# Inventory of Breeding Birds on Red Mountain Open Space



Photo: Bill Schmoker

# 2007



# **Rocky Mountain Bird Observatory**

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Tech. Report # M-RMOS07-01

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## **ROCKY MOUNTAIN BIRD OBSERVATORY**

The mission of the Rocky Mountain Bird Observatory (RMBO) is the conservation of birds of the Rocky Mountains, Great Plains, and Intermountain West, and the habitats on which they depend. RMBO practices a multi-faceted approach to bird conservation that integrates scientific research and monitoring studies with education and outreach programs to bring bird conservation issues to the public and other conservation partners. RMBO works closely with state and federal natural resource agencies, private landowners, schools, and other nonprofit organizations. RMBO accomplishes its mission by working in four areas:

Research: RMBO studies avian responses to habitat conditions, ecological processes,

and management actions to provide scientific information that guides bird

conservation efforts.

**Monitoring**: RMBO monitors the distribution and abundance of birds through long-term,

broad-scale monitoring programs designed to track population trends for

birds of the region.

Education: RMBO provides active, experiential, education programs for K-12 students in

order to create an awareness and appreciation for birds, with a goal of their

understanding of the need for bird conservation.

Outreach: RMBO shares the latest information in land management and bird

conservation practices with private landowners, land managers, and resource professionals at natural resource agencies. RMBO develops voluntary, working partnerships with these individuals and groups for habitat

conservation throughout the Great Plains and Rocky Mountains.

#### Suggested Citation:

Robert A. Sparks, D.J. Hanni, and S.W. Gillihan. 2007. *Inventory of Breeding Birds on Red Mountain Open Space*. Tech. Rep. M-RMOS07-01. Rocky Mountain Bird Observatory, Brighton, CO, 15 pp.

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# **EXECUTIVE SUMMARY**

In 2007, Rocky Mountain Bird Observatory (RMBO) was contracted by Larimer County Open Lands Program to conduct a bird inventory on the northern portion of Red Mountain Open Space (RMOS) located in Larimer County, Colorado. The purpose of the inventory was to compile a list of species detected on RMOS, their associated habitats, relative abundance, and breeding status, and to formulate management recommendations. We searched sites representative of the major habitat types present, including grassland, shrubland, riparian, and ponderosa pine. We detected a total of 1,109 individual birds of 74 species, including 29 species of conservation concern. Inventories were conducted on 7 and 11 June, and 17, 18, 20, and 21 July. The most commonly encountered species were Violet-green Swallow, Mourning Dove, Green-tailed Towhee. House Wren, and Spotted Towhee. Specific management recommendations include protecting key habitat areas of high conservation value (Haygood Canyon, Boxelder Creek and mountain mahogany shrubland communities) from fragmentation and buffered from uses, protecting raptor nesting sites from disturbance, maintain cottonwood stands and pockets of mature ponderosa pine and Douglas fir and continuing bird inventory and population monitoring.

## **ACKNOWLEDGMENTS**

We would like to thank: Larimer County Open Lands Program for providing funding for this project; RMBO's members for ongoing support of general operations; and the talented and hard-working field technicians who collected the data: Arvind Panjabi, Scott Severs, and Rob Sparks.

# **TABLE OF CONTENTS**

Executive Summary	i
Acknowledgments	
Table of Contents	
Introduction	1
Methods	
Field Personnel	2
Site Selection	2
Inventory Protocol	2
Results	
Discussion and Management Recommendations	4
Literature Cited	
Appendix A. Bird species, breeding status, and number of individuals detected	
during area searches, by search site, on Red Mountain Open Space	. 12
Appendix B. List of bird species observed on Red Mountain Open Space during	
inventory, with management designation	. 15

#### INTRODUCTION

Red Mountain Open Space (RMOS) is a 13,500-acre parcel of rolling foothills grassland and shrubland with riparian areas and open ponderosa pine woodlands (Figure 1). It is located in northern Larimer County, Colorado, approximately 15 miles (24 km) north of the City of Fort Collins. The property is owned and managed by Larimer County Natural Resources Department. To the east is the 18,728-acre Soapstone Prairie Natural Area (SPNA), which is owned and managed by the City of Fort Collins. The respective government agencies are actively working to manage the properties as a large landscape block with similar long-term goals, including preservation of the rich diversity of birds and other wildlife.

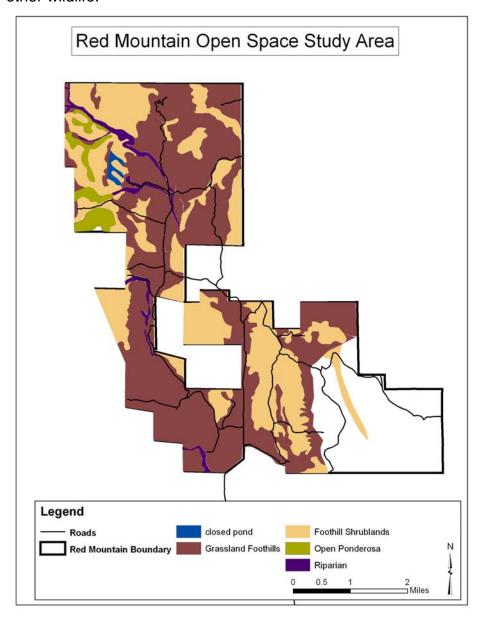


Figure 1. Red Mountain Ranch Study Area.

Rocky Mountain Bird Observatory (RMBO) is also currently collaborating with the City of Fort Collins to inventory and monitor the breeding birds on SPNA. Specifically, the City and County are interested in how birds may respond to changes in recreation and management. Since RMOS and SPNA are adjacent and managed cooperatively, generating a baseline of the bird species presence and relative abundance on RMOS offers a better picture of the bird diversity in the area and, in turn, allows for better, more coordinated management of the properties.

To that end, RMBO in 2007 implemented standardized inventory techniques (habitat-based area searches) on RMOS to compile a list of species present during the breeding and migration stages of their life histories. In addition, this inventory was designed to identify associated habitats and determine relative abundance for each of the bird species detected. Together, this information can then inform land-management decisions.

# **METHODS**

#### **Field Personnel**

Field technicians all had extensive prior experience in identifying birds through sight, song, and call. In addition, they were trained in plant identification and inventory protocol specific to this project.

#### **Site Selection**

Sites searched were: Haygood Canyon, the gulch south of Haygood Canyon, the ridge north of Haygood Canyon, the top western part of Haygood Canyon, Boxelder Creek, open ponderosa pine woodlands, grasslands and foothill shrublands. These sites are representative of the habitats present on RMOS. Because the primary goal of the inventory was to determine the status of expected species that had not been previously documented, observers focused on searching habitats where such species would most likely be found. The field technicians also emphasized searching habitats known to be of particular value to birds such as wetlands, creeks, and cliffs.

# **Inventory Protocol**

Field technicians visited and thoroughly searched every selected site on the property to document the presence of bird species. Although they made no special effort to locate nests, technicians documented active nests and in cases of rare or otherwise important species, recorded their locations using hand-held Garmin<sup>®</sup> E-trex<sup>TM</sup> Global Positioning System (GPS) units.

Most birds observed during the inventory, particularly small passerines, were assumed to be breeding on the property or surrounding vicinity, except for wideranging species with specific nesting needs that were not likely met (e.g., cliffnesting swifts or raptors with no cliffs, or colonial waterbirds with no obvious colonies or colony sites). Unless specifically noted in the results, it is assumed that most birds documented were nesting on the property.

## **RESULTS**

We conducted inventories on 7 and 11 June, and 17, 18, 20, and 21 July. A total of 1,109 birds of 74 species were detected (Appendix A). In addition, we found the distinctive nest of an American Dipper in Haygood Canyon, but were unsure if this nest was currently being used as no adults were seen at the nest. We also documented an active nest location within Haygood Canyon and two possible alternate nests for Golden Eagle. The most commonly encountered species were Violet-green Swallow, Mourning Dove, Green-tailed Towhee, House Wren, and Spotted Towhee.

We documented 71 species that were probable or confirmed breeders on Red Mountain Open Space. Other species detected were either migratory or passing over RMOS. These species included the Rufous Hummingbird and Prairie Warbler. The other species documented, American White Pelican, was found dead on the property. This species is a colonial waterbird and was passing through the area since there is no suitable habitat on RMOS.

# DISCUSSION AND MANAGEMENT RECOMMENDATIONS

Birds are excellent indicators of environmental quality and change. In addition, they are one of the most highly visible and valued components of our native wildlife. Monitoring birds provides data needed not only to effectively manage bird populations, but also to understand the effects of human activities on ecosystems. Because bird communities reflect a broad array of ecosystem conditions, monitoring bird communities at the habitat level offers a cost-effective means for monitoring biological integrity at a variety of scales.

It should be kept in mind that the inventories were conducted as one to three day visits during a breeding season that lasts from April through July. By no means is the list complete. And while the dates chosen for the inventories generally correspond well to the peak period of detectability among most breeding birds, some species' peak detectability periods did not overlap with our visits. Nonetheless, the list should represent fairly well the core avifauna of Red Mountain, including some of the rarer species.

The inventory on RMOS revealed a diversity of birds species found in the various habitats on the ranch with 29 bird species on various conservation priority lists (Appendix B). The northern section of the ranch contains grasslands distributed in the central portion with foothill shrublands to the east and west. These are the two most extensive habitats on RMOS. Priority bird species in these habitats detected on the property are; Ferruginous Hawk, Loggerhead Shrike, Brewer's Sparrow, Vesper Sparrow and Lazuli Bunting. Less extensive habitats but of high conservation value are Boxelder Creek and Haygood Canyon which contain sensitive riparian habitat and hosts many priority bird species, American Dipper (probable), Golden Eagle, Prairie Falcon and White-throated Swift. An American Dipper nest was found in Haygood Canyon but the nest could not be verified as active. Golden Eagle, Prairie Falcon and White-throated Swift use the cliffs surrounding Haygood Canyon to nest on. Open ponderosa pine habitat and pockets of Douglas fir are found on the north western part of the ranch and also provide good habitat for many priority birds such as Broad-tailed hummingbird, Cordilleran Flycatcher, Pygmy Nuthatch and Virginia's Warbler. Cordilleran Flycatcher will also breed in riparian habitats that have a mature overstory as well as moist ravines where we have seen patches of Douglas fir. Virginia's Warbler prefers areas with shrubby understory within open ponderosa pine or patches of juniper.

The 2007 data coupled with additional surveys will improve our knowledge of what bird species are using Red Mountain Open Space as breeding or as migratory stopover habitat. Through additional surveys we will be able to target low density species which are generally either nocturnal, colonial or locally distributed within specific habitats. Most techniques aimed at locating low density species in small study areas employ censuses (i.e., all individuals within a defined area are counted), rather than sampling. Depending on the species, a

INVENTORY OF BREEDING BIRDS ON RED MOUNTAIN OPEN SPACE 2007

variety of techniques can be employed, including targeted area searches of specific habitats (e.g. cliffs, prairie-dog towns, burns, water bodies, wetlands, etc.), counts of colonial nesters at colonies, and call-response surveys using recorded vocalizations (for both diurnal and nocturnal species).

#### Management recommendations:

- Haygood Canyon should have limited to no recreational use since it hosts many priority species as well as sensitive habitats.
- Pockets of mature ponderosa pine and Douglas fir should be maintained for cavity nesting birds and other bird species that rely on mature pine stands for nesting.
- Boxelder creek should be buffered to minimize disturbance to this riparian habitat.
- The hogback west of Table Mountain should have limited access to recreational activities since there are nesting Golden Eagles in this area.
- The stands of cottonwood trees on the property should be maintained as they provide migration stopover habitat and nesting habitat for breeding birds.
- Continue bird inventory and monitoring in conjunction with efforts at Soapstone Prairie to inform management decisions.

## Management recommendations for species of concern in Appendix B:

Ferruginous Hawk: This species inhabits open areas such as grasslands, agricultural and semidesert areas (Andrews and Righter 1992). Nests are placed on outcrops, isolated trees or on the ground. Cliffs in and surrounding Haygood Canyon and the hogbacks should have minimal recreational use to minimize disturbance to this species. A ½ mile buffer around all raptor nests is recommended.

Golden Eagle: Breeds in similar habitat to Ferruginous Hawk as well as ponderosa pine and other forested habitats with rock outcrops. There should be minimal disturbance around nests for this and all raptor species. The same management recommendations for Ferruginous Hawk apply to this species.

Prairie Falcon: This species breeds on cliffs or bluffs in open areas (Andrews and Righter 1992). Ferruginous Hawk, Golden Eagle and Prairie Falcon have similar breeding habitat and can be managed similarly.

Common Nighthawk: Breeds in grasslands, sagebrush and semidesert shrublands, mixed conifer, agricultural areas and riparian habitats (Andrews and Righter 1992). Nests on the ground and may use gravel, sand, bare rock and other materials as substrate (Poulin, 1996). Maintaining open areas will create suitable habitat for this species.

White-throated Swift: This species nests on cliffs and ledges and forages in surrounding habitats. Haygood Canyon is the core breeding area for this species on RMOS. Disturbance should be minimal on the cliffs of Haygood Canyon when managing for this species.

Broad-tailed Hummingbird: This species breeds in ponderosa pine, Douglas-fir, lodgepole, foothill riparian forests and open meadows. Core habitat that should be maintained for this species is open ponderosa pine, open meadows and Douglas-fir habitat in the northwestern portion of RMOS.

Cordilleran Flycatcher: Coniferous and deciduous forests near streams or in moist ravines provides good breeding habitat for this species. It would be beneficial for this species to maintain edges, snags and riparian areas (Yanishevsky and Petring-Rupp, 1998).

Say's Phoebe: Breeds in grasslands and shrublands often near buildings (Andrews and Righter 1992). This species responds positively to moderate rural development (Yanishevsky and Petring-Rupp, 1998).

Logger-head Shrike: Open riparian areas, agricultural areas, grasslands and shrublands are ideal habitat for this species (Andrews and Righter 1992). Management for this species should aim at maintaining edge habitat, native prairie, fence lines and vegetation along stream banks (Yanishevsky and Petring-Rupp, 1998).

ROCKY MOUNTAIN BIRD OBSERVATORY

Plumbeous Vireo: This species breeds in ponderosa pine, aspen forests and foothill riparian forests (Andrews and Righter 1992). Mature ponderosa pine habitat should not be fragmented. Fragmentation may increase Brown-headed Cowbird parasitism (Yanishevsky and Petring-Rupp, 1998).

Warbling Vireo: This species prefers aspen forests, lowland and foothill riparian forests (Andrews and Righter 1992). This species is sensitive to removal of deciduous trees and practices that reduce canopy cover. Grazing of livestock in open meadows, building horse corrals and pack stations and habitat changes that favor Brown-headed Cowbirds are threats for this species (Yanishevsky and Petring-Rupp, 1998).

Clark's Nutcracker: Breeds primarily in spruce-fir, Douglas-fir and limber pine forests (Andrews and Righter 1992). Although this species usually breeds at higher elevations Douglas-fir habitat on the northwestern part of RMOS may provide breeding habitat for this species.

Black-billed Magpie: This species will breed in all open habitats with scattered trees and avoids both treeless grasslands and deserts and dense forested areas (Andrews and Righter 1992). The domed shaped nest this species builds provides nest sites for Long-eared Owls. Black-billed Magpies can tolerate recreational trails and light development.

Violet-green Swallow: Breeds mostly in aspen forests, around cliffs and in towns but also in coniferous and montane riparian forests (Andrews and Righter 1992). Its ability to breed in remote areas as well as near people has kept populations relatively stable (Brown et al. 1992).

Pygmy Nuthatch: Prefers breeding in ponderosa pine forests but may nest in aspens (Andrews and Righter 1992). Management for this species should be aimed at maintaining mature and old-growth stands and snags (Yanishevsky and Petring-Rupp, 1998).

Rock Wren: Primary breeding habitat is open, rocky slopes and around cliffs (Andrews and Righter 1992). Hogback ridges and rocky areas within Haygood Canyon should have little trail development to minimize impact on this species.

American Dipper: Breeds in mountain streams and rivers near bridges which have created nesting sites (Andrews and Righter 1992). The stream running through Haygood Canyon should be maintained for this species.

Mountain Bluebird: This species will breed in mountain grasslands and sage shrublands adjacent to open coniferous forests and aspen forests. Local breeding distribution in Colorado is affected by nest hole availability and has become more common locally where nest boxes are placed (Andrews and Righter 1992). Clear cutting small patches of forest creates more foraging habitat and retains sufficient numbers of cavities for nesting (Sullivan 1995). Rocky Mountain Bird Observatory

Virginia's Warbler: Breeds in dry dense hillside shrublands. As well as in riparian thickets ponderosa pine forests and pinon-juniper woodlands with shrubby understories (Andrews and Righter 1992). There is research that shows the practice of controlled burning to remove understory fuels has severe negative impact on amount of potential nesting sites and number of foraging opportunities (Olson and Martin 1999).

Yellow Warbler: Prefers lowland and foothill riparian forests and riparian willow shrublands (Andrews and Righter 1992). This species is absent from areas where there is little understory shrub cover due to intense disturbance and cattle grazing. Altering water ways such as diversion or ditching and removal of riparian vegetation will negatively impact Yellow Warblers (Yanishevsky and Petring-Rupp, 1998). This species can tolerate recreational trails within its breeding habitat.

Green-tailed Towhee: This species breeds in dry shrublands as well as in riparian shrublands and pinon-juniper woodlands (Andrews and Righter 1992). Beneficial management actions for this species are to maintain inherent edge and limit burning (Yanishevsky and Petring-Rupp, 1998).

Brewer's Sparrow: Breeds in sagebrush shrublands as well as other shrublands such as mountain mahogany or rabbitbrush (Andrews and Righter 1992). The most important conservation measure for Brewer's Sparrow is protection and restoration of native shrublands and shrub-steppe habitats (Rotenberry et al. 1999).

Vesper Sparrow: Breeds in grasslands, open shrubland with grasslands and open pinon-juniper woodlands (Andrews and Righter 1992). This species will benefit from grassland easements and other management programs to preserve and restore grasslands (Jones and Cornely 2002).

Lark Sparrow: This species will breed in grasslands, shrublands, open riparian areas and agricultural areas (Andrews and Righter 1992). Ground disturbance (grazing, prescribed burning, off road vehicles) will adversely impact this species (Yanishevsky and Petring-Rupp, 1998).

Lazuli Bunting: A regular breeder in Gambel oak shrublands and other hillside shrublands, lowland and foothill riparian forests in all habitats requires low shrubs (Andrews and Righter 1992). Research on human impacts shows this species frequents bird feeders and bird baths during breeding season with unknown impacts (Greene et al. 1996). Shrub removal will negatively impact this species as it depends on shrubs for nesting.

Western Meadowlark: This species is a common grassland breeder in Colorado and may also breed in croplands (Andrews and Righter 1992). Beneficial management includes maintaining native grasslands in early succession,

INVENTORY OF BREEDING BIRDS ON RED MOUNTAIN OPEN SPACE 2007

maintaining good ground cover, controlled grazing of livestock and providing elevated perches (Yanishevsky and Petring-Rupp, 1998).

Red Crossbill: Breeds in coniferous forests and is known to breed wherever food supplies are abundant (Andrews and Righter 1992). Management for this species should be aimed at maintaining mature and old-growth forests especially ponderosa pine (Yanishevsky and Petring-Rupp, 1998).

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APPENDIX A. BIRD SPECIES, BREEDING STATUS, AND NUMBER OF INDIVIDUALS DETECTED DURING AREA SEARCHES, BY SEARCH SITE, ON RED MOUNTAIN OPEN SPACE, Larimer County, Colorado, June–July 2007. Species are presented in taxonomic order using standard

names (American Ornithologists' Union 1998).

Common Name	Total Count	Status	Gulch S of Haygood	Haygood Canyon	Open p-pine	Ridge N of Haygood	Top of Haygood	Grassland	Box Creek	Hogback east of Table Mt.
American White Pelican <sup>2</sup>	1	М	-	-	-	-	-	1	-	-
Turkey Vulture	20	В	-	5	5	10	-	-	-	-
Sharp-shinned Hawk	1	В	-	1	-	-	-	-	-	-
Cooper's Hawk	1	В	-	-	-	1	-	-	-	-
Red-tailed Hawk	14	В	1	5	1	-	3	-	2	2
Ferruginous Hawk	1	P-B	-	1	-	-	-	-	-	-
Golden Eagle <sup>1,3</sup>	5	В	-	2	-	1	1	-	-	1
American Kestrel <sup>1</sup>	6	В	1	4	-	-	-	-	1	-
Prairie Falcon <sup>1</sup>	6	В	-	3	-	2	-	1	-	-
Rock Pigeon	2	В	-	2	-	-	-	-	-	-
Mourning Dove	64	В	36	19	1	5	-	3	-	-
Great Horned Owl	1	P-B	1	-	-	-	-	-	-	-
Long-eared Owl	1	P-B	1	-	-	-	-	-	-	-
Common Nighthawk	5	P-B	2	1	1	-	-	-	ı	2
White-throated Swift <sup>1</sup>	42	В	1	41	1	-	-	-	ı	-
Broad-tailed Hummingbird	5	В	3	-	1	-	1	-	ı	•
Rufous Hummingbird	1	М	-	1	•	-	-	-	1	-
Hairy Woodpecker	2	P-B	1	-	1	-	-	-	-	-
Northern Flicker	7	В	2	4	-	1	-	-	-	-
Western Wood-Pewee	50	В	4	4	•	1	1	40	1	-
Cordilleran Flycatcher	36	В	10	20	1	1	4	-	-	-
Say's Phoebe	5	P-B	-	-	-	-	-	1	-	4
Loggerhead Shrike	4	P-B	-	-	-	-	-	-	1	4
Plumbeous Vireo	24	В	7	11	2	2	2	-	-	-
Warbling Vireo <sup>1</sup>	21	В	6	12	-	1	2	-	-	-
Steller's Jay	21	P-B	13	6	-	-	2	-	-	-
Western Scrub-Jay	1	P-B	-	1	-	-	-	-	-	-

Common Name	Total Count	Status	Gulch S of Haygood	Haygood Canyon	Open p-pine	Ridge N of Haygood	Top of Haygood	Grassland	Box Creek	Hogback east of Table Mt.
Clark's Nutcracker	1	P-B	-	1	-	-	-	-	-	-
Black-billed Magpie	1	В	-	1	-	-	-	-	-	-
Common Raven	1	В	-	1	-	-	-	-	-	-
Violet-green Swallow	142	В	28	93	ı	10	1	10	-	-
Northern Rough-winged Swallow	6	P-B	-	1	-	-	2	3	-	
Cliff Swallow <sup>1</sup>	24	В	4	19	-	-	-	-	-	1
Black-capped Chickadee	7	В	-	7	-	-	-	-	-	
Mountain Chickadee	25	В	12	9	1	1	2	-	-	-
Bushtit	2	P-B	2	-	-	-	-	-	-	-
Red-breasted Nuthatch	4	В	-	2	2	-	-	-	-	-
White-breasted Nuthatch	6	В	4	2	-	-	-	-	-	-
Pygmy Nuthatch	19	В	9	1	9	-	-	-	-	-
Rock Wren	9	В	1	5	ı	1	2	-	-	-
House Wren	51	В	21	22	1	-	4	3	-	1
American Dipper <sup>1, 3</sup>	0	P-B	-	(1)	-	-	1	-	-	-
Blue-gray Gnatcatcher	13	В	6	4	2	1	•	-	-	
Mountain Bluebird	6	P-B	5	-	-	1	-	-	-	-
American Robin	45	В	10	24	1	4	6	-	-	-
Brown Thrasher <sup>1</sup>	1	P-B	-	-	-	-	-	-	-	1
European Starling	4	В	-	-	-	-	-	-	-	4
Cedar Waxwing	11	P-B	4	7	-	-	-	-	-	
Virginia's Warbler	24	В	7	4	2	3	8	-	-	-
Yellow Warbler	26	В	2	19	-	-	-	-	5	-
Yellow-rumped Warbler	1	P-B	-	-	1	-	-	-	-	-
Prairie Warbler	1	М	-	1	-	-	-	-	-	-
MacGillivray's Warbler	1	P-B	-	-	1	1	-	-	-	-
Yellow-breasted Chat	4	P-B	-	4	1	-	-	-	-	
Western Tanager	3	P-B	-	1	1	1	-	-	-	-
Green-tailed Towhee <sup>1</sup>	53	В	18	17	4	8	5	-	1	-

Common Name	Total Count	Status	Gulch S of Haygood	Haygood Canyon	Open p-pine	Ridge N of Haygood	Top of Haygood	Grassland	Box Creek	Hogback east of Table Mt.
Spotted Towhee	53	В	18	25	•	4	5	1	-	-
Chipping Sparrow	7	P-B	2	5	-	-	-	-	-	-
Brewer's Sparrow <sup>1</sup>	7	В	6	-	-	1	-	-	-	-
Vesper Sparrow	2	В	-	1	ı	1	-	-	-	-
Lark Sparrow	13	В	-	7	1	-	-	5	-	1
Song Sparrow	10	В	3	6	1	-	1	-	-	-
Black-headed Grosbeak	31	В	18	7	ı	2	4	-	-	
Blue Grosbeak	3	P-B	1	-	1	-	-	-	1	1
Lazuli Bunting <sup>1</sup>	18	В	-	16	1	-	-	-	2	
Indigo Bunting	1	P-B	-	1	ı	-	-	-	-	
Western Meadowlark	10	В	-	-	-	-	-	10	-	-
Brewer's Blackbird	9	В	3	3	-	-	-	-	-	3
Brown-headed Cowbird	45	В	20	23	ı	-	-	1	1	-
Bullock's Oriole	4	В	1	2	-	-	-	-	1	-
House Finch	1	В	1	-	-	-	-	-	-	-
Red Crossbill	22	P-B	-	21	-	1	-	-	-	-
Lesser Goldfinch	6	В	-	5	-	-	1	-	-	
American Goldfinch	46	В	8	18	1	-	2	1	-	16

Other evidence of breeding found (e.g. Feeding young), Status: Breeding = B, Potential Breeding = P-B, Migratory = M.

Found dead
Nest found

# APPENDIX B. LIST OF BIRD SPECIES OBSERVED ON RED MOUNTAIN OPEN SPACE DURING INVENTORY, WITH MANAGEMENT DESIGNATION.

	Species Management Designation <sup>2</sup>					
Common Name <sup>1</sup>	USFS	USFWS	BLM	CDOW		PIF-BCR18
American White Pelican			SS	SGCN		
Ferruginous Hawk	R2SS	BCC	SS	SGCN	RC	RC,RS
Golden Eagle <sup>1</sup>		BCC		SGCN	RC	
Prairie Falcon		BCC		SGCN	RC	RC
Common Nighthawk					RC	RC
White-throated Swift				SGCN	CC,RS	CC
Broad-tailed Hummingbird				SGCN	RS	
Rufous Hummingbird				SGCN		
Cordilleran Flycatcher				SGCN	RS	
Say's Phoebe					RS	RS
Loggerhead Shrike	R2SS	BCC		SGCN	RC	RC
Plumbeous Vireo					RS	
Warbling Vireo					RS	
Clark's Nutcracker					CS,RS	
Black-billed Magpie					RS	
Violet-green Swallow					RS	
Pygmy Nuthatch				SGCN	RC	
Rock Wren					RS	
American Dipper				SGCN		
Mountain Bluebird					RC,CS,RS	
Virginia's Warbler		BCC		SGCN	CC,RC,RS	
Yellow Warbler						RC
Green-tailed Towhee					CS,RS	
Brewer's Sparrow	R2SS	BCC		SGCN	CC,RC	CC,RC
Vesper Sparrow				SGCN		
Lark Sparrow						RC
Lazuli Bunting				SGCN		
Western Meadowlark						RS
Red Crossbill				SGCN		

<sup>&</sup>lt;sup>1</sup> Common Names are from the A.O.U. Check-list of North American Birds, Seventh Edition (2003).
<sup>2</sup> Special management designations: USFS=United States Forest Service, R2SS=USFS Region 2 Sensitive Species; USFWS=U.S. Fish and Wildlife Service, BCC=USFWS Bird of Conservation Concern for Region 6 (Mountain-Prairie Region); BLM=Bureau of Land Management, SS=Sensitive Species; CDOW=Colorado Division of Wildlife, SGCN=Species of Greatest Conservation Need; PIF-BCR16=Partners In Flight Bird Conservation Region 16, CC=Continental Concern, CS=Continental Stewardship, RC=Regional Concern, RS=Regional Stewardship; PIF-BCR18=Partners In Flight Bird Conservation Region 18, CC=Continental Concern, CS=Continental Stewardship, RC=Regional Concern, RS=Regional Stewardship.