

population estimate on winter counts, not availability of breeding habitat. We have revised the final determination to acknowledge the new estimates for prairie dogs, and discuss the implications of prairie dog abundance to mountain plover viability.

Comment 38: Prairie dog poisoning has increased.

Response 38: The Service has new information to suggest that poisoning of black-tailed prairie dogs may have increased in some States in the mountain plover's range (Service 2002.). We have revised this section of the final determination to conclude that while prairie dog poisoning may have increased locally, it does not represent an imminent threat to mountain plovers throughout their breeding range.

Comment 39: Prairie dog shooting is a threat to mountain plovers.

Response 39: We agree that shooting black-tailed prairie dogs has been shown to reduce prairie dog abundance at some locations. However, it has not been shown to be a significant threat to maintenance of black-tailed prairie dog colonies (Service 2002.). While it has the potential to degrade or prevent recovery of habitat and impact mountain plover breeding success, we believe those instances are localized and infrequent. We have no information to indicate that the incidental shooting of mountain plovers is significant.

Mineral Development Issues

Comment 40: Oil and gas development, including coalbed methane, is a potential significant threat to mountain plovers.

Response 40: This final determination provides information describing the potential effects to mountain plovers from oil and gas development. The degree of effect depends on the density of mountain plovers and level of oil and gas development within a project area.

Comment 41: The presence of mountain plovers at the Antelope Coal Mine in Wyoming is evidence that mining does not impact mountain plovers.

Response 41: We have revised the final determination to report new information from the Antelope Coal Mine, including its potential effects on mountain plovers.

Pesticide Issues

Comment 42: Inclusion of grasshopper control as a potential threat is not valid because the rule admits that Federal grasshopper control programs have been abandoned.

Response 42: The Animal and Plant Health Inspection Service (APHIS) has recently authorized rangeland

grasshopper control, and control of grasshoppers can occur when they reach economic thresholds. We have revised the final rule to report new information regarding pesticide exposure from grasshopper control and from California wintering habitat.

Regulatory Mechanisms

Comment 43: Existing regulatory mechanisms are inadequate to protect the mountain plover.

Response 43: We have no evidence that the existing regulatory mechanisms have contributed to the decline of the mountain plovers throughout a significant portion of their range. The Forest Service and the BLM routinely include the mountain plover in their planning documents to ensure that activities they authorize do not contribute to the further decline of the species. The NRCS has prepared a fact sheet for the mountain plover to encourage farmland practices beneficial to the mountain plover. The Service is developing a dialogue with all Federal agencies to ensure that measures are included in land management plans to protect and promote the conservation of the mountain plover. Federal listing would not add significant conservation benefit above those efforts presently adopted by Federal agencies.

Peer Review

In compliance with the July 1, 1994, Service Peer Review Policy (59 FR 34270), peer reviews were provided by five specialists. The peer reviewers in 1999 were Dr. Marshall Howe with USGS-Patuxent Wildlife Research Center, Dr. C.R. Preston with the Draper Museum of Natural History in Cody, Wyoming, and Dr. James Dinsmore with Iowa State University in Ames, Iowa. Each of these peer reviewers concluded that there was sufficient information to list the mountain plover as threatened. The reasons cited by the peer reviewers included small population and declining trend of the species, prairie dog distribution and decline, habitat loss to grassland conversion, the influence of cropland nesting efforts on mountain plover conservation, and pesticide exposure.

Two peer reviewers provided comments to the 2002 listing proposal. One peer review was provided by Dr. Peter Paton with the University of Rhode Island in Kingston, and the second peer review was provided by Mr. Steve Forrest with Hyalite Consulting in Bozeman, Montana. Mr. Forrest was selected by Earthjustice following the settlement agreement reached between the Service and Earthjustice to expedite a listing decision for the mountain

plover. Both of these peer reviewers also supported the proposal to list the mountain plover. The issues identified by each of them were similar to those received from the peer reviewers in 1999, but also included attention to other specific issues such as declines in Weld County, Colorado, Montana, and Thunder Basin National Grassland in Wyoming, as well as habitat fragmentation, prairie dog shooting, and the proposed special rule.

Since the 1999 listing proposal and following the 2002 re-opening of the comment period, we have acquired additional information regarding the concerns identified by each of the peer reviewers, as disclosed in this final determination.

Summary of Factors Affecting the Species

Section 4 of the Act (16 U.S.C. 1531 *et seq.*) and the regulations (50 CFR part 424) that implement the listing provisions of the Act set forth the procedures for adding species to the Federal list of endangered and threatened species. A species may be determined to be endangered or threatened due to one or more of the five factors described in section 4(a)(1) of the Act. These factors and their application to the mountain plover rangewide are discussed below.

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range

Historical and Current Conversion of Grassland in Breeding Range

As described in the 1999 and 2002 proposed rules, the historic conversion of grassland to cropland likely contributed to the decline of mountain plovers and their habitat (e.g., Graul and Webster 1976, FaunaWest 1991, Knopf and Rupert 1999b). To assess more recent grassland conversion, we reviewed information available from the National Resources Inventory (NRI) of the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) between 1982 and 1997. We selected the "rangeland" cover type because "native grassland" is not a type category within the data base specifically, but is represented under the rangeland category. Comprehensive NRI data is only available from 1982 through 1997 (NRCS 1998; K. Musser, NRCS, in litt. 2000; K. Musser, pers. comm 2002). We used only areas occupied by mountain plovers in their breeding range to compare the rangeland conversion statistics (Knowles and Knowles 1998, Shackford and Leslie 1995).