

REVIEW AND APPROVALS

GRULLA NATIONAL WILDLIFE REFUGE

Arch, New Mexico

ANNUAL NARRATIVE REPORT

Calendar Year 1996

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3/18/97
Date

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4-23-97
Date

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3/27/97
Date



GRL1-9/96

DRC

One of the several arroyos adjacent Salt Lake.

INTRODUCTION

Grulla National Wildlife Refuge is located in Roosevelt County, New Mexico near the small town of Arch, approximately 25 miles northwest of the Muleshoe National Wildlife Refuge. The refuge comprises 3,236 acres. The saline lake bed of Salt Lake consists of 2,330 acres and the remainder of the refuge is grassland. Grulla was officially established as a National Wildlife Refuge on November 6, 1969 by Public Land Order No. 4742 transferring the land from BLM.

The refuge is beneficial as a wintering area for lesser sandhill cranes when the lake holds water. Although the flat lake bed is often dry or nearly dry for several years in a row, when sufficient water is present large concentrations of cranes use the refuge as a roosting site.

INTRODUCTION

TABLE OF CONTENTS

	Page
A. HIGHLIGHTS	
	1
B. CLIMATIC CONDITIONS	
	1-2
C. LAND ACQUISITION	
1. Fee Title.....	NTR
2. Easement.....	NTR
3. Other.....	NTR
D. PLANNING	
1. Master Plan.....	NTR
2. Management Plan.....	NTR
3. Public Participation.....	NTR
4. Compliance with Environmental Mandates and Cultural Resource Mandates.....	NTR
5. Research and Investigations.....	NTR
6. Other.....	NTR
E. ADMINISTRATION	
1. Personnel.....	3
2. Youth Programs.....	4
3. Public Participation.....	NTR

4.	Volunteer Programs.....	4-5
5.	Funding.....	5
6.	Safety.....	5
7.	Technical Assistance.....	NTR
8.	Other Items.....	6

F. HABITAT MANAGEMENT

1.	General.....	7
2.	Wetlands.....	8-10
3.	Forests.....	NTR
4.	Croplands.....	NTR
5.	Grasslands.....	11-14
6.	Other Habitats.....	NTR
7.	Grazing.....	15-16
8.	Haying.....	NTR
9.	Fire Management.....	NTR
10.	Pest Control.....	NTR
11.	Water Rights.....	NTR
12.	Wilderness and Special Areas.....	NTR
13.	WPA Easement Monitoring.....	NTR

G. WILDLIFE

1.	Wildlife Diversity.....	NTR
2.	Endangered and/or Threatened Species.....	NTR
3.	Waterfowl.....	16
4.	Marsh and Water Birds.....	16
5.	Shorebirds, Gulls, Terns, and Allied Species.....	16
6.	Raptors.....	16
7.	Other Migratory Birds.....	NTR
8.	Game Mammals.....	NTR
9.	Marine Mammals.....	NTR
10.	Other Resident Wildlife.....	17
11.	Fisheries Resources.....	NTR
12.	Wildlife Propagation and Stocking.....	NTR
13.	Surplus Animal Disposal.....	NTR
14.	Scientific Collections.....	NTR
15.	Animal Control.....	NTR
16.	Marking and Banding.....	NTR

17.	Disease Prevention and Control.....	NTR
-----	-------------------------------------	-----

H. PUBLIC USE

1.	General.....	17
2.	Outdoor Classrooms - Students.....	NTR
3.	Outdoor Classrooms - Teachers.....	NTR
4.	Interpretive Foot Trails.....	NTR
5.	Interpretive Tour Routes.....	NTR
6.	Interpretive Exhibits/Demonstrations.....	NTR
7.	Other Interpretive Programs.....	NTR
8.	Hunting.....	NTR
9.	Fishing.....	NTR
10.	Trapping.....	NTR
11.	Wildlife Observation.....	17
12.	Other Wildlife Oriented Recreation.....	NTR
13.	Camping.....	NTR
14.	Picnicking.....	NTR
15.	Off-Road Vehicling.....	NTR
16.	Other Non-Wildlife Oriented Recreation.....	NTR
17.	Law Enforcement.....	17-18
18.	Cooperating Associations.....	NTR
19.	Concessions.....	NTR

I. EQUIPMENT AND FACILITIES

1.	New Construction.....	NTR
2.	Rehabilitation.....	19-21
3.	Major Maintenance.....	NTR
4.	Equipment Utilization and Replacement.....	NTR
5.	Communications Systems.....	NTR
6.	Computer Systems.....	NTR
7.	Energy Conservation.....	NTR
8.	Other.....	NTR

J. OTHER ITEMS

1.	Cooperative Programs.....	NTR
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2.	Other Economic Uses.....	NTR
3.	Items of Interest.....	22
4.	Credits.....	22

K. FEEDBACK NTR

L. INFORMATION PACKET

(Inside Back Cover)

A. HIGHLIGHTS

- Average rainfall was recorded for the year (Section B)
- Salt Lake was nearly dry throughout the year (Section F.2)
- Few sandhill cranes were observed (Section G.4)
- Vandals finished destroying the parking lot rail fence (Section H.17)

B. CLIMATIC CONDITIONS

Weather during the first of the year was unseasonably mild but dry and windy. No precipitation was received until May. Even then only .34 inches was recorded for the entire month. Summer weather arrived in May when temperatures above 100°F were recorded.



GRL2-8/96

DRC

Salt Lake comprises 2,330 acres and is often dry year-round.

The dry spell ended in June when 4.07 inches of rain were recorded for the month. Temperatures were high and the highest recorded for the month was 104°F. Three inches of precipitation was received in July but the wettest month of the year was August when 7.22 inches of rain fell during the month.

Weather was mild but mostly dry the remainder of the year. During September through November only 1.50 inches of precipitation was recorded and none at all was received in December.

Total precipitation recorded for the year was 16.13 inches compared to 12.78 recorded for 1995. Although average annual precipitation was received, it did not contribute much moisture to the vegetation and lake bed since most all of it was received during June through August.

E. ADMINISTRATION

1. Personnel

No personnel are stationed at the refuge. The refuge is administered from Muleshoe NWR.



GRL3-12/96

HC

Refuge staff from left to right -
Don Clapp, Refuge Manager, GS-11 (EOD 6/87), PFT
Glenda Copley, Office Assistant, GS-6 (EOD 7/87), PFT
Dean Gilliam, Maintenance Worker, WG-8 (EOD 1/78), PFT

2. Youth Programs

AmeriCorps member Jack Bush, stationed at Muleshoe NWR, contributed several hours throughout the year conducting wildlife inventories, reading traffic counters, litter removal, and boundary post/sign rehabilitation.



GRL4-4/96

Jack Bush, AmeriCorps Member

DRC

4. Volunteers

Raymond Stokes, who lives three miles northwest of the refuge at Arch, New Mexico, was a refuge volunteer throughout the year. Mr. Stokes maintained precipitation records and also reported general observations of waterfowl and sandhill crane populations in the area.

Volunteers Carlos Contreras, Carlos Contreras Jr., and Scott Modderman contributed approximately 40 hours of volunteer work on the refuge this year. Duties pertained to wildlife surveys, fence construction/removal, litter removal, and boundary posting/rehabilitation.

5. Funding

<u>Refuge Funding FY 92-96</u>		
FY	Total	MMS
96	0	4,000
95	0	0
94	2,000	0
93	1,000	5,900
92	2,000	5,800

Grulla NWR received MMS funding to replace the deteriorated split rail fence at the visitor parking area. Force account expenses for the refuge amounted to nearly \$1,000 and had to be paid from Muleshoe NWR's restricted budget. These expenses pertained to repairing vandalism damages and rehabilitating boundary posts/signs and fences.

6. Safety

Monthly safety meetings were held at the Muleshoe NWR.

8. Other Items

Training and Meetings

Refuge Manager Clapp

- Law Enforcement Refresher
Training, Marana, AZ
February 13 - 17
- OSHA Collateral Duty Safety
and Health Training,
Albuquerque, NM
March 31 - April 4
- Pesticide Certification
Training, Lubbock, TX
April 19
- Motor Boat Safety Training,
Washita NWR, Butler, OK
August 12 - 16
- Firearms Requalification
Sevilleta NWR, Socorro, NM
September 24
- NRCS Farm Program Workshop,
Muleshoe, TX
October 7
- Project Leaders Meeting
Albuquerque, NM
December 2-6

Office Assistant Copley

- Administrative Assistant
Professional Skills Training
Lubbock, TX
August 6
- Administrative Conference
Albuquerque, NM
December 2 - 6

F. HABITAT MANAGEMENT

1. General

The refuge comprises 3,236 acres of which 906 acres are grassland and 2,330 acres are saline lake bottom.



GRL5-4/96

The flat lake bed of Salt Lake covers over 2,000 acres.

DRC

2. Wetlands



GRL6-6/96

High winds formed some unique sand dunes.

DRC



GRL7-8/96

Eroded sand dunes on the southeast side of Salt Lake.

DRC

The 2,330 acre lake bed of Salt Lake remained dry or nearly dry throughout the entire year. Summer rains contributed traces of water in the lake bed during June through September. There is no management of the lake basin since part is privately owned as well as is most of the lake access.



GRL8-8/96

More sand

DRC



GRL9-9/96

Summer rains put some water in Salt Lake.

DRC



GRL10-10/96

The southeast side of Salt Lake.

DRC

5. Grasslands



GRL11-8/96

More sand dunes on the south side of Salt Lake.

DRC



GRL12-5/96

Some gullies were nearly filled with sand.

DRC

Except for a small area adjacent the entrance road the refuge boundary is not fenced since it extends through the lake bed in several areas. Although acquisition of an abandoned road right-of-way in 1983 allowed access to a small portion of the refuge, acquisition of adjacent land would be required before any boundary fencing could be accomplished.



GRL13-8/96

DRC

One of several arroyos along the south side of Salt Lake.



GRL14-8/96

The southwest end of Salt Lake.

DRC



GRL15-9/96

Heavy rains in August green up refuge vegetation.

DRC



GRL16-9/96

DRC

In some areas the grass stands were invaded by weeds following last years drought.

Late summer rains rejuvenated refuge grasslands somewhat. Dry conditions during 1995 had left much of the grasslands in poor condition. In many areas some grasses had died out and were invaded by weeds and areas on slopes were severely eroded by high winds. Those areas suffered from wind erosion again this year. High winds blew sand from the lake bed onto the slopes on the south and east sides of Salt Lake completely covering grass stands in some areas.

7. Grazing

Cattle from adjacent lands have grazed on the refuge grasslands since 1969 when the land was acquired from the Bureau of Land Management and fencing was determined to be unfeasible.



GRL17-10/96

DRC

AmeriCorps member Jack Bush inspects grasslands
in the grazed portion of the refuge.

Adjacent land owners have expressed an interest in some type of land exchange which might be to their advantage as well as the Service's. So far nothing has been accomplished toward any type of land exchange due to the lack of refuge personnel and adequate funding.

Inspections of grasslands during 1994 and 1995 indicated that approximately 570 acres of the nearly 760 acres of grassland with access from adjacent privately owned grasslands was actively grazed during the year. Remaining areas on both sides of the lake were not grazed due to cross fences or were adjacent farm fields and contained mature grasses.

G. WILDLIFE

3. Waterfowl

The only waterfowl observed on Salt Lake this year were 24 gadwall during mid-August.

4. Marsh and Water Birds

A few hundred lesser sandhill cranes were observed adjacent the refuge throughout the fall months. The only crane observations on the refuge occurred during mid-October when 12 were sighted on Salt Lake.

5. Shorebirds, Gulls, Terns, and Allied Species

Due to the extreme dry conditions again this year, few shorebirds were observed.

During July 14 American avocet were observed along the north side of Salt Lake.

A few Baird's sandpipers, semipalmated sandpipers, killdeer, and American avocet, were seen on Salt Lake throughout August.

6. Raptors

Turkey vultures and golden eagles were occasionally seen on the refuge or nearby. Others observed included northern harrier, American kestrel, Swainson's hawk, ferruginous hawk, and red-tailed hawk.

10. Other Resident Wildlife

Ring-necked pheasant, scaled quail, and lesser prairie chicken were often seen on or near the refuge.

H. PUBLIC USE

1. General

Approximately 680 visitors used the refuge this year, this is 230 less than the number recorded for 1995. Many of the refuge visitors are from the Portales, New Mexico area, approximately 30 miles west of the refuge. The Eastern New Mexico University is at Portales.

During recent years improvements to the refuge have included an entrance road, parking area, interpretive trail and signs, entrance signs, and a traffic counter.

11. Wildlife Observation

The majority of the public use at Grulla pertains to wildlife/wildlands observation. There are no facilities on the site.

17. Law Enforcement

Enforcing refuge regulations at Grulla is difficult because of the distance from Muleshoe NWR and few available personnel. There is only one staff member at the Muleshoe NWR with law enforcement authority.



GRL18-6/96

DRC

The parking lot rail fence after the section destroyed
by vandals was removed.

Vandalism occurred at the refuge parking area three times this year. At the first of the year someone had shot the refuge entrance sign. Vandals had rammed the parking area rail fence with a vehicle on two separate occasions during mid-summer.

I. EQUIPMENT AND FACILITIES

2. Rehabilitation



GRL19-7/96

DRC

Temporary parking lot fence and turnstile. It appears that vandals have avoided ramming this fence with vehicles like they did the rail fence.

Due to vandalism, rail fence repair was conducted at the parking area during late summer. The rail fence was temporarily replaced with a barbed wire fence.



GRL20-4/96

DRC

The "sand removal crew" consisted of Maintenance Worker Gilliam and volunteer Modderman.

High winds had covered approximately three-fourths of a mile of fence along the refuge's fenced portion of grasslands adjacent Salt Lake. The refuge's dozer was used to clear the sand from the fence during April.



GRL21-4/96

DRC

Maintenance Worker Gilliam clearing sand from the refuge's interior fence adjacent Salt Lake.



GRL22-5/96

DRC

The wooden posts and boundary signs installed two years ago were still visible among the sand dunes in most areas.

J. OTHER ITEMS

3. Items of Interest



GRL23-7/96

DRC

One of the many buffalo horns along with bones uncovered by high winds in the Salt Lake bed.

During mid-June refuge personnel were notified that Eastern New Mexico University (ENMU) Anthropology Department staff members and the Regional Office Archeologist had visited the Salt Lake bed and inspected some 60 bison carcass sites on June 6. Horns, bones, and flint chips were evident. Apparently area artifact hunters had given the information regarding the bones to ENMU personnel who in turn notified Regional Office personnel. Evidently the strong spring winds had scoured the lake bed exposing the bones.

4. Credits

This report was written by Manager Clapp and printed and assembled by Office Assistant Copley.

Photograph credits: DRC - Don Clapp, HC - Hilda Contreras.

GRULLA NATIONAL WILDLIFE REFUGE

Roosevelt County, New Mexico

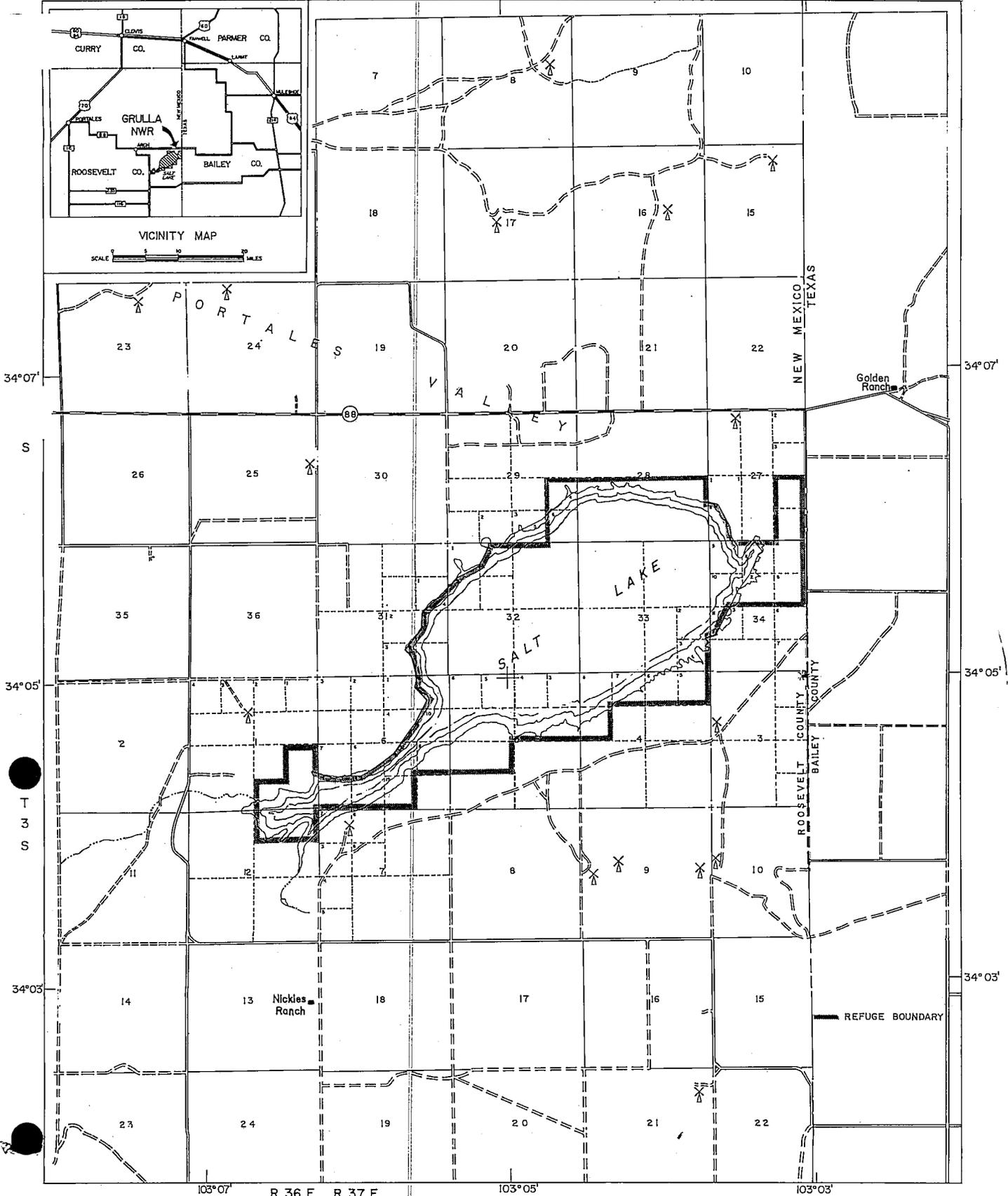
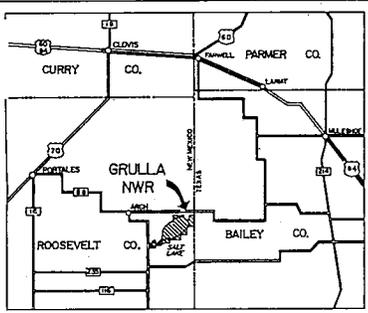
UNITED STATES
DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

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COMPILED IN THE DIVISION OF ENGINEERING
FROM G. L. O. PLATS, U. S. G. S. QUADRANGLES,
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ALBUQUERQUE, NEW MEXICO

JUNE, 1970

SIXTH PRINCIPAL MERIDIAN



MEAN
DECLINATION
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