

SELECTIVE USE OF BLACK-TAILED PRAIRIE DOG COLONIES BY
MOUNTAIN PLOVERS—A SECOND LOOK^{TWS}

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A study conducted by Knowles et al. (1982) in 1979 documenting the selective use of black-tailed prairie dog (*Cynomys ludovicianus*) colonies by mountain plovers (*Charadrius montanus*) on the Charles M. Russell National Wildlife Refuge (CMR) in north-central Montana was repeated in July 1999. During the 20 year interval between plover surveys, prairie dog acreage in the survey portion of the CMR declined from 908 ha to about 200 ha in 1999 due to an apparent epizootic of sylvatic plague from 1992 to 1996. The 1979 survey recorded an average of 9.1 mountain plovers per survey run with 99 percent of these observations being recorded on prairie dog colonies. The 1999 survey recorded an average of 0.5 mountain plovers per survey run along the identical survey route. All 3 mountain plovers were observed on 1 of the few non-plague impacted prairie dog colonies remaining in this area. Within the survey portion of the CMR, prairie dogs are necessary to provide suitable habitat for mountain plovers. Prairie dogs reduce vegetation height, total plant cover and plant litter, and increase the amount of bare ground. Large, closely spaced prairie dog colonies are probably important for the long-term persistence of mountain plovers on the glaciated plains in north-central Montana.