RCUTING SLI	P DIVISION OF WILDL	IFE REFUGES DATE: 1-24- 194.4
MR.	SALYER	SECTION OF HABITAT IMPROVEMENT:
MRS	. WOODIN	Mr. Kubichek
WR.	ELLER 7.18	Mr. Smith
MRS	. CARVIN	Ir Griffith Act G 1/28
<u> </u>	DUMONT	Miss Cook Duc 3-21
SEC	TICN OF CPERATIONS:	SECTION OF ERA:
	Fir Krummes UK 2/9	VHAR TAR 2/11
	Mr. Gustafson	Dr. Bours W58 2/23
	Miss Baum	Mrs. Fishman
	Mrs. Kricun	
SEC	TION OF LAND MANAGEMENT:	STENOGRAPHERS:
1	HE Españaw 3	Miss Whorley
	Mar Ashorimovit-	
SEC	TION OF STRUCTURES:	
	Kr. Taylor 1107 2/16/9	9
REMARKS:	MONTEZUMA NARRATIVE REF	ORT
-	SEPTEMBER*DECEMBER 194	3
		Return to: Habitat Improvement

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Montezuma National Wildlife Refuge

Narrative Report, September - December, 1943

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UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE

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MONTEZUMA NATIONAL WILDLIFE REFUGE September-December, 1943

I . GENERAL

A - Weather was very open, less precipitation than usual having been received in the form of snow, although heavy rains were received during October. Temperatures were about normal. Practically no snow had fallen on the refuge by the end of the period. Following is a summary of the data from the records at the Mays Point Lock in the New York State Barge Canal:

Month	Precip.	Max. T.	Min. T.
September	1.11	88	34
October	6.17	70	37
November	2.67	76	20
December	.78	66	_1
Totals & Av.	10.73	88	1

B- Water - Rains during October filled both pools and at one time threatened flood conditions. The main pool had previously dropped about 8" through the summer, while the storage pool had been held about a foot low awaiting the completion of dikes.

II - WILDLIFE

A - <u>Migratory Birds</u> were conspicuous by their relative absence. An estimated 5000 or about half the usual number of migrants came through and as previously reported the summer population was small. Probably 80% of this fall population was made up of migrants. This decrease apparently was the trend thru all of Central New York and hunters reported very little success. Food and cover conditions were apparently in good shape and it seems logical to believe that the drop must have been due to general climatic conditions which shunted the flight in other directions. All observations and reports indicated a rather light migration of geese as well as ducks. A great number of coots and gallinules reared on the area remained unusually late in the fall.

Waterbirds consisting mainly of great blue heron are increasing each year.

B - Upland Game Birds consisting of pheasants apparently produced an average number of young in spite of the wet season in the spring. The dikes and a few high areas provided good nesting sites along with the upland habitat. The nature of the dikes of course led to some predation by fox and coon. In general in the vicinity pheasants were rather scarce outside of the refuge this period. C - Big Game Animals - Deer are increasing each year and it is believed the herd now approximates 300. Good food and cover, yarding areas and protection are no doubt the primary factors. During the State's open season for the first time in Seneca County the last week in November it is reported about 75 buck deer were taken. Several doe deer shot by hunters were picked up by refuge personnel on or adjacent to the refuge and turned over to public institutions for food. A constant patrol was maintained to prevent hunting on the refuge. Several deer were killed by vehicles on highways during the fall either in or near the sanctuary and were picked up by refuge personnel.

D - Fur Animals, etc. - Muskrats have increased their population greatly with proper food and habitat and it looks like a very good trapping season for the next period. Some predation is evident by mink and occasionally by fox but this is not on a large scale.

Fox and raccoon have increased to the point where some predation is taking place. A program to trap some of these was placed in operation this fall. Thirteen red fox and one grey were caught to date while 25 raccoon were taken. On the basis of late operations it is believed that there are at least 1000 raccoon in the refuge swamps. Very few were taken due to the difficulty of trapping under existing conditions and the relative inaccessibility of some of the swamps in the pools. Examinations made after the pools became frozen, however, disclosed tracks and signs everywhere. In one case 5 coons were found packed into a small 10-foot snag. It is believed that approval should be obtained for a program to remove some of these by taking from the den trees without destroying the tree. Otherwise a considerable loss of eggs and young waterfowl may be expected.

III REFUGE DEVELOPMENT AND MAINTENANCE

A - Physical - A considerable amount of time was used loading dump trucks at the loading trap and hauling dirt to repair a section of dike at the plug in the main pool dike.

Due to failure of the well at Secondary and lack of rain water it was necessary to install a pipe line to the adjacent pool inlet. Excavation was largely accomplished with the bulldozer and grader.

Grading of the dikes was done to put them in good shape for the winter. Stone rip rap was hauled around some of the spillways and dirt was levelled with the bulldozer.

Several window repairs, touch up painting and repairs to doors placed the buildings in good shape.

One grader was repaired, cleaned and painted. The rotary scraper and disc harrow were cleaned and painted. Work was started cleaning, repairing and painting tractors and other equipment.

B - Plantings -

1 - Aquatics - No plantings were done in this period. Plantings of wildrice made from seed last year are existing but are badly depleted by muskrats. Plantings of pondweed, wild celery and water lily made in July are developing very well.

4 - Cultivated Crops - No crops were realized this year in the form of harvest due to the difficulty of the season. About three acres of soy beans were left unharvested and furnish good feed for deer and pheasants. However, about 50 acres of winter wheat is now started so that ther should be a good crop next year.

C - Collections - consisted of propagules collected from Vayuga Lake for planting on the refuge as reported on Form NR 9.

IV ECONOMIC USE OF REFUGE

A -E - All information of these items is included on the NR forms.

VI PUBLIC RELATIONS

B - Refuge Visitors during this period included Mr Krummes from the Central Office who made an inspection trip. Colonel Chambliss of the Voorheesville Holding and Reconsignment Point of the Army also visited the refuge and made a tour.

C - Refuge Participation - There was a great demand for information and movies on the wildlife work. The manager on request gave talks and showed movies to the Rotary Clubs of Clifton Springs, Clyde and Phelps and tp the Sportsmens Organization of Canandaigua, New York. Several other requests were necessarily refused.

D - Hunting in this vicinity was reportedly very poor. Hardly any hunting was successful in the grain fields and the lake and stream hunting was very light.

F - Violations - Plenty of overtime was put in to prevent violations. One deer was shot and taken from the refuge in early November but the offender was not caught. It is known that a gang of professional deer poachers is active in adjoining counties and many nights have been spent on patrol to prevent their trespass on the refuge. Several fishing violations were reported to State Protectors for prosecution.

VII OTHER ITEMS

A great amount of time was used in the repair, maintenance and painting of refuge heavy equipment. Arrangements were necessary to effect the repair and transfer of equipment to other stations. No photographs were taken during the period.

January 8, 1944 merton Radway Merton Radway, Refuge Manager

Regional Director

Date

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MIGRATORY BIRDS

Refuge_	B Howberge	- (S)	(3)	Mor	ths of _	Sept	t o	Dec	_* 1	94_	ALE A	612
(1) Species	(2 First Ob		(3) Became Common	(4) Peak Concer	tration	(5) Last 01)se rved	Young	(6) Prod	uced	(7) Total	
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge	
Pied billed grobe Balard Black duck Baldpate Groun wing tool Blue wing tool Pintail Wood duck American bittors Groat blue herem Groat blue herem Groat blue herem Groat blue herem Groat blue herem	<pre>but the second second second in the second sec</pre>	The first refuge record for the apecter during mpring migration, fall migration	beerved. In the case of resident aped the column may be disregarded. The date the sneet as becaus common on the	2000 2000 100 300 80 80 80 80 80 80 80 80 80 80 80 80 8	10/28 10/28 10/28 10/14 9/15 10/12 10/14	1 1 25 25 25 3 1 1 25 3 4 50 15	11/3 12/51 12/51 11/23 11/23 9/23 11/15 11/20 11/5 11/20 10/23 11/1 10/50	ar melonce and to 'recimul lates becautors 1311 a.htt .hofreq and gnirub agoier and 14 tol beau Sadd mand eron ad for yen to 11 the and nogu gnihmagab .anoldaridhachoo	de guidensestiget seguier nó cento da LLA de guidensestiget seguier nó cento da LLA de conto da LLA de conto da contractor de co	would probably be the sume in many one	50 5000 5000 150 400 75 800 800 500 100 25 150 600 400	

1472

. REMARKS: (Pertinent information.not specifically requested)

INSTRUCTIONS

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact are to be omitted.
- (7) TOTAL: Estimated total number of the species using the refuge during the period. This figure may or may not be more than that used for peak concentrations, depending upon the manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

* Only columns applicable to the period covered should be used.

UPLAND GAME BIRDS

	Refuge Nerteans	nina A	Months	of Sept	to1	 , 194 <u>3</u>
(l) Species	(2) - Density	(3) Young Produced I	(4) Sex Ratio	(5) Removals	(6) Total	(7) Remarks
tion and	Acres	r ated	ed pressed in ed aced by a	ng e- ing rch	Estimated	Pertinent information

Common Name	Cover types, total acreage of habitat		Number broods obs'v'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent inform specifically re- List introduction	quested.
Ring nook phonoant	Reverting Agrie. Craus - brush	2		Lunin slodi sgli sylt bul i	reverting ag lard type syn a possible: n representa eas should b	ds, Stan Wher the o	erdwor tho. Meed cour eres c	nd ha ter d be a and ple d	600 360		
	ioo fautoe bas enol	lavreed	a nođn	beau	produced, b g habitat.	ghuo n.tbei	5 26 ·	r Ltati	Betimated : in represen	TOUNG PRODUCED:	
a0 a	ste, Include dat	drisene	iq . ya	land.	rily to wild	entra Idal	i sel Leva	app) ti se	This column other speci	SEX RATIO:	(4)
	do report periods	ming t	b bevo	ners i	ach categor	nt	nodaus	tal r	Indicate to	REMOVALS:	(5)
assachs.	rt period. This m fuge during certain	he repo	ring t	ie du atta	ing the refu is those mig	r va s pl	odawa bitrd	otal ident	Setimated t	TOTALS	(6)
Also	overed in survey.	area c ally re	on and solfle	tde.Li qa di	teraine popi	b oð 1 311	used rbine	blod er pe	Indicate me include oti	REMARKS :	(7)

* Only columns applicable to the period coverel should be bea.

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INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.*

(1) SPECIES:

Use correct common name.

(2) DENSITY:

specifically requested.

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.

-

262%

BIG GAME

1

(1) Species	(2) Density	(3) Young Produced	n ri	(Rem	4) ova	ls	and a	(Los	5) ses	Intr	(6) oductions	(7) Estimated	(8) Sex Ratio
Common Name	Cover types, total Acreage of Habitat	Number	Hunting	For Re- stocking	Sold	For Research	Predation	Disease	Winter Losses	Number	Source	Total Refuge Population as of Dec. 31	Percentage
Rorthern white	Susap - brush	prote ava grass pr bb. 7 allo basrysilo sample a	No se u	ise: Seri budo sise		ea bes bes bes bes	では した した した した した した した した した した	piq mla ife d b	neral botta 1 m 1d1 1 shoul 1 shoul 1 vey 1	tand land tbe sti tte sti s.	obscure i riculture abols list gures subs aple areas dar Hemari	800	
	age. Luring the year.	tet oo be bevonet		1000						100.00		I YOUNN PRODUC	(3
at	ates indicate total losse	nite estin	11	97 7					tis of fory di			LOSSES	2)
	iben stock wis secured.	ey from w	33	000	93	ter l	48	tedi	wa edd	ate	Si India	INTRODUCTIO	(6
de :	n the refuge as of Decembe	spectes o	do	10).tali	qoq	bei	ian istoo	erid	ev£0) TOTAL HEPUOI POPULATION	<i>i</i>)
	each species as determine	to esismo alsvoi				1 10 1	tag ton	seo Isvi	teq edd testo b	ate fiel	Indi.) SEX RATION:	8)

161

INSTRUCTIONS

Form NR-3 - BIG GAME

4

- (1) SPECIES: Use correct common name; i.e., Mule deer, black-tailed deer, white-tailed deer. It is unnecessary to indicate sub-species such as northern or Louisiana white-tailed deer.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) exclusive of fenced herds. Detailed data may be omitted for species occuring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated total number of young produced on refuge.
- (4) REMOVALS: Indicate total number in each category removed during the year.
- (5) LOSSES: On the basis of known records or reliable estimates indicate total losses in each category during the year.
- (6) INTRODUCTIONS: Indicate the number and refuge or agency from which stock was secured.
- (7) TOTAL REFUGE POPULATION: Give the estimated population of <u>each species</u> on the refuge as of December 31.
- (8) SEX RATION: Indicate the percentage of males and females of each species as determined from field observations or through removals.

1614

Form	NR-	7
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PLANTINGS (Marsh - Aquatic - Upland)

	Refuge	Nonte sum			Yea	ar <u>194</u>	- 40.6	
Species	Location of Area Planted	Rate of Seeding or Planting	Amount Planted (Acres or Yards of Shoreline)	Amount & Nature of Propagules	Date of Plant- ing	Survival	Cause. of Loss	Remarks
Brasonia abroberi Potamogoton matans Vallianeria spiralia Symphese edorata	Min pool	1 bu.perme. 64 per plot 70 per plot 100 per *	1/8 core 10 plots 11 plots 7 plots	4 1b. sood 642 stems & poot 731 " 723 tubers	Ang July *	Unimoun Good		
TOTAL ACREAGE PLAN	Marsh an Hedgerov Food str	nd aquatic 1 ws, cover pat rips, food pa plantings	ches tches	_				

Form NR-8 (Revised)

CULTIVATED CROPS

11

new Page.

Permittee f farmed by refuge	Permit	Unit or	Crops	Ave. Yield		ttee's are	Harve		vernmer Unhary		re or Retur Compens	
rsonnel, so indicate)	No.	Loca- tion	Grown	per <u>Acre</u>		Bu.Har-	Acres		_Acres	Bu	Service Cash Re	s, or
Tony Salerno	8449	Field IO	Soy Beam	ent the	the av	ality and	Babise	erop	S left st	anding 1	n field	
12 - ago a attrivito potriad algoid	number of	tout and	arown Sinmu Sinmu Sinmu Sinmu		At tasin bada ad	abectico bractico for text	tiene bha	to obech	01, 1119			
and the set of the set	d and to a bire to	etaoutie resulta religni	at pares		ta tabo	To and to and the solution	No ot	01 N	del ber	Se tabor	CULLING	
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Summary of Crops Grown:	Crop	Acreag	ge Permit Acres	ttee's s Bus	Share hels		Go Harvest res		ent's Sh Unha Acre	arvested	Total u. \$	Reven
	-Soy Be				6 194 7	D	stire or	rop la	ft stan	ding in	field	

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DIRECTIONS FOR PREPARING FORM NR-CULTIVATED CROPS 9

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EPT. OF THE ANTERIOR ISR AND WILDLIFE SERVICE REGEIVED

MAR 291944

RECORDS AND

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

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

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

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

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

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

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

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

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

-

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

Year 194

1620

Refuge

Montesuma

Collections Receipts Total Amount Date or Species Amounts Amount Surplus Period or Method Unit Cost Amount Source on Hand Collection Brasenia obreberi 4 1b. Reelfoot N.W. Rene 1000 seed Refuge Potemogotom meteres 642 plants July, 1943 Hand operation Nemo 781 plants July, 1945 -Vallissoria spiralis Nyaphasa odorata July, 1943 -728 plents

HAYING AND GRAZING

Refuge Montesum

Year 194

1

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Animal Use Months	Tons of Hay Har- vested	Period of Use From - To	Rate	Total Income	Remarks
Harry Lolend	8456	Trast 55	20	38		5/16/43 to 10/81/48	\$5.00 per head	\$21.00	
								and the second s	
ineria a irra									
Totals:									
A.	creage graze creage cut f	d 20 or hay				88			razing 121.00

TIMBER REMOVAL

Refuge Montesune

Year 1944

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
Descrift Paradiso Loan Allan Guisoppo Caoi Pearl Dratt John Paradise Robert Soett Stove Folesynski Stove Kolesynski	4598 4575 8676 8602 8680 8680 8680 8680	Truct 25 b Storage pool Truct 28 a Storage pool Truct 12 Truct 12 Truct 12 Truct 28 b Truct 28 b Truct 5,12		20 std. cord 100 std. cord 50 std. cord 50 std. cord 25 std. cord 25 std. cord 25 std. cord 25 std. cord 55 std.cord	• .28 1.00 .25 1.50 .50 .50 .50 .28 .50	5 5.00 100.00 12.50 75.00 12.50 12.50 12.50 8.25 12.50	None • • • • • • • • • • • • • • • • • • •	implo,mah,elm
Clouden 7. Marsh Ernest Marrists Glouden 7. Marsh	8426 8694 8687	Prest 12 Prest 27 a Prest 12		5785 bundles 1500 " 2500 "	.01 .01 .01	37.68 15.00 25.00		
'Total acreage of	eut over		Total inco	ome Timber (23	6.25	Flag	\$77.65	
No. of units re	Cords			slash disposal		<u>)</u>		1622