

## Mountain Plover (*Charadrius montanus*) Fact Sheet

Colorado NRCS

November 2010

### General Information:

The mountain plover belongs to the order Charadriiformes, the shorebirds, and the family Charadriidae, along with the killdeer and several other plovers. Mountain plover is the endemic plover of the shortgrass prairie. About the size of a killdeer, the mountain plover averages 7-1/2 inches in length, with yellow to flesh-colored legs, and a short, fairly thick bill. During the breeding season, the mountain plover has a distinct black cap and a thin black line between the eye and the bill. Mountain plovers lack the black breast bands common to other plovers. The diet of this neotropical migrant is 95% insects.

A key feature that distinguishes the mountain plover from the killdeer is the lack of black bands on the chests of plovers.



Mountain Plover photo by Lou Hodges, CDOW Volunteer



Mountain Plover Chick photo by Vicky Dreitz, CDOW

### Status:

This bird has been designated as a Federal Proposed species by the U.S. Fish and Wildlife Service (FWS) under authority of the Endangered Species Act (ESA). The current population is approximately 18,000 birds (Andres and Stone 2009). Evidence that the mountain plover is continuing to decline is provided by long-term research conducted at breeding sites in Montana and Colorado, Breeding Bird Survey data, Christmas Bird Count data from California, and National Wildlife Refuge records from California. While there is no reliable estimate of the rate of decline, the number of nesting mountain plovers on breeding transects in Montana and Colorado has declined during the past 10 years, and fewer mountain plovers are reported from key wintering areas in California. The mountain plover may be adversely affected by spring tillage, sodbusting, certain types of range management activities, some oil and gas activities, and loss of prairie dog colonies.

**Distribution:**

**Breeding:** Breeding occurs in Colorado, Wyoming, Montana, Nebraska, New Mexico, Kansas, Oklahoma, Arizona, Utah, and Texas (in order of breeding abundance). Current information also shows a very small number of breeding birds in Mexico. Most breeding plovers occur in Colorado, Wyoming, and Montana. More than one-half the entire population may breed in Colorado. Distribution in Colorado is primarily on the Eastern Plains and Park County, however a few breeding birds have been observed in Costilla, Conejos, Moffat, and Rio Blanco counties. Plovers occupy breeding range from about April 1 through August 1.

**Winter:** Current known wintering concentration is California, primarily in the Imperial Valley and Central Valley, and northern Mexico. Wintering plovers have been reported from Arizona and Texas. Plovers occupy winter sites in California from mid-October to mid-March.

**Habitat:**

**Breeding:** Nest sites typically occur in areas with vegetation less than 10 centimeters (4 inches) in height; having at least 30 percent bare ground; and less than 5 percent slope. Rangeland vegetation in eastern Colorado usually consists of blue grama, buffalo grass, and prickly pear. Plovers are known to nest on bare or mostly bare, tilled, dry cropland fields. Mountain plovers avoid wet sites. Taller vegetation or other structure (e.g. fence posts) may be used by chicks for shade.

**General Habitat Modification Techniques:** Mountain plovers appear to have an affinity for sites that are disturbed by grazing, burning, or mechanical modification. Consequently, mountain plovers are found on sites that are heavily grazed (e.g. domestic livestock or prairie dogs), have been burned to control vegetative composition and structure, or that have been cultivated.

Some dry croplands mimic natural habitat associations. Mountain plovers that nest on some of these sites may be lost or damaged from routine spring tillage practices.

**Beneficial Conservation Planning for Plovers:**

In Colorado, the primary concern is to improve the quality of and to increase the amount of nesting habitat for plovers. This habitat may be found on rangeland or cropland. Critical physical components of ideal plover habitat, regardless of whether the land use is rangeland or cropland are:

Flat slopes-5 percent or less

Vegetation height 4 inches or less and more than 30 percent bare ground

Additional characteristics of good plover habitat are large acreages, with 80 to 250 acres thought to be ideal. Plovers are frequently found in prairie dog colonies, so most efforts that maintain prairie dogs will also benefit mountain plovers.



The information below describes targets for plover habitat improvement on rangeland and cropland. When an NRCS planner locates an area that meets the physical components described above, the planner should include practices in an alternative that achieve one of the following:

RANGELAND (ecological sites suited to shortgrass prairie ecosystems)

- 1) Grazing-by cattle, sheep, horses, or other domestic livestock or prairie dogs
- 2) Burning-early spring burns before birds return to the nest are most favorable. Follow NRCS General Manual Policy and Prescribed Burning standard.
- 3) Close mowing
- 4) Using chemicals on broadleaves. Follow Pest Management standard.

CROPLAND

On dry cropland that will remain in dry cropland, the best action is to try to discourage use by plovers so that nests aren't destroyed. Most nest destruction on cropland results when plovers nest on bare or idle ground. This land is subsequently tilled for weed control or for planting during the nesting period, resulting in a failed nesting effort. Improving nesting success or discouraging nesting may be accomplished by:

- 1) Conducting tillage outside the nesting season
- 2) If tilling bare ground or light stubble during the nesting season, look for plovers and go around nests or lift implements over nests. See tips on locating nests from Rocky Mountain Bird Observatory (<http://www.rmbo.org/dataentry/postingArticle/dataBox/gotPlover.pdf>)
- 3) Using no-till or minimum till that:
  - a. Leaves tall stubble (>6 inches height) to discourage bird use for nesting
  - b. Leaves at least 70% residue/cover to discourage bird use for nesting

Current knowledge of the plover's habitats indicate they don't use irrigated pasture and hayland for nesting, nor most, if not all CRP for nesting. These cover types are not a concern in plover management.

### **Endangered Species Act (ESA) Information**

NRCS General Manual policy, found in 190 GM Part 410.22, states: "NRCS, as an agency within the U.S. Department of Agriculture (USDA), has both the authority and the obligation under ESA to protect and conserve plant and animal species listed or proposed for listing as endangered or threatened, as well as those habitats determined critical by the Department of the Interior's (DOI) Fish and Wildlife Service (FWS) or the Department of Commerce's (DOC) National Marine Fisheries Service (NMFS), hereafter referred to as "the Services'." The policy further states for Federally Proposed species:

- NRCS Technical Assistance Only – When NRCS concludes that a proposed action "may adversely affect" species proposed for listing or habitat proposed to be designated as critical, NRCS will recommend alternative conservation treatments that will avoid adverse effects, and to the extent practicable, provide long-term benefits to species and habitat. Should the client or landowner refuse to apply the recommended alternative conservation treatment, NRCS will inform the client and landowner of the NRCS policy and shall terminate assistance for the action or portion of the action affecting the proposed species. When it is

anticipated that technical assistance will result in NRCS action, NRCS shall initiate a conference with the appropriate Service.

- NRCS Action – When NRCS concludes that a proposed action “may adversely affect” species proposed for listing or habitat proposed to be designated as critical, NRCS shall conference with the appropriate Service to determine whether the action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of the proposed critical habitat. NRCS shall incorporate all recommendations of the conference into plans and specifications to the extent practicable. If the species is federally listed or has federally designated critical habitat prior to the completion of the action, the project will be halted while the necessary consultation requirements are met.

#### References:

Andres, B. A., and K. L. Stone. 2009. Conservation Plan for the Mountain Plover (*Charadrius montanus*), Version 1.0. Manomet Center for Conservation Sciences, Manomet, Massachusetts.

Knopf, F.L. 1996. Mountain Plover (*Charadrius montanus*). In: The Birds of North America, No. 211 (A. Poole and F. Gill, Eds.). The Academy of Natural Sciences, Philadelphia, PA and the American Ornithologists' Union, Washington, D.C.