



DEVELOPMENT OF MOUNTAIN PLOVER HABITAT USING BLACK-TAILED PRAIRIE DOGS AT KENNECOTT ENERGY COMPANY'S ANTELOPE MINE

By Patrick J. Baumann

*Abstract—Wildlife surveys conducted at the mine site since 1978 have documented the presence of the mountain plover (*Charadrius montanus*), a Migratory Bird Species of High Federal Interest and a species periodically under status review by the U.S. Fish and Wildlife Service. For over 20 years, Kennecott Energy Company (KEC) and others have monitored and studied the mountain plovers utilizing the mine site and peripheral areas. Observations from these efforts have documented that mountain plover-use patterns in this area exhibit a strong affinity for black-tailed prairie dog (*Cynomys ludovicianus*) colonies located on and near the permit area, particularly for nesting and brood rearing.*

Antelope Mine initiated an innovative program in 1999 to establish mountain plover habitat reclamation through the translocation of prairie dogs into artificially constructed colonies. After two years of preliminary experimental fieldwork, a plan to establish 160 acres of habitat was developed. The efforts were coordinated by Thunderbird Wildlife Consulting, Inc. (TWC).

The project involved translocating black-tailed prairie dogs from three different colonies near the mine area. The source colonies were selected based on their proximity to the mine; capture rates while trapping; their potential contribution to genetic variability in the relocated populations; and the opportunity to relocate animals from a previously disturbed colony and from colonies ahead of the mining advance.

Two areas in reclamation were chosen as release sites based on several factors, including topography; vegetative structure and composition; proximity to historic mountain plover sightings; proximity to each other; future potential to attract mountain plovers; and accessibility to the public for use as educational exhibits.

Little success was achieved in the translocation efforts of 2000 and 2001, but methods continued to be refined, and in 2002, the first prairie dog colony was established in reclamation. In 2003, the project was expanded to a total of four viable colonies.

The successful relocation of the prairie dog colony will promote the mitigation efforts to establish mountain plover habitat. As the relocated colonies become established, mountain plover habitat will develop in and around those sites. This is essential to achieving reclamation goals and ultimate bond release. During 2003, this project received the National Excellence in Surface Mining and Reclamation Award from the Office of Surface Mining, the Wildlife Habitat Reclamation and Stewardship Award from the Wyoming Game and Fish Department, the Wyoming Wildlife Federation Habitat Conservation Award, and the Wyoming Department of Environmental Quality Excellence in Surface Mining and Reclamation Award.

Patrick J. Baumann is an Environmental Engineer with Antelope Mine
Caller Box 3008, Gillette, WY 82717.

