

MAMMAL DAMAGE CONTROL RESEARCH AT THE DENVER WILDLIFE RESEARCH CENTER

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The Denver Wildlife Research Center, first organized as a national research organization in 1940, is the U.S. Federal institution devoted to research on resolving conflicts among humans and wildlife. As the research arm of the U.S. Department of Agriculture's Animal Damage Control Program, the Center provides biological information, problem definition, materials and methods development, and ongoing ecological assessments to assist in managing wildlife problems related to agriculture and public safety. The Center's research effort on mammal damage problems involves approximately 45 scientists and support personnel working at 8 facilities in the U.S. For many years, the Center has also conducted cooperative international projects involving both short-term research and training and long-term projects with resident staff. In the past several years, the Center has greatly expanded its cooperative research programs and currently has 7 university-based resident field projects and cooperative research agreements with 15 universities, 2 industry consortia, and 1 private research institute.

A variety of mammal problems involving numerous species have been identified and prioritized as requiring research attention at the national level. Other problems or species have been identified based on special regional concerns. Important areas for current work include coyote predation on livestock, particularly sheep; rodent damage by a variety of species to crops and rangeland; economic damage to timber production and reforestation efforts caused by deer, elk, bear, and rodents, particularly pocket gophers, beaver, and mountain beaver; and increasing populations of deer and other wildlife in urban and suburban areas where traditional management methods cannot be used.

For many years, management of problem wildlife has relied on the use of pesticides, generally in sufficiently small quantities or in specialized formulations that provide little economic incentive for private industry. Our agency currently has approximately 50 minor use pesticide and drug registrations for technical or formulated products. Provision of analytical chemistry methods and data on chemical properties, ecological effects, human health effects, and efficacy for these materials has been a high priority for the Center. More recently, concerted efforts have been undertaken to identify and develop non-lethal or non-chemical alternative management methods for specific wildlife problems. This research includes increased focus on biological, ecological, and animal behavior studies, engineering applications, and genetics and immunology.

In the future, ecologically based integrated pest management approaches to resolving mammal damage problems will allow better utilization of a variety of management methods – old and new – to assure that humans can live compatibly with wildlife in the environments they share.

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