October 2002

Management of Rodent Populations at Airports

Gary W. Witmer
USDA, National Wildlife Research Center

Jessica Dewey
USDA, Wildlife Services

Management of Rodent Populations at Airports

Gary W. Witmer, USDA, National Wildlife Research Center, 4101 LaPorte Ave., Fort Collins, CO 80521 USA

Jessica W. Dewey, USDA, Wildlife Services, 4700 River Road, Unit 87, Riverdale, MD 20737 USA

Birds pose serious hazards at U.S. airports. Raptors are hazardous to aircraft safety due to their size, hunting behavior, and hovering/soaring habits. Abundant food sources, open space, and availability of perches at or near airports contribute to ideal hunting opportunities for many raptors. The ability to directly manage raptor populations is limited by the Migratory Bird Treaty Act. Reduction of small mammal populations at an airport may decrease raptor populations in the area and therefore, reduce the risk that raptors pose to aircraft. Rodents can be managed by population management or by habitat management. Reduction of small rodent populations can be achieved through a variety of methods, including the use of rodenticides. Zinc phosphide, a rodenticide on a grain bait, was found to be very efficacious in rodent population reduction at a USA airport, but provided only a short-term solution. We discuss the use of zinc phosphide baits in field settings, including important steps and precautions in use. We also present preliminary data on differences in rodent populations in different habitats or varying land uses at or near airports. The maintenance of low vegetation by mowing or cattle grazing resulted in lower rodent populations. Certain crops supported fewer rodents that grasslands. We will present examples of potential complications and unexpected results that have occurred when managers tried to emphasize or de-emphasize one group of species at the expense of another.