOGE: BURFORL	LAKE		
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Burford Lake Wildlife Management Area Narrative Report September, October, November, December, 1950

I. GENERAL

A. Weather Conditions. The record from the Dulce, New Mexico (Jicarilla Apache Indian Reservation) station of the U.S. Weather Bureau is as follows:

Year 1950	Snowfall	Precipitation	Max. Temp.	Min.Temp.
Sept.		1.17	92°F	29°F
Oct.		.0	85°F	24°F
Nov.	1.	.76	66°F	-5°F
Dec.	3.5	.52	55°F	-50F
Total	4.5	2.45 extre	me92°F	-5°F

The precipitation figures for November and December include the 1 inch and 3.5 inches of snowfall figures. The average rainfall for this period is 5.47 inches, distributed as follows: 1.56 September, 1.39 October, 1.20 November, and 1.32 December. In the table above, the precipitation for the period is only 2.45 inches or 57% below normal. The total precipitation received during the past 12 months has amounted to 8.64 inches, while the average yearly precipitation is 18.22 inches. The records at the Dulce weather station show this past year to be the driest period in this area for the past 44 years. There has been but 5 meager snowfalls on the refuge during the past four months. This snow in each case being but a few inches deep (4 snowfalls, 1 inch deep; 1 snowfall 2 inches deep). The snow in each instance lasting but from two to five days. The last storm was on December 30 which precipitated approximately 2 inches of snow and with south slopes becoming bare on the second day. From reports received, there should normally be from 5 to 7 inches of snow on the ground at the present time.

B. Water Conditions. As the precipitation table and the information given above would indicate, the water level in the lakes are far below normal. Using the normal lake level where the water line was noted on a rock bluff and where the water line of Burford Lake was when the refuge boundry fence was constructed, we estimate that this larger lake of the refuge is 30 inches below the normal water line. Hidden or Hayden lake has approximately l acre of water area remaining. When the refuge fence was constructed around this lake, it was estimated to have an area of 10 acres. Both lakes are completely frozen over at this writing and have been since December 8th.

C. Fires. No fires to report.

II. WILDLIFE

A. Migratery Birds.

1. Population and Behavior.

a. Waterfowl, other Waterbirds and Shorebirds. In studying our observation figures, we note with interest the fluctuation in numbers of the species as each specie reacts to the migrational urge.

Using our limited figures, we find that during latter September the flight was composed of Gadwalls (37%) and Baldpates (25%), constituting the greater part of the birds with Pintails (12%) third in number at that time. Other percentages were Ruddy ducks (6%), Mallards (5%), and Redheads less than 1%.

By mid-October, the first three species had declined in number with a marked increase in Redheads, Mallards, Ruddy ducks, and Green-winged teal. The greatest percentage of birds were still Gadwalls but the figures had changed to Gadwall (20%), Redheads (17%), Baldpates (13%), Pintails (12%), Mallards (12%), Ruddy ducks (10%), Greenwinged Teal (8%), and Canvasbacks (3%). This October period found the Mallards and Green-winged Teal at their greatest number. The first Buffle-heads were noted when 50 were seen on Burford Lake. None of these birds had been seen during September. Three American Merganzers were noted on October 19.

We find that by mid-November that Gadwalls and Baldpates had further declined with no Pintails noted. There was also a drop in the number of Shovellers and Ruddy ducks.

Mallards and Redheads had dropped slightly in numbers while there was a sharp increase in the Canvasback population.

The percentages were now in this order; Canvasbacks (28%), Mallards (20%), Redheads (16%), Gadwalls (12%), Baldpates (9%), Ruddy ducks (6%), and Green-winged Teal (4%).

However, at this time, there were approximately 50% fewer birds on the area than during the mid-September and October periods. In checking our observations, we find the majority of ducks passed through this refuge from the mid-September to mid-October.

Coots were at their greatest numbers on September 19th and Ring-billed Gulls on October 19th.

2. Food and Cover.

There was an abundance of food. We have noticed extensive growths of Potamogeton pectinatus throughout most of Burford Lake.

3. Botulism. No dead or sick ducks were noted on the entire refuge.

- B. <u>Upland Game Birds</u>. Although no upland game birds were noted directly on the refuge, 15 sage hens were seen in the area adjacent to the refuge.
- C. Big Game Animals.
 - 1. Population and Behavior, Mule Deer. Tracks of Mule Deer have been continually noted along the eastern side and northern end of Burford Lake. In addition, sign of Mule deer have been noted occassionally at Hidden Lake. A doe with two fawns was seen at dark on the eastern or outlet end of Burford Lake on October 14th.
- D. Fur Animals, Predators, Rodents, and Other Mammals.

 1. Fur Animals. During September four badgers and four skunks were trapped inside the boundry fence at Hidden Lake. The badgers were released. It was observed that badgers have been doing rather extensive digging along the eastern shore of Hidden Lake in opening muskrat tunnels.
 - 2. Predator Notes. Since the nesting season, no observations of predatory animals killing waterfowl have been noted. During latter November a supply of 56 steel traps were secured through the cooperation of the New Mexico division of the Predator and Rodent Control of the Fish and Wildlife Service, for use in controlling predators on the refuge and on the Jicarilla Apache Indian Reservation.
- E. Predaceous Birds. --Golden Eagle. Two golden eagles were seen on the refuge on September 14, and four were noted on the eastern or outlet end of the refuge on December 2nd. On this latter date although there were approximately 300 ducks confined to a small open lead of water near-by, the eagles did not attempt to disturb the birds, but were later observed flying low over a snow covered sage brush knole apparently hunting rabbits.

III. REFUGE DEVELOPMENT MAINTENANCE.

A. Physical Development. During the month of September, it was necessary to extend all water gaps farther into the lakes.

The refuge headquarters cabin was completely chinked with adobie.

A pumphouse to shelter the waterpressure system and light plant generator was constructed and the roof covered with galvanized roofing.

Poles were cut, hauled, pealed, and a pole line errected from the barn to the cabin, extending to the pumphouse. Electric lights were installed in the headquarters cabin and in the barn.

The yard at the cabin was bull-dozed level through the cooperation of the Continental Oil Company.

A butane stove and refrigerator were installed in the headquarters cabin.

Physical Development-continued.

A new Jeep four wheel drive pickup was secured from Salt Lake City, Utah, trailer hitch installed, and horse and horse trailer hauled from the San Andres National Wildlife Refuge, Las Cruces, New Mexico, to this refuge.

The second floor of the barn-storage building was braced and repaired and one manger removed to provide additional storage

space for refuge equipment and supplies.

The necessary 16 foot poles to construct a gate at the entrance to the headquarters area were secured, pealed and a "framed" gate entrance constructed. The gate was reinforced, hung 18 inches above the ground to allow for partial clearance of snow and a cable brace attached for support to the gate.

A trip was made to Pagosa Springs, Colorado, to secure refuge supplies which included the galvanized roofing and the door for the cabin, and part of the materials needed in completion of the water system.

Two new tires were received and mounted on Ford, License number I-18022.

B. Plantings.

- 1. Aquatics and March Plants. No plantings to report for the period.
- 2. Trees and Shrubs. Two Blue spruce and two Douglas firs were planted on the grounds of the headquarters cabin.
- 3. Upland Herbaceous Plants. No plantings to report for the period.
- 4. Cultivated Crops. No cultivated crops to report for the period.
- C. Collections.
 - 1. Seed or Other Propagules. Nothing to report for the period.
 - 2. Specimens. No specimens were taken during this period.
- D. Receipt of Seed and Nursery Stock. There was no seed or nursery stock received at this station during this NR period.

IV. ECONOMIC USE OF REFUGE

- A. Grazing. None.
- B. Haying. No haying during this period.
- C. Fur Harvest. No furs were taken during the period.
- D. Timber Removal. No timber on the refuge.

VI. PUBLIC RELATIONS

- A. Recreational Use. Due to the more convenient picnicing and boating areas we know of no one using the refuge for this purpose. A few fishermen have tried "their luck" in Burford Lake but with more local interest centered on trout fishing, the planted bass and bluegills in Burford Lake received very little attention. We would estimate that no more than half a dozen fishermen tried this lake during the period.
- B. Refuge Visitors. The more important refuge visitors are listed below:

Date	Name	Business
9/1	Geo. E. Barclay, Reg.Ref.Sup.	Passing through
9/5	Homer Bixler, U.S.I.F.S.	Checking or forest fire
9/16	Francis V. Olson, Reg.Sup.Eng.Org. Geo. E. Barclay	Delivered equipment
9/27	Arthur Lusher, U.S.I.F.S.	Repairs to well on west end of horse pasture
9/29	Geo. E. Barclay	Inspection trip
10/18	Arthur Lusher	Plans for checking duck hunters
10/24	Wm. Farris	Information
10/24	Kenneth Long, U.S.I.S.	Passing through
	Arthur Lusher	Posting Area
11/10	E. C. Cates, Reg.Sup.Pred.& Rod.	Passing through
	Geo. E. Barclay	11 11
11/12	G. Hobgood, Reserv.Supt., U.S.I.S.	n n
	Arthur Lusher	и и
12/13	Arthur Lusher	Left jeep at O.S.

C. Refuge Participation. During the period the writer made a trip to Fort Worth, Texas, with a Jicarilla Apache Indian Agency truck to secure a load of grain, arrangements for which had been made by the Fish and Wildlife Service, to feed wild turkeys on the Reservation as there is no mast for these birds on the Reservation this year. A ton and a half of this feed is stored at the refuge headquarters which will be fed to the turkeys in connection with the predator control work.

A special waterfowl hunting permit is required by duck hunters on the lakes of the Jicarilla Reservation and the refuge manager cooperated with the Indian Agency by checking for these permits when contacting duck hunters.

- D. Hunting. No public shooting areas on refuge.
- E. <u>Fishing</u>. Due to the amount of trout fishing streams and lakes in the surrounding area, little attention is given to bass and bluegill fishing, therefore, little or no fishing pressure is experienced on this area at this time. The season on the lakes of the refuge extends through the month of September.

To our knowledge none of the bass or bluegills planted in Burford Lake early in July 1949 have as yet been caught.

F. Violations. On October 19th, during the first half of the split duck season, the writer made a close check on the outlet end of Burford Lake and picked up 21 empty shot gun shells despite the fact that all approaches to this area were well posted and signed. Two additional posters were placed in this area. No further signs of violations were found.

VII. OTHER ITEMS

A. Items of Interest. A large Mallard drake with leg band number 507-71174 was shot by Kenneth Long of the Jicarilla Apache Indian Agency at lower Thompson Lake just east of the lower end of Burford Lake on October 21, 1950. Mr. Long sent in this band for the data on where his duck had been banded, and received the information that his Mallard was banded on the Conjos River, La Jara, Colorado, on March 2, 1950, by the Colorado Department of Game and Fish.

The first fish caught from the rainbow trout, bass and bluegill planting on the Reservation in the early summer of 1949 occured on October 22 of this period, when three rainbow trout were taken by the refuge manager. The total weight of these trout were 10 1/4 pounds. Until this time, none of the planted fish had been caught to the knowledge of the Indian Agency. These people were very much interested in the matter as it was hoped that considerable fishing interest could be developed to expand the sale of the \$3.00 fishing permits for the special Fish and Game fund. Previous to the taking of these trout, considerable theories had existed as to what had happened to the planted fish as a number of unsuccessful attempts had been made to catch them. It was thought that the fish must have perished as several of the lakes had been presumably carefully checked, one of which was La Jarra Lake where the three trout were later taken. As soon as these three rainbows were landed the writer proceeded to Dulce to notify the Indian Agency officials. A rapid trip was made to this lake in the afternoon by several interested parties and six more trout were taken. The total weight of the nine trout taken that day was 31 3/4 pounds. Despite the fact that only nine more days of fishing trout remained a number of the \$3.00 fishing permits were sold by the Agency. A total of 37 trout were taken during the remainder of the season, the smallest of which recorded was a 2 1/2 pounder, the largest a 5 1/2 pounder.

A scale check was made on these rainbows and we have been informed that they are the fish planted in the lake only 18 months previous.

Considerable good will was attached the Fish and Wildlife Service in the area for having established the fact that the rainbow trout were still in this lake.

One bald eagle was seen on the eastern end of Burford Lake on October 19th and again on December 2nd.

Prepared by:

January 8, 1951

Willard E. Blanchard,
Refuge Manager, GS-5.

Approved by:

George E. Barclay, Regional Refuge Supervisor.



Filling chinks in the O.S. cabin with adobie.9/13/50 Taken by Mrs. W.E.B.



Yard being leveled by the Continental Oil Company bulldozer on 11/30/50 Taken by W.E.B.



Extending a water gap the second time due to receding water. Burford Lake 9/21/50 Picture taken by Mrs. W.E.B.



The central part of Burford Lake freezing over. Taken 12/2/50 by Mrs.WEB.

WATERFOWL

Refuge Dulce, New Mexico Months of September

to December

194 50

	(1) Species	(2 First		(3) Peak Conce	ntration	(4) Last Se	en -	Young Pr	oduced	(6) Total
(6)	Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period
I.	Swans: Whistling swan	stimated rentative t	retding a breeding	young produc renc. Erocc mebitate, Es	counte th	o observad build be me puld be me puld be me	tons and ac te on two c	ousl count should b	s on repre- tes aggregat comitted.	
II.	Geese: Canada goose	eriod.								
	Cackling goose	he Last re	Lugo Pool	thy you, one t	beares qua	ing the ne	reoff concer	ned in th	reporting	
(3)	White-fronted goose Snow goose Blue goose	he greates	g numpes.	of the speci	es present	in a limi	red Interve	I of bime		
III.	Ducks:	de first ;		or seen. The	de column	goes Dog s	eason conce	ident ape	rear about 700	
TT.	Mallard	60	9/12	175	10/19	120	12/2			500
	Black duck Gadwall	585	eright sho	600	9/19	90	11/2	I attenti		1500
(1)	Baldpate Pintail Green-winged teal	450 170 30	п п	450 200 120	9/12 9/19	70 175 35	10/19	E on refu	to during th	1000 500 300
	Blue-winged teal Cinnamon teal	1	11	1	9/12	1	9/12	a. Blanchi	ed, ms. 05-54	10
	Shoveller Wood duck	21	"	50	10/19	25	11/2			150
	Redhead Ring-necked duck Canvas-back Scaup	25 10 60	9/19 9/12	250 10 220	9/19	114 10 165	9/19 12/2	govánu		600 25 600
	Golden-eye Buffle-head	50	10/19	50	10/19	50	10/19	nd the For	to of Pariors to and of the Lake (up.)	100 /
	Ruddy duck	95	9/12	150		40	11/2			400
IV.	Coots	190	11	700	9/19	200	103.8	2006		1500

3-1750 (July 1946)

(over)

Form NR-1

SUMMARTES

Tota	1 Production:	The same								
TA"	leese oucks	780				aterfowl usage terfowl number	- 4	period_		1200
C	Soots A quor Survive-posiq Golgon-ole	90 95	10/19		the Nar	sed by concer rows, and Redh ere always a	lead Bay,	and the No	orth end of	this la
nde.	Redhead Hing-necked duck Canvara-teck Scaup	90 70 92	# 9/12 9/12	200 Se	birds). Princip	al nesting a	reas this	season		600 600
	Bine-winged beni Ginnapon beni Showellar Wood duck	7	# #		10/19	Reported	Marie Committee of the	E. Blanch	nard, RM. GS-	-5.
-	Chrom-winged toal	30	14	INSTRU	CTIONS	- 35	18/5	1		200
(1)	Species: First Seen:	reporting given to the first	period sho those speci refuge rec	uld be added es of local ord for the	d in appro and Natio	other species priate spaces nal significa uring the sea does not ap	s. Speci ance. ason conc	al attent	ion should the reporting	be Table
(3)	Peak Concentra-					t in a limit				
	tions									
(4)	Last Seen:	The last period.	refug e pecè	ed for the	species du	ring the seas	son conce	rned in t	he reporting	g
(5)	Young Produced:	sentative	breeding a	reas. Brood	d counts s	on observation hould be made aving no bas:	e on two	or more a	reas aggrega	ating
(6)	Total:	may or may		re than that		ng the refuge peak concen-				

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

MIGRATORY BIRDS

Burford bake Wildlife Burford ake Wildlife (other than waterfowl)
Refuge Management Area, Dulce, New Mexico Months of September

to December

19**4** 50

(1) Species	First	Seen	Peak N	3) umbers		4) Seen	I	(5) Production	n	(6) Total
Common Name	Number	Date_	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. Water and Marsh Birds:									Iwo	Duck h Horned Magpie Raven Crow
		20/2	1	12/2	1	6 titor	I		oL.	E Magic
T-50 .US, bracksout .	vd.	Reported					100			
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ormes and predaceous	aradelife s) E	am se a monto	90 mon	10/19	40 III	11/2			-	150
	banzoo	поо повля	e edf tol	species	d for the	roser egu	lor Joill	odT :	list Seen	(2) H
	to Invisi	nl beding	l's at in	seerq sel	the spec	lo redmun	greatest	edT :an	edmul Alas	(3) P
	oncerned.	season o	off golden	b antoequ	for the	broper eg	plet refu	edT	neeZ Jan	(4) [
	Inutos ba	s anollav	nesdo no	begad bec	nug produ	ay 10 100	mun bejan	Esti	roduction	(5) P
.benracinco boils	tne the n	hit o Jo	ing the r	(over)	e edi to	To. do In	nated tot	Esti	:Late	T. (8)

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	(1)	(2)		(3)	(4	1)		(5)		(6)
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	White-winged dove										
y	(2)			(5)		123		(2)		(11)	
-	197			357		The Dane				-	0
	Total Total	923		Last		Ponk Non	ne-	Birst S		mercae	2
/IV.	Predaceous Birds:	dumber To									
71	Golden eagle	2 0000	9/14	4 dmul	12/2	4 days	12/2	Today		email non	10
		-	-								
	Duck hawk										
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	Magpie '						1				THE RESERVE OF THE PERSON NAMED IN
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699	Bald Eagle	1	10/19	1	12/2	1	12/2				2
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**											
							Reporte	d by			
No. of Particular				-	-			d by Willa	rd E. Bla	nchard, RM	GS-5
				TAICMDI	OMTONG						

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 (Gavilformes to Ciconiiformes and Gruilformes)

II. Shorebirds, Gulls and Terns (Charadriiformes)

III. Doves and Pigeons (Columbiformes)

IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)

The first refuge record for the species for the season concerned. First Seen: (2)

Peak Numbers: The greatest number of the species present in a limited interval of time.

Last Seen: The last refuge record for the species during the season concerned.

Production: Estimated number of young produced based on observations and actual counts.

Estimated total number of the species using the relige during the period concerned. (6) Total:

Burford Lake Wildlife Refuge Management Area, Dulce, New Mexico Months of September to December , 194 50

					- 1		-60	med groun	COD	doorsoo and	(1) SPECTORS:
(1 Spec	ies of	(2) Density		You Produ	ng ced	(4) Sex Ratio	R	(5) emovals	rol:	(6) Total	(7) Remarks
Common	is area.	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd.	Estimated Total	Percentage	Hunting	For Restocking	Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Sage Hens	actual	ldlife Management S should be based or Survey method use	m ni b	burg l lists res su sample	iogi bols Figu	unknown bye	Stand Sherv	base o	d be	ries pest Lucis 7 - ov noitevreed mes lo est	"On & Off" basis. These birds have been noted in the areas adjacent to the refuge. The lakes of the refuge are the only available water
	ada	ions and sotual cov	beervat	o uodi	bea	produced, ba	milbs	er of y	edmu batt	n bejamija Nemerger ni	in this particular section.
4.	по в	sec. Include dat	sasanta	dq eye	dans	bliw to wild	Lamin	isva li	qqn f se	This column	(4) SEX RATIO:
		he report period.	d Burns	b beve	CIPT 1	sch category	nž.	redman	Lad	Indicate to	(5) REMOVALS:
	*seasons	rt period. This me fuge during certain	ogen ed	ring to	ub an	ng the refug as those migr	teu t	edmin l brid di	Lesc neb!	d betanited t	(6) TOTAL:
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						A THE REAL PROPERTY.	100		16		

S-SH mro's

Borford -alcs Wildliffe

Form NR-2 - UPLAND GAME BIRDS.*

- (1) SPECIES: Use correct common name.
- Applies particularly to those species considered in removal programs (public DENSITY: 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 Pertinent information not 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 Ashead Find & no 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 the areas adjacent to the observations and counts on representative sample areas. Survey method used and o, The lakes of the refuse 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 Rurford Lake Wildlife Management Area Year 1950 Dulce, New Mexico

(1) Species	(2) Density	Young Produced	1	Remo	(4) val		1	(:	5) es	Intr	(6)	(7) Estimated Total	(8) Sex Ratio
Common Name	Cover types, Total Acreage of Habitat	Number	Hunting	For Re- stocking	Sold	For	Predation	Disease	Winter	Number	Source	Refuge opulation as of Dec. 31	Percentage
Mule deer	800 acres, sage brush flats, knoles and area along shore line which is open grass flats. See Remarks.	See remarks.				none	one	none	none			See Remarks.	See Remarks.
				.*			i,	*					

REMARKS: There are approx. 800 acres of sage brush flats, knoles and open grass areas inside the refuge which deer frequent in going to and coming from the lakes for water. We have not seen a deer actually on the refuge area but have noted tracks along the eastern side and northern end of the lake. They naturally feed some what in passing no doubt but we do not feet that they would use the area are place to drop their young. We estimate a total of 25 deer using the refuge on an on and off basis.

Refuge Burford Lake Wildlife anagement Area, Dulce, N. M. Year 1950

(a) Waterfowl (b) Shorebirds (c) Other Number Hospitalized No. Recovered Recovered No outbreak of Botulism (b) Shorebirds (c) Other Number Hospitalized No outbreak of Botulism (c) Other No outbreak of Botulism (d) Shorebirds (e) Other Number lost Number lost Number lost Source of infection No outbreak Number lost Number lost Number lost Source of infection Number conditions Number lost Number lost Number lost Number lost Number lost Source of infection Number lost Number lost Food conditions Number lost Number lost Number lost None Number lost None Number lost Food conditions Number lost Number lost None Number lost None Source of infection None Number lost None Food conditions Number lost None Number lost None Source of infection None Number lost None Source of infection None Source of infection None Number lost None Source of infection None Source of infection None Number lost None Source of infection None Source of infection None Source of infection None Number lost None Source of infection None Source of in	*	Botulism	Lead Poisoning or other Disease
Losses: (a) Waterfowl Actual Count Estimated Species Actual Count Estimated Species Actual Count Estimated Species Actual Count Estimated Species Actual Count Estimated No. Recovered In	Period of outbreak N	one	Kind of disease None
Actual Count Estimated none none none none none none none no	Period of heaviest lo	sses_None	Species affected_ None
is the driest in 44 years.	(a) Waterfowl (b) Shorebirds (c) Other Number Hospitalized (a) Waterfowl (b) Shorebirds (c) Other Areas affected (locate Water conditions (average) water conditions	No. Recovered % Recovered No outbreak of Botulism """ """ """ """ """ """ "" ""	Species Actual Count Estimated none none none Number Recovered Lead Poisoning or other Disease Number lost none Source of infection no outbreak Water conditions low Food conditions yery good, considering low condition
Remarks	Condition of vegetati	on and invertebrate life satisfactory	
	Remarks		

Refuge Burford Lake Wildlife "anagement Area, Dulce," ew Mexico Year 194 50

		Sport F	ishing	Commercial	Fishing	Res	tocking	Number re-
Species	Relative Abundance	Man days Fishing	Number Taken	No. of Permits	Pounds Taken	Number Stocked	Area Stocked	moved for Restocking
Black Bass Bluegill	Unknown "See REMARKS	(10) ten (10) ten below.	Unknown Unknown	None	None "	None "	None	None "
with many distribution was an analysis								
	,							
			-1.					

REMARKS: Bass and Bluegill were planted in Burford Lake in the summer of 1949 but to our knowledge(including all persons at the Jicarilla Apache Indian Agency) none of these fish have as yet been taken. The Man days of Fishing are so low because of the trout streams and lakes in the area, therefore little attention is given to bass and bluegill fishing.

PLANTINGS (March - Aquatic = Upland)

Refuge Burford Lake Wildlife Management Area, Dulce, New Mexico Year 1950

Species	Location of area planted.	Rate of Seeding or Planting	Amount Planted (Acres or Yards of Shoreline)	Amount & Nature of Propagules	Date of Planting	Survival	Cause of Loss	Remarks
No plantings during during the year.								

TOTAL ACREAGE PLANTED:

March and aquatic none	
Hedgerows, cover patches	none
Food strips, food patches	none
Forest plantings	none

Permittee

(If farmed by refuge

CULTIVATED CROPS

Burford Lake Wildlife Refuge Management Area, Dulce, New MexYear 194.50

Avg.

Yield

Crops

Unit

or

Permit

Permittee's

Share

Harvested

Government's Share or Return

Compensatory

Unharvested

personnel, so indicate)	No.	Loca- tion	Grown	per Acre	Acres	Bu.Har- vested	Acres	Bu.	Acres	Bu.	Services Cash Rev	
No cultivated crops off self-libits to money and freely to more efficient alient to the self-libits to the self-self-libits to the self-self-self-self-self-self-self-self-	report formers to reduce and to essuitee the old	r the period to the personal and ballers of the period at a state of the street of the	the Banhala Harvanted column. It is request actions or position or particular such as closer, alialia, a cop in possible of sweet clover, alialia, a cop in possible any be shown. Thatian, a cop in possible any be shown.	n Shere - Only the number of neres harves a	teve end tent temportant that the ever	tor elections and michoses. The election of reinge bersoned. Into is to the second control of the second cont	in this column.	The coll interest out to nothing off the last	The property of principles sebrustely. It some	orope pervented or nellined during the or	DIRECTIONS FOR PREPARING FORM ME-8	
Summary of Crops Grown		Acreag	Acres		hels	Acr	larvest		nt's Shar Unhar Acres	vested		Revenue
44 152 44 15 19) :				-	17

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.

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

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

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

<u>Crops Grown</u> - 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 <u>Bushels Harvested</u> 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. <u>Unharvested</u> - 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 <u>Bushels</u> 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 indicate the total cash revenue received by the Service.

3-1759 Form NR-9 (April 1946)

COLLECTIONS AND RECEIPTS OF PLANTING STOCK (Seeds, rootstocks, trees, shrubs)

Refuge Burford Lake Wildlife Management Area Year 19% 50

Species Amount Pe	Col	lections		Rece	eipts			
	Date or Period or Collection	Method	Unit Cost	Amount	Source	Total Amounts on Hand	Amount	
-7- CHASE						# No. 10 - 10 - 10		
			V.					
Nothing to re	port for the	period.						
1000								
	10			A OF STREET				
- 150	THE PARTY							
				Cynthe Tark				
						Later Departs		
						4:430.00.0		
				EST TO SERVICE SERVICE				TV#
				Total State of the				
	1 34							
							N. S.	
				Harry All College				
					* Property			
	THE WAY						76711237	
		8 - 1 1		THE RESERVE TO SERVE				

HAYING AND GRAZING

Refuge Burford Lake Wildlife Management Area Year 1950

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Use	Tons of Hay Har- vested	Period of	Use To	Rate	Total Income	Remarks
o grazing is pe o haying on the	rmitted on t	he Manageme	nt Area.							
			1			*				

T		1	_	7	-	
200	n	т.	а	313	S	8

Acreage grazed none	Animal use monthsnone	Total income Grazing none /
Acreage cut for hay none	Tons of hay cut none	Total income Haying none

See Note above.

No. of units removed B. F.

Cords.....

TIMBER REMOVAL

Vann 10/1/ 50

Paris Burford Lake Weldlife Management Area

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
There is no marke	table timber	n the "ana	ement Area.					

Method of slash disposal