

**JUNE 3, 1998**  
**MOUNTAIN PLOVER**  
**EXTENSIVE SURVEYS**  
**KIOWA AND RITA BLANCA NATIONAL GRASSLANDS**

**FINAL REPORT**  
**KEITH M. KINTIGH**  
**CONTRACT BIOLOGIST**

**Introduction**

The mountain plover (*Charadrius montanus*) has long been a species of concern in the short grass prairie. Breeding populations have steadily declined throughout the century. The current breeding range of mountain plover (MOPL) includes portions of National Grassland in northeastern New Mexico, western Oklahoma, and northwestern Texas. In 1993, a petition was filed to list the species as threatened under the Endangered Species Act. In addition, MOPL is a Forest Service Sensitive Species for the Kiowa and Rita Blanca National Grasslands. These factors have prompted an evaluation of the status of MOPL on the Kiowa and Rita Blanca National Grasslands in New Mexico, Oklahoma, and Texas.

**Objectives**

The primary objectives of this project were to 1) conduct extensive surveys for MOPL in suitable habitat on the Rita Blanca National Grassland; 2) identify areas of potential habitat for future MOPL management projects; and 3) conduct an intensive survey of the National Grassland portion of the burn located in T26N, R36W, Section 28, Union County New Mexico. Suitable habitat was defined as >80 acre expanses of flat topography (<5%) in short grass prairie dominated by blue grama (*Bouteloua gracilis*) and buffalo grass (*Buchloe dactyloides*), up to 3 to 4 inches tall.

**Study Area and Methods**

Efforts were concentrated on all tracts of the Rita Blanca National Grassland that fell, either entirely or in part, within in the state of Oklahoma, T1N R1E-R5E (Figure 1). In addition, select portions of the Rita Blanca National Grassland within the state of Texas (units 6, 18, 19, 20, 22, 44, 45, 46, and 47) and a single unit of the Kiowa National Grassland, T26N, R36W, Section 28 (unit 40) in New Mexico were also surveyed. Visual surveys to detect nesting MOPL were conducted in suitable weather (no rain, sustained winds < 20m.p.h.) between the hours of 0630 and 1000 from 20 April to 10 May 1998. Each Grassland unit was scanned and assessed for habitat quality. In suitable tracts, routes were driven or walked along public primary and secondary roads (Figure 1). Scanning stops were 3 minutes long at 0.5-mile intervals along routes. At each stop, a 360-degree visual scan with 8x35 power binoculars was conducted. All incidental sightings of species of special concern were noted.

## **Results and Discussion**

The survey resulted in the detection of a single MOPL on 24 April 1998, withing the burn site in unit 40, Kiowa National Grassland, New Mexico. Only 2 units were considered to have high habitat potential, unit 40 on the Kiowa and unit 19 on the Rita Blanca (Table 1). Seven units were considered to have medium habitat potential and may be good candidates for future management. These are units 120, 124, 100, 107, 116, 134, and 22 on the Rita Blanca. The remaining units were considered to have low habitat potential because of a high density of residual vegetation and shrubs, and/or poor topography. In Total, 31 units were surveyed with 17.25 hours of effort (Table 2). The average daily survey effort was 7 units over 3.5 hours of survey time and 1 hour of commute time. Prominent incidental species included long-billed curlew, ring-necked pheasant and loggerhead shrike (Figure 2, Table 2).

Table 1. Rita Blanca National Grassland unit assessment for MOPL habitat and management potential, April - May 1998.

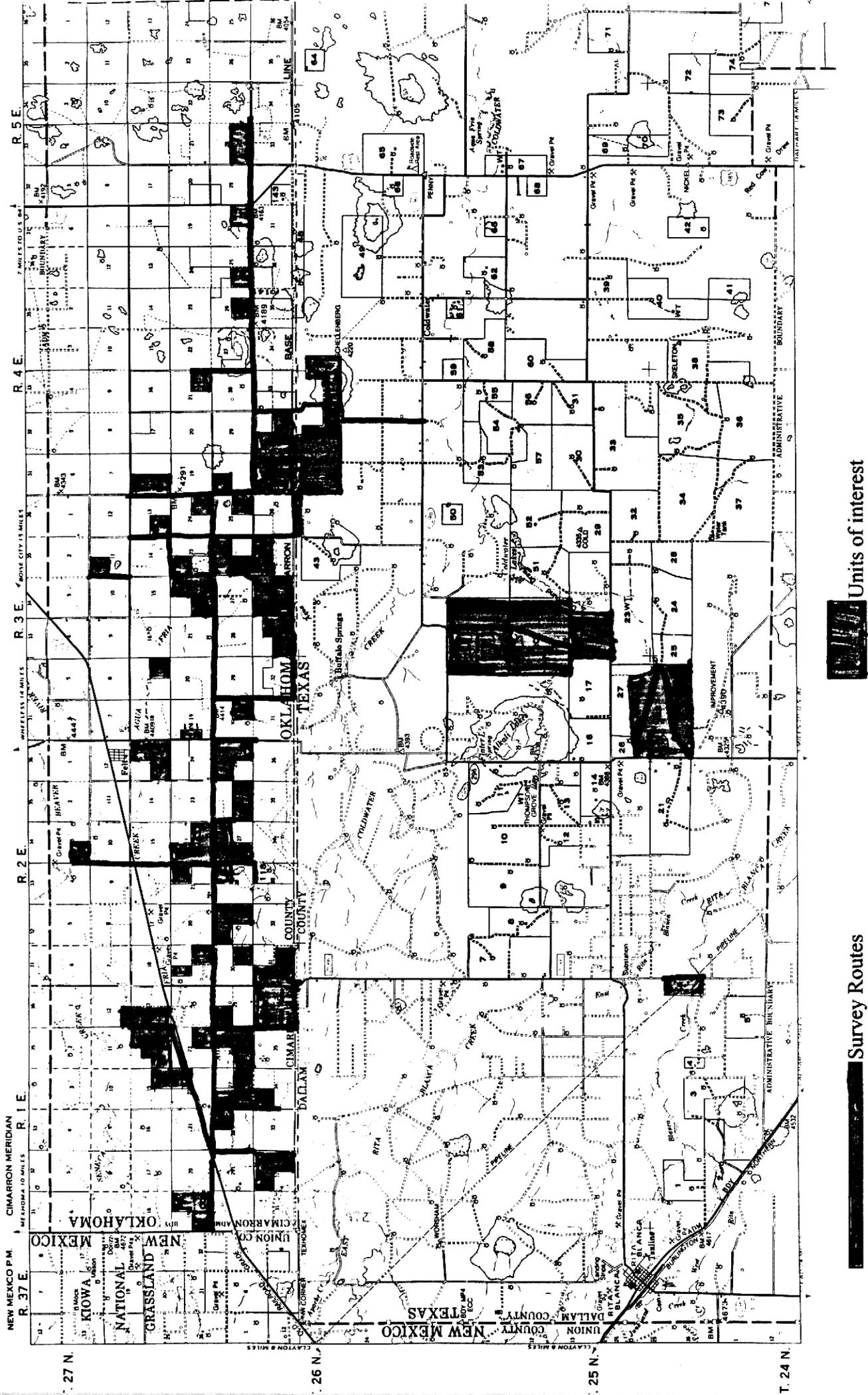
Unit	Veg. Status	Suitable Topo.	Potential	Notes
113	Residual growth >6in.	E end-Y, W end-N	Low	
123	Residual growth, >6in.	Y	Low	
120	SE 1/4 sec good	Y	Med	
122	Some residual	Y	Low	Prairie Dog Town, NE corner
124/125	Residual growth off PDT	Y	Med	Very Large PDT
129	Res. >6in. Yucca	Y	Low	
128	Res. >6in. Yucca	Y	Low	
130	Res. >6in. Yucca	Y	Low	
100	S end good	Y	Med	
102	Res. >6in	N	Low	
105/106	Res. >6in	Y	Low	Small PDT around stock tank
103	Res. >6in. Yucca	Y	Low	Again, only suitable area is around stock tanks
107	NE area good	Y	Med	Scanned for 5 min, no MOPL
108	Res. >6in	Y	Low	
109	Thick Residual	Y	Low	
116	W end good patches	Y	Med	
118	Res. >6in	N	Low	Draw through middle of unit
114	Res. >6in.	Y	Low	
117	Res. >6in	Y	Low	
112	Res. >6in. Dense shrubs	Y	Low	Very Sandy soils
132/133	Res. >6in	Y	Low	
134/135	Intermittent Residual	Y	Med	Good burn candidate
136	Res. >6in	Y	Low	Plays with no standing water, platform damaged
137	Small suitable patches	Y	Low	PDT, and windmill area suitable, ~20min investigating
138	Res. >6in. yucca	Y	Low	Sandy soils
139	Very high res.	Y	Low	
141	Res. >6in. shrubs	Y	Low	
140	Res. >6in	N	Low	
6	Res. >6in. Dense shrubs	Y	Low	Sandy soils
22	Small patches	Y	Med	Good batches along south-central edge of unit
19	Good habitat	Y	High	Surveyed, no plover. Recommend future intensive survey

Table 2. List of Mountain Plover Survey incidental encounters of USFS sensitive species and species of interest, April - May, 1998.

Date	Species	Number	Location	Notes
4/24/98	Ferruginous hawk	1	Unit 120	Identified by Dan Svingen, FS Biologist
4/24/98	Long-billed curlew	2	Unit 120	
4/24/98	Ring-necked pheasant	2	Unit 120	At windmill
4/24/98	Black-tailed Prairie Dogs		Unit 122	Small colony in N.E. corner of Unit
4/24/98	Long-billed curlew	2	Unit 122	
4/24/98	Water pipit	1	Unit 122	Call identified by Dan Svingen, FS Biologist
4/24/98	Swainson's hawk	1	N.E. of Unit 122	Nest, identified by Dan Svingen, FS Biologist
4/24/98	Black-tailed Prairie Dogs		Units 124, 125, 127	
4/24/98	Peregrine falcon	1	OK TIN R 3E Sec. 20	S. end of section in ag. field. ID'd by D.S. USFS
4/24/98	Burrowing owl	15+	Units 124, 125, 127	On prairie dog town
4/24/98	Long-billed curlew	2	Unit 125	
4/24/98	Scaled Quail	1	Unit 125	
4/24/98	Loggerhead shrike	1	Unit 128	
4/24/98	Ferruginous hawk	1	Unit 40	Nest, identified by Dan Svingen, FS Biologist
4/24/98	Burrowing owl	1	Unit 40	On burn
4/24/98	Mountain plover	1	Unit 40	On burn
5/2/98	Ring-necked pheasant	1	Unit 100	
5/2/98	Loggerhead shrike	1	Unit 100	
5/2/98	Loggerhead shrike	1	N of Unit 109	
5/2/98	Loggerhead shrike	1	Unit 115	
5/2/98	Long-billed curlew	1	N of Unit 115	On State Land
5/2/98	Swainson's hawk	2	Between Unit 109 and 115	
5/2/98	Swainson's hawk	1	Unit 116	May have flushed off nest?
5/2/98	Loggerhead shrike	1	Unit 116	
5/2/98	Black-tailed Prairie Dogs		Units 105, 106	
5/2/98	Burrowing owl	2	Unit 106	On prairie dog town
5/2/98	Scaled Quail	1	Unit 105	
5/7/98	Long-billed curlew	1	W of Unit 135	
5/7/98	Long-billed curlew	1	Unit 135	
5/7/98	Ring-necked pheasant	1	N Unit 132	
5/7/98	Ring-necked pheasant	1	S Unit 132	
5/7/98	Black-tailed Prairie Dogs		Unit 137	
5/7/98	Burrowing owl	2	Unit 137	On prairie dog town
5/8/98	Loggerhead shrike	1	East of Unit 137	
5/8/98	Scaled Quail	1	Unit 22	In habitat enclosure
5/8/98	Swainson's hawk	1	Unit 22	Questionable ID, on nest

**Notes:**

Day 1: Start time 6:30 am, End 11:00 am.  
 Day 2: Start time 6:00 am, End 10:00 am  
 Day 3: Start time 6:30 am, End 10:00 am  
 Day 4: Start time 6:15 am, End 9:30 am  
 Day 5: Start time 7:30 am, End 9:30 am



**Survey Routes**



**Units of interest**

Figure 1. MOPL survey routes and units of interest on the Rita Blanca National Grassland, Oklahoma & Texas, April - May 1998.

