

**Mountain Plover (*Charadrius montanus*) Breeding
Range, 1990-1998**

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In January of 1998, the Denver Audubon Society and the Colorado Natural Heritage Program began a compilation of range-wide breeding records of the Mountain Plover (*Charadrius montanus*) since 1990. This project was funded with help from the Colorado Division of Wildlife, the Denver Audubon Society's Lois Webster Fund, and the Colorado Natural Heritage Program. The purpose of this project was to gain a sense of the breeding range of *C. montanus* in recent times and to create a map of that range. Additionally, the project was developed to compile a list of the people who have been observing or researching the plover and their respective study areas, as a resource for future studies. This was not an attempt at quantitatively sampling the abundance or location of *C. montanus* throughout its range, and should not be interpreted as such.

Surveys were sent out by mail, fax, e-mail, and internet web page to the attendees of the December, 1997 Mountain Plover Conference, the Natural Heritage Programs of the Western States and Canadian Provinces, as well as miscellaneous other resources and personnel. The survey requested post-1990 breeding records of *C. montanus* and included requests for the following information regarding each record:

- Location information (state, county, geographic coordinates, TRS, etc.)
- Contact name and address
- Date
- Number of individuals
- Habitat type (burned area, shortgrass prairie, prairie dog (*Cynomys spp.*) colony, plowed field, or other site with description)
- Age (Adult, Young, or Both)
- Evidence of reproduction
- Evidence of disease, predation, or injury.

In addition, some agencies and resources were contacted by phone and queried about the status of *C. montanus* in that state.

Replies were returned electronically, verbally and by mail and then compiled. The attached map was created using the counties where *C. montanus* were found since 1990 and the date of observation. Known duplicate records were deleted, however

duplicate sightings of the same bird within the same year and from year to year may (and probably do) exist.

Results

The project resulted in a total of 1450 records, of which 1241 were from 1990 or later. Pre-1990 records turned up in the results because in many instances entire databases of information were sent to us without being filtered. The reports averaged 2.5 birds per sighting (record). This number is adjusted for the fact that 546 of the records included no value for the field "number of individuals"; a value of one was assumed for each of those 546 records.

The U.S. range of *C. montanus* during the breeding season includes 82 counties in ten western states including Montana, Wyoming, Nebraska, Utah, Colorado, Kansas, Oklahoma, Texas, New Mexico, and Arizona. The states with the most expansive range of *C. montanus* during the breeding season are Montana and Colorado. The county per state breakdown is as follows: 16 counties in Montana, 8 counties in Wyoming, 2 counties in Nebraska, 2 counties in Utah, 28 counties in Colorado, 5 counties in Kansas, 1 county in Oklahoma, 1 county in Arizona, 20 counties in New Mexico, and 2 counties in Texas. Although many records contained more precise locations, the county level of resolution was the lowest common denominator and so used to make the attached map.

Only 500 of the 1450 records contained a description of the type of habitat of the observation area. Of those, 68 observations were on shortgrass habitat, 395 were on plowed fields (agricultural), 2 were on burned fields, and 2 were on prairie dog colonies. These figures are the result of bias in the data. Many reports we received as individual records were from one person who was investigating use of plowed fields by *C. montanus*, and many of the records came from sources that did not include the habitat category. For example, although we know from the 1997 meeting that many of the sightings in Montana are from Charles M. Russell refuge, and that most of those are from prairie dog towns, that information did not show up in the data we received. Therefore the numbers should not be used for any analysis, but rather can serve as anecdotal reference to various habitat types used by *C. montanus* during the breeding season.

This was by no means a complete census of the range of *C. montanus* or even of all the people who work with or observe the plover, but is instead a compilation intended to draw together the findings of a network of people. One important resource not included here is that of the Breeding Bird Survey, which has produced a range map of the mountain plover from standardized route sampling methods. The range map produced by that survey is found online at <http://www.mbr.nbs.gov/bbs/grass/a2810.htm>.

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References

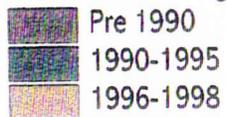
The vast majority of the records received were from unpublished sources, which are listed in the observer name and address in the table of records. Many are simply contributor names or organizations, which can be referenced to the list of contacts which is enclosed with this document. Some data came from the following published works:

Sager, Lawry. Feb. 1996. A 1995 Survey of Mountain Plovers (*Charadrius montanus*) in New Mexico. Endangered Species Program, New Mexico Dept. of Game and Fish, Santa Fe, NM. Contact 95-516-66.

Horner, Peggy. Dec. 1997. Mountain Plover Summary – Recent Sightings in Texas. In: Synopsis of the Mountain Plover Workshop, Colorado Division of Wildlife, Denver, CO.

Range of breeding Mountain Plover in the United States

Observations during the breeding season



This map is the result of a data compilation effort headed by the Denver Audubon Society. It reflects the data that exist in the Natural Heritage Program Databases in Montana, Wyoming, Colorado, Nebraska, Kansas, Oklahoma, New Mexico, and Arizona. Additional data were provided by numerous individuals, including many of those present at the Mountain Plover Workshop hosted by the Colorado Division of Wildlife in Denver, Colorado, December 3-4, 1997.



Map created by CNHP GIS Unit
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