# POGASSE NATIONAL WILDLIFE REFUGE Narrative Report January - April 1963

REGULAR PERSONNEL Ed Collins - Refuge Manager

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#### T. GENERAL

#### A. Weather Conditions.

		Precipita	tion	Max.	Min.
	Snowfall	This Month	Normal	Temp.	Temp.
January February March April	3"	-19 -47 1.17 -70	-36 -36 -55 3-19	55 45 77 80	-29 -19 -3 -18
Total	19#	2.53	Extremes	-80-	-29

Weather data is obtained from Mr. George Jones who operates an official weather station at Pollock, South Dakota. Mr. Jones has maintained a weather station for the past 36 years.

January was one of the coldest months on record. Temperatures dropped below zero on 22 days. The Period was relatively open with a snow cover rarely remaining more than 2 weeks. February, March, and April were fairly mild with temperatures probably above normal. Percipitation for the period totaled 2.53 inches and compares with the long term average of 2.46 inches.

#### B. Habitat Conditions.

#### 1. Water

The refuge was froze over when the period opened. By mid-February approximately 3 feet of ice was present over most of the refuge. except for an open spot under the bridge on State Highway 10. For some reason this area stayed opened nearly the entire winter.

Ice stayed on the north and center units until the 2nd week of March. Several late snow storms brought the pool to crest levels and by March 22 water started to pass through the emergency spillway.

Water conditions in this area are generally good. Most stock dams and ponds are full as a result of late snows. Conditions to the east are spotty with some areas reporting excellent water while adjacent areas report the same dismal conditions of the past several years.

#### 2. Food and Cover.

No crops of any type were raised on the refuge last summer. Spring migrants were forced to forage for themselves which, of course, they are quite adept at doing. Geese frequented the stubble fields for volunteer grain east of the center unit. Just before pulling out large flocks of white-fronts were observed cleaning up corn fields in the proposed acquisition area.

Puddle ducks concentrated in the center unit and the flooded portions of the south unit where natural foods are abundant. During the peak of the migration corn and stubble fields were literally alive with field feeding species of ducks.

Cover conditions are better than last year but far from being excellent. The Corps permits year-round use on the lands that they lease and consequently, the ranchers grazed the meadows during the fall and winter. This type of practice will not be allowed when the Service assumes management of the area.

#### II WILDLIFE

#### A. Migratory Birds.

1. Geese. A flock of 100 canadas were the first migrants of the spring. Approximately 500 birds were using the refuge the last week of March with some stragglers remaining to late April. Divided into 4 or 5 groups, these geese showed a preference for the shoreline in the north unit.

White-fronts began building up the last week of March and by early April peaked at nearly 2000. These geese no doubt came from two goose concentration areas to the south of Pocasse, Blue Blanket Lake and Swan Lake. It seems likely that the spring population of white-fronts will build up as the refuge comes under full management within the next several years.

Canadas and white-fronts showed little tendency to mingle. Honkers were usually observed in small bunches while white-fronts tended to concentrate. Noted exceptions occurred while the birds were feeding.

2. Ducks. The spring migration was probably less spectacular than in most years. Mild weather brought on a " trickle through " migration and as a result no large concentrations built up on the refuge.

The Missouri River, with hundreds of miles of newly flooded shoreline, was especially attractive to puddle ducks. The numerous potholes and sloughs immediately north of the refuge also held high populations of ducks.

For the most part the migration was over when the period closed. The breeding pair population appears substantially higher than last year. This was expected, however, since maximum pool elevation was not reached last year until July. Duck production could conceivably double last years 500 ducks.

#### Other Waterbirds.

White pelicans made their appearance on April 12. Several doublecrested cormorants were observed with the pelicans as they loafed in the north unit. Neither species will probably nest here.

The sandhill crane migration was over when the period ended. No cranes were observed or reported using the refuge or " river bottom" this spring.

No grebes, herons, or bitterns were recorded before the close of the period.

#### Shorebirds, Gulls, and Terns.

Killdeer are summer residents and can be seen anywhere along the lake shore. Small flocks of wilson's phararopes were observed as the period ended.

Ring-billed gulls were quite common last summer during the first year of flooding. A few franklin's gulls were also present during the summer but neither species nested. Both birds used the area this spring and were present as the period ended.

#### Doves.

No large movement of mourning doves was noted this period. Approximately 100 were present at the end of the period.

#### B. Upland Game Birds.

Ring-necked pheasants came through the winter in good condition. Excellent cover from last summer's heavy rains provided the necessary winter roosting habitat which is often lacking in north-central South Dakota. The south unit provices excellent nesting cover.

Sharp-tailed grouse and hungarian partridge probably don't use the refuge during the summer although both birds are seen in close proximity to the refuge during the winter months.

#### C. Big-Game Animals.

White-tailed deer use the south unit on an intermittent basis. A fair population of both white-tailed and mule deer exist west of here along the Missouri River.

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

Beaver are probably present in the south unit although none have actually been sighted. The rising Missouri River has put the beaver on the move and as a result these troublesome creatures have been reported seeking refuge in any area with water and trees.

Muskrats are not established on the refuge but likely to become permanent residents within the next few years.

Mink are present in low numbers. One was reported observed last fall but none have been seen this period.

Skunks and raccoons are present but rarely seen. We will likely see an increase in both species within the next few years.

Coyotes are rarely seen but are known to be present on an off and on basis. P&RC has established bait stations both north and west of the refuge.

Coyote hunting with dogs is gaining in popularity. Several hunting groups headquartered out of Pollock on weekends this winter and always managed to get 1 or 2 coyotes.

Red fox are probably numerous although none have been seen this period.

Cottontail rabbits are abundant. Hunting season is open yeararound but the population is still underharvested. Jackrabbit hunting during the winter months is a popular sport. The population appears to be down from the high of several years ago.

#### E. Hawks, Eagles, Owls, Crows, Raven, and Magpies.

Marsh hawks are year-around residents. Approximately 3 were present when the period closed. Rough-legged hawks are seen on occasion during spring and fall migration.

A single group of 9 bald eagles, 6 adults and 3 juveniles, was observed during the spring migration of March 17 along the Missouri River.

Several short-eared owls wintered on the refuge. A migration of short-ears was noted 20 miles south of the refuge in April.

Magpies are present year-around. The population is relatively low in this area.

No crows were observed this period.

#### F. Other Birds.

Horned larks were numerous along road shoulders and open fields during the entire winter.

#### G. Fish.

Northern pike, large-mouth bass and bluegill were planted in refuge waters during the spring and summer of 1962. No winter-kill occurred during the winter of 1962-1963.

The folks in Herried, South Dakota were overjoyed when they realized that many of the northerns planted in the refuge last summer had migrated to the tailwaters of their dam. They unhesitatingly stocked their dam with wat they like to refer to as "Pollock fish".

#### H. Reptiles.

No turtles or snakes were observed this period.

#### I. Disease.

None noted this period.

#### III REFUGE DEVELOPMENT AND MAINTENANCE

An Annual Water Management Plan was prepared by the manager and approved by the Regional Office this period.

Program Schedules were prepared for both the refuge and the Waterfowl Production Areas assigned to Pocasse Refuge.

Approximately 107 acres of native grass was seeded on Waterfowl Production Areas in McPherson County.

#### IV RESOURCE MANAGEMENT

Leases for the summer of 1962 were administered by the Corps of Engineers with termination date in February, 1963. Former landowners were notified by the Corps in March that 1963 economic-use permits were to be handled by the U.S. Fish and Wildlife Service since by that date the general plan and co-operative agreement would have been completed. At the end of the period the plan is yet to be completed and former landowners are clamoring to farm their former lands.

Neither agency is sure who holds administrative authority over the area and consequently, the Service makes recommendations to the Corps and the Corps makes recommendations to us. We both agreed on letting the Corps administer the "outleasing" within the refuge boundary for another year with a Service clause providing for no hay cutting before August 1st.

This is undoubtedly the last year the Corps of Engineers will administer leases within the refuge boundary.

V FIELD INVESTIGATION OR APPLIED RESEARCH

None.

#### VI PUBLIC RELATIONS

#### A. Recreational Uses.

Recreational activities are at a standstill during the winter months except for a few ice skaters that used the recreational area during January and February.

#### B. Refuge Visitors.

1/30 1/31 2/4 2/6 4/10	Klmer Bellah Dave Fisher Eldridge McKay	GSA, Aberdeen USGMA, Pierre Editor, Pollock Pioneer	Building lease Court case Information on refuge
2/6	Emmett Foster		Park development
4/10	Ed Crozier	Mgr. Tewaukon Refuge, N.D.	Transfer property
4/10	Marvin Lee	Clerk, " " "	
	Lewis Smith	State Warden, Mobridge	Numerous - Violations

#### C. Refuge Participation.

Manager met with the Pollock City Council on February 2 regarding the overflow sewer line that dumps into the refuge.

Reviewed the development of the Pollock city park and recreational area with State Park employee, Emmett Foster.

Manager reviewed biological studies at Lacreek Refuge, Martin S. D. from March 3-5.

Manager assisted with cooperative white-fronted goose banding between the Service and the State of Nebraska from March 18 - 23.

Manager attended Wetlands Workshop at Jamestown, N.D. from March 26 - 27.

Manager assisted H. Miller and M. Hammond on prairie grouse counts and the special grouse study at Valentine and Fort Niobrara Refuges from April 15-29.

Manager cut radio tape for Wildlife Week on KOLY, Mobridge.

#### D. Hunting.

No hunting is allowed on the refuge. Beaver hunting along the Missouri River began as soon as the ice moved out. Water levels were fluxuating most of the spring and this hampered the hunters. Compared with last year, beaver hunting this year was very poor.

#### E. Violations.

None.

#### F. Safety.

A perfect safety record at this station now stands at 316 calendar days.

#### VII OTHER ITEMS

#### A. Items of Interest.

A late spring snow storm driven by 50 mph winds tore the manager's airplane loose from its "tie-downs" and flipped it over on its back. Damage was extensive and the plane had to be dismantled and trucked to a repair shop.

#### B. Photographs.

No photographs taken this period.

Submitted by:

Regional Refuge Supervisor

#### WATERFOWL

			Weeks	of r	(2) eport	ing	perio	1		
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3 -1750a Cont. NR-1 (Rev. March 1953)

### WATERFOWL (Continuation Sheet)

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Trumpeter											
Geese:				SOO		O PAGE DEPOS					
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Snow		70	500		200		1000		17,400		
Blue	0 11000 1100		MARK WES	超克斯特 放正器	NH THATOS	9	And the second s				
Other											
Ducks:											
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Gadwall			3	MANUAL TO	ASST CE	THE RESERVE	50	75	500	real state of the	
Baldpate			1	50	50	30	20	10	1,100		
Pintail	12	700	600	1000	100	350	150	150	23,300		
Green-winged teal Blue-winged teal				200	300	200	50	90	5,400		
Cinnamon teal					50	150	300	200	1,100		
Shoveler				20		104 (S. PASA) - 201	100	1,00			
Wood					200	150	800	625454	5,300		
Redhead				75	30	200					
Ring-necked			1.0	19		-					
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3-1751 Form NR-1A (Nov. 1945)

# MIGRATORY BIRDS (other than waterfowl)

Refuge Months of to april 195 63

(1)		2)	(3		(4			(5)		(6)
Species	First	Seen	Peak Nu	mbers	Last	Seen	men management management	Production		Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimate Number
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						Reporter	12			
				g sin sh		.10				
. Shorebirds, Gulls and Terns:										
Pranklin's gull Ring-billed gull Eilldear	3	3/11	15	3430	50, "	l/4 1 present		ar s		
Wilson's phararope		100			150 atil	l present				
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ave several periods (	uring the	apring.								
							1			
						4	100			

#### UPLAND GAME BIRDS

Common Name acre	ver types, total reage of habitat	Bird	Number broods obs'v'd.	Estimated Total	Percentage	Hunting	For Restocking	egyf i not	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Preasant	O acres of short ass prairie, "go- ck" & seader	10			Limit enpo of as a re- gredneyes a				60	
	ione (spring) and appropriate	410 8T0			agya Khabasa Kalenca ata		er od		F CORPAS	
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#### SMALL MAMMALS

Year ending April 30, Refuge LLS (Include data on all species of importance in the management program; i. e.,

(1) Species	Density	ered in Striner	b ter		(3) vals		of es			(4)		28 1 08	(L) SE	(5)
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	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Re-	Permit Number	Trappers Share	Refuge share	Total Refuge Furs Shipped	Furs Donated	Furs Destroyed	tion
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REMARKS:

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

12715

Reported by

#### WATERFOWL

<u>.</u>			Weeks	of r	(2) e p o r t	ing pe	riod			
(1) : Species :	3/1	9/2-8	9/9-15	9/16-22	9/23-29	9/20-14/6		10/14-20	10/31-27	10/38-11/
Swans: Whistling										
Trumpeter							#/			4
eese:						28752				
Canada						5/ 10 17 17		60	-	
Cackling (Mich)						• •		70	60 60	-
Brant								- 20		60
White-fronted							32	12		
Snow							45	45		
Blue						All Shirt	***	•		
Other				· -						
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Mallard Black	600	1,000	1,700	2,000	2,700	2,000	1,300	3,000	1,500	6,000
Gadwall										
Baldpate						200	200	500	500	
Pintail	1	100 cm cm		5	50	10				
Green-winged teal	P00	500	500	550	700	500	500	500	4,00	300
Blue-winged teal	700	60 800	30	50	50	200	30	220		300
Cinnamon teal	100	CUU	700	650	700	50	10		250	
Shoveler	90	60	20	-	-					
Wood	,,,	00	20	20	20	20	10	200	100	LO .
Redhead	50									
Ring-necked								20		
Canvasback										
Scaup								400	F00	***
Goldeneye								200	QUU	100
Bufflehead								30	30	
Ruddy				5	A	30	20	20	34	
Other										
oot:	320	300	700	1 000	9 000					
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Cont. NR-1 (Rev. March 1953)

#### WATERFOWL (Continuation Sheet)

REFUGE POSSE						MON	ITHS OF	*	TO TO		1962
	11/4-10	Week:		(2 repor 1/25/12/1	ting		i o d	2/23831	(3) Estimated waterfowl days use	: (1 : Production: Broods: seen :	tion Estimated
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Ducks: Mallard Black	10,000	10,000	20,000		7,000		1 271227	in Space of Re-	545,000		A hyes
Gadwall Baldpate					250 HM 11	anti opy	e barren		10,080		
Pintail Green-winged teal	300	30		MANY L					29,100 8,700		
Blue-winged teal Cinnamon teal Shoveler	70				me la	area ra			22,865 L 220		
Wood Redhead Ring-necked			3						190		
Canvasback Scaup Goldeneye	330	300	100	250	153573 15357547				10,850		
Bufflehead Ruddy Other		20	20	20.0	20				123 h13		
Uther			3 1 0 0 0 0 0 1		20			STABBLES	1,750		
Coot:	500			70)	ver)			P.25	45,820		

# MIGRATORY BIRDS (other than waterfowl) Months of

Refuge Months of 195

	(1)			2)	(3			4)		(5)		(6)
	Species	1,504	First	Seen	Peak Nu	mbers	Last	Seen		Production "		Total_
	Common Name	1 111	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimate Number
	Water and Marsh Bi	rds:					1715 (LP)	cony jezir	B1 2/13/61	Tournes, co	n proesos	oon.
	white polican  0.8. heres  2.0. night heren  American bittern  Fied-billed grobe  Hestern grobe  Sandbill cross	20 20 25 26	present	last peris	od & 7 30 6 40 2	9/1-10 9/20 9/10 9/1 9/20 9/1 10/19	2 2 6 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	9/16 10/1 10/6 10/15 10/10 9/10 11/10		on tod a should af Aytel Leads Lfor	ist group glyde it. De addod and Wati	nng to see opay to old opay opay opay opay opay opay opay opay
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	Shorebirds, Gulls	and										
•	Shorebirds, Gulls : Terns:	and	present	last perie	d 1000 300	9/27 9/20	15	20/30 11/26	A - O lever N			
	Shorebirds, Gulls : Terns:	500 200 5		- 100	a 1000 300 10 20	9/20 9/10 9/1	10 2 1	13/16	\$ - 01 (1. v. e v. N			
	Shorebirds, Gulls : Terns:	500		9/27	20 50 2	9/20 9/1 9/1 11/1 9/1 10/1	10 2 1 7 2	11/16 10/1 9/15 11/5 9/1 10/5				
	Shorebirds, Gulls : Terns:	500 200 5	1 400		20 300 20 50 2 4 600	9/20 9/10 9/1 11/1 9/1	10 2 1 7 2	11/16 10/1 9/15 11/5 9/1				
	Shorebirds, Gulls Terns:	500 200 5 20 30 30	1,000	9/27 9/28	20 300 20 50 2 4 600	9/20 9/10 9/1 12/1 9/1 10/1	10 2 1 7 2 2 2 2 2	11/16 10/1 9/15 11/5 9/1 10/5 10/20				

#### WATERFOWL HUNTER KILL SURVEY

Refuge \_\_\_\_

Year 196

(1) Weeks of Hunting	(2) No. Hunters Checked	(3) Hunter Hours	(4) Waterfowl Species and Nos. of Each Bagged	(5) Total Bagged	(6) Crippling Loss	(7) Total Kill	(8) Est. No. of Hunters	(9) Est. Total Kill
	184-1510	eer ba ka	wilder state entitles worker in treening to	internation des				
	50.5	words are.		es even. edd to v	orty execut a	out a the	-135	
	0225	slopida	the 25 percent roal camer be conserved.	recW be	un nose un. Sandin duo:		of end	
			entative or te.	imper de	m to callo	gist od l	Errorio 1	
			the hunters speak hunting on the reluga.	of hours	nodisen Isa		(c) Record	
			order of numbers barged. Samela article of the color (L), Canada G. (L), Canada G	n decress 5), Gade	l spacies 1 Rediend (1	Moltredak (34) f. Lisel i	Finte	
			,begged	wateriord	to arte inum		1009a (2)	
			reported knocked down but, pot recovered.	Liperrad ou	To attribut		200aH (8)	The state of the s
		,			best and	uloj te	Estot (1)	
	na Li	idali , dadi	ow old galach ocuter old no bedand one one.	t un tour	ednin Lidos Salvas (Seluma		mite8 (8)	V
			Large Transfer a second - Career Large Co.	90 9650	edlected by	ç sD en	ECDY (8)	
							Service and the service and th	
	64~84							
			(over)					

#### UPLAND GAME BIRDS

Refuge Pocasso	Months o	of Sept	to	Dec ,	19	62
		The second secon		Committee of the Commit		COMMONN

(1) Species	(2) Density		(3 You Produ	ng	(4) Sex Ratio	R	(5) emova	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd.	Estimated Total	Percentage	Hunting	For Restocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
ing-necked pheasant	600 scres of short grass preirie, taxe and wild hay		uno es uno es uno es o alc uno es aca es	oedi tape tape tape tapti	1M:1F				200	
	Isprob box emplysy		egu es	ingel i	Leopione gas Jedinar mil	05 T 05 T	5 555 8 7 5 5		edspilded i Pages of	THE CONTRACT $(E)$ . $C$
	ebkion .oze .sza		, visalitu	e bil	e oo viinaa Valde				Con-silent yn caeldo	(A) SEE BARTO:
	so had brader advis		579200	175.50	estop dose m	200	ožejji	ejon f	edyn Akti	ibiavoses (a)
	icil dalteq druge Prep goldan egulet		nliwb Lank	6 3 V II 6 7 J II	m edi grimu plus bisse s	rodi gbra		ica i remid	edemine? ehuloni	3 LATET (3)
	geviote bit boneves a Listanuper		nols. Hopga	fago con :	determini Lulumnetta	a bo Bowl	eu bo	d) an Ta Uc	efactbel enclose	100000000000000000000000000000000000000
			- 23	88. s.	l blanda ber	YIGO	6eLts	g édi	ed eldsori	ėgs esmulos ylst0 *
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Refuge Calendar Year 1962

(1) Species	(2) Density	(3) Young Froduced		Ren	10 <b>V</b> 8	als			(5) sses	In	(6) troductions	(7) Estima Total I Popula	ted Refuge	(g) Sex Ratio
Common Name	Cover types, total Acreage of Habitat	Number	Hunting	For Re- stocking	Sold	For Research	Predation	Disease	Winter	Number	Source	At period of Greatest use	As of Dec. 31	
shite-tall deer	600 seres of short grass prairie, bay seadow and shelterbolt fringes	2	O Mari	. 880 81. 90 84 11 1000	100 to 10	100 000 11 34 00 10 10 10 10 10 10	in the second		ta ed. erolo ar bel		ences espain ences espain ences ences	3	3	
	elgera la eriz Las best bos			10 AV 10 EV 14 EV	en E	្ឋាន ឯយូវនេះ ជនៈបំបា	- 20 S		oq oq ogsavi Mot i		post somid			
		tida en his	U.S.		10.0	<b>4</b> 70	16		i edn		seria elle elle	OBTONA CHO		
	repair dated near that some	ujias bij	2.5		8				1.7					
	derines sus socia dolla	r sort ye	100	) ) () ()	9734		rodi.			0 9	ustari id			
	a to became to septem of a	A delibertual production of the control of the cont			20	1030 0629	Kyro-	300	e welle e s inne	9 H	7 1951 - 1801	retron Lurg Skore kined	(1)	
	bedignisted as saturage form				· Ce	j to wetal	13.6 13.6	rec	18Q s	in en	meijhal Binjy	orio ig		

hemarks:

Ed Collins

Reported by

#### DISEASE

Year 192

Refuge Pecesse

	Botulism	KAB	Lead Poiso	ning or other Disc	8258
Period of outbreak			Kind of disease		
Period of heaviest lo	sses		Species affected		
Losses: (a) Waterfowl	Actual Count	Estimated	Number Affected Species	Actual Count	Estimated
(b) Shorebirds (c) Other					
Number Hospitalized	No. Recovered	% Recovered	Number Recovered_		
<ul><li>(a) Waterfowl</li><li>(b) Shorebirds</li><li>(c) Other</li></ul>			Number lost		
Areas affected (locat	ion and approximate	e acreage)	Water conditions		
Water conditions (ave	naza denth of water	in elektrone			
	s, reflooding of en		Food conditions	A	
Condition of vegetation	on and invertebrate	life	Remarks_		**
Remarks		94			

#### PUBLIC USE

Refuge				Cal	endar Y	ear	62	
Vis	Potal Use sitor-Days		nting Use	F	ishing Use		Miscellaneou Use	ıs
Where practical, the breakdown of					, show	by percent	and visitor-da	ıys
Hunting (on refuge lands):	Percent Vi	sitor-Days	Acres	Miscellaneous		Percent	<u> Visitor-Days</u>	
Waterfowl				Recreation*		100/	12,200	
Upland Game	settlest to constitution than the constitution of	0		Official				
Big Game		0	gand place despires on the seem.	Economic Use		2000 CV-0132-000-000-000-000-000-000-000-000-000-0	0	
Supervised by Re	fugeBy	State	No. of	Blinds	Other			
Hunting (off refuge lands);	Estimated man	-days of hunt	ing on lands		ments:		clascos	2,700
Adjacent to the	refuge 100		(These	e figures		Boating		3,000 1,000
should not be inc	cluded in huntin	g-use totals	above).			Ficaics Site-sec		2,000
Fishing:						Celebrat	ion(July h )	3,000
Acres of ponds on	r lakes	_and miles o	f streams					
or	pen to fishing.			*including p			ng, boating, d photographing	Ž.•

				(1)	
NONAGRICULTURAL	COLLECTIONS,	RECEIPTS,	لبيط	PLANTINGS	

Refuge	Focaso	Year	1962
			-

	(See			s and Recks, tre				(		ings tic - Upland	)		
Species	Amount (Lbs., bus., etc.)	(2) C or R	Date	Method or Source	Cost	(3) Total Amount on Hand	Location of Area Planted	Rate of Seeding or Planting	Amount Planted (Acres or Yards of Shoreline)	Amount and Nature of Propagules	Date	Survival	Cause of Loss
	[40]K(3)												
			,					x = y					

<ul> <li>(1) Report agronomic farm crops on Form NR-8</li> <li>(2) C = Collections and R = Receipts</li> <li>(3) Use "S" to denote surplus</li> </ul>	Remarks:
Total acreage planted:	
Marsh and aquatic	
Hedgerows, cover patches	
Food strips, food patches	
Forest plantings	
	76348

#### Fish and Wildlife Service

Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

		ittee's	distribution and the conflict of the conflict	nment's Si	CONTRACTOR OF THE PROPERTY OF	Section Control and Control an		Green M		1
Cultivated	Share	Harvested	Harv	ested	Unha	rvested	Total Acreage		nd Water- owsing Crops	Total
Grown Grown	Acres	Bu./Tons	Acres	Bu./Tons	Acres	Bu./Tons	Planted	Type an		Acreage
		Lered by th	e Corps c		re en e	cash basi	during li	62		
						1		1 I in a second		- 100 miles
o. of Permittees:	Agricultur	al Operation	ons		Haying	Operations			Ag. Land	
o. of Permittees:  Hay - Improved (Specify Kind)	Agricultur Tons Harvested	al Operation	Cash Revenue		<b>Haying</b>	Num			aming and general direction or security of distance and needs of the security of distance and needs of the security of the sec	
Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash	e   1.		Num	ber	_ Grazin	g Operations	
Hay - Improved	Tons Harvested	Acres	Cash	e 1.	RAZING	Num	ber	_ Grazin	g Operations	ACREAGE
Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash	e 1.	RAZING Cattle Other	Num	ber mals	Grazin AUM'S	g Operations  Cash Revenue	

#### REFUGE GRAIN REPORT

(1)	(2) On Hand	(3) RECEIVED	(4)		GRAIN	(5) Disposed of	7	(6) On Hand	Propose	(7) d or Suitable	LE USE*
Variety*	BEGINNING OF PERIOD	DURING PERIOD	TOTAL	Transferred	Seeded	Fed	Total	END OF PERIOD	Seed	Feed	Surplus
All cecnosic use	paraits	for 1962		istored	by the (	orps of	ingineero (	n a cash			
	(d) M33 (e) Zee	i mije tor s I mije tor s	entag con a Letation de refues, "Me	igilomaea Rpikkipili Lobe	and the		**	X.			
	(0) A to	in a jespo	ns 2 mad 2. Nacin 5: ed break-do	and publicates	opero.	tellari inspe	a procedence g	(m)like(n)	Serie w		
		n ist stile Der refoges ert sil pran ervest from	inchite et inchite et recited di iteed satelie	odik begi Darimini mining m	g jiosi s S liapa S socies		done on state		Trans to		
	(1) Line( b)	ach type i Acid core, g So, ten ero	combete to meet miew ( Buign sebi	estap eti. Letteja Siid	apecines shesi, eso coms, es	ing an think rain whas Mary	ocu, seliew ore g wilde ditar se ercy	where can brose might gent owners	rosinan Pengine Mase den		
	g estata ta general ta	praintin to considered to be rye in economic	nache i or egovenient -55 lb.; neu pe volunte o	Sum our response response response	e of thes 33 Gora ay beas mediané			o ) po comp con base— c aso)— to m buozrusiya			
(8) Indicate shipping o	r collection	points					8 of during	the period	concret pa		
(9) Grain is stored at			<u> </u>	Bracks (	SBYTA I	SE1,083.					

3-1759 Form NR-9 (April 1946)

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

Refuge Year	195
-------------	-----

		Co11	ections	Recei				
Species	Amount	Date or Period of Collection	Method	Unit Cost	Amount	Source	Total Amounts on Hand	Amoun
		247						
				1.63				
					Interior Du	plicating Secington 25, D.	tion,	

3-1761 Form NR-11 (2/46)

#### TIMBER REMOVAL

Refuge.	Pecasse	Year	19562

, j. u.t.,	Domit No.	Unit or		No. of Units Expressed in B. F., ties,	Rate	Total	Reservations and/or Diameter	Creation Cu
Permittee	Permit No.	Location	Acreage	etc.	Charge	Income	Limits	Species Cu
			u u					
BY APPLICAT						,		
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			100					
			" x ~				*	
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						X -		

Total acreage cut over	er	Total income	
No. of units removed	B. F. Cords	Method of slash disposal	 
	Ties		

INT.-DUP. SEC., WASH., D.C. 36103

#### PEST PLANT CONTROL REPORT

### Refuge, Calendar Year (To be inserted in the September-December Narrative Report.)

Plot No.	Species Treated	Growth	Date of Treat.	Chem. or Method Used	Dilut. or Carrier	Rate Per Acre	Water Depth	Material	Labor	Equipment	Total	Per Acre	% Kill last Observ.	Date last Observ.
	to subjic the eres of interstation in	And Tell vesues of thereby and and and	Pare & Builton , obser eres and the Local Tark	i thempest end name at a uga duse tol bear at a ettraduse lo equt would	(*************************************	lbs Abold equivalent per acre - not lbs	Toge parprofes and carrier.	TON AUTHORITON TOWN.	om Application form.	spivons divorger on dith attain bash in	el asus sumes and ll .abbohdran lo nokus bam so birone wries wen a .nosase suma a sed and asus sumas and ll .tranmagary sus Mimener rol somps sit il myone ed birona			

#### INSTRUCTIONS ON REVERSE SIDE

Additional forms will be supplied by Regional Office upon request.

Remarks: Include any important information not given in above columns, including No. of years an area has been treated where repeated treatments have been made.