

Wildlife Services

Protecting People
Protecting Agriculture
Protecting Wildlife

Protecting People

FY 2008

Protecting Property, Infrastructure and Transportation in Rural to Urban Settings



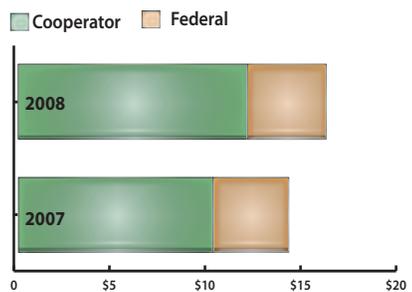
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Wildlife Population and Property Protection

- Wildlife Services (WS) conducts research on contraceptive vaccines for mammals and birds, and removes animals in over-populated and strike-probable locations and donates meat as appropriate
- WS conducts beaver damage management programs in more than 20 states and researches control of beaver populations and damage
- A current study suggests for every \$1 spent in managing beaver damage by WS, \$12.2 in resources was saved on roads, bridges, dikes and dams, sewer and water treatment facilities, and landscapes.
- WS currently has 73 trained explosive experts operating in 20 states to handle beaver damage
- More than 70% of funds for property protection comes from cooperators

Expenditures for Property Protection (Millions)



WS, a program within the U.S. Department of Agriculture's Animal and Plant Health Inspection Service, provides Federal leadership and expertise to resolve wildlife conflicts that threaten public and private resources. WS works in every State to prevent wildlife damage to property, roads and bridges, aircraft, and other important man-made resources.

Protecting Property in Urban and Suburban Areas

Each year, wildlife cost property owners millions of dollars in damage, underscoring the need for responsible wildlife damage management. WS protects homes, lawns, landscaping, golf courses, parks, pets, equipment and machinery, industrial facilities, and other property against wildlife damage.

In FY 2008, WS conducted more than 67,580 technical assistance projects to reduce wildlife damage to property in urban, suburban, and rural locations as well as at airports across the country. Technical assistance enables property owners to work on their own to resolve wildlife conflicts. WS provides critical information, guidance, and, sometimes, equipment to assist property owners in their efforts. When the conflict is more significant, however, WS specialists employ direct assistance, using their knowledge and expertise to disperse, remove, or relocate problem wildlife, such as vultures, raccoons, and bears.

WS expended more than \$16.1 million to protect property from wildlife damage in FY 2008 and \$14.1 million in FY 2007. Damage may be relatively minor or it may result in significant economic loss and inconvenience. Wildlife can damage foundations, structures, and even internal wiring as it attempts to gain entry into a property. The excrement from roosting birds or bats is not only foul, but also can corrode machinery and vehicle paint, and can create a slipping hazard on walkways. Grazing wildlife, such as geese, deer and feral pigs, can destroy golf course greens, fruiting plants, lawns, and other landscaped areas. In addition to causing damage, overabundant wildlife populations can create quite a nuisance. The excrement and noise from a roost of vultures or crows can be so severe that backyard swing sets, grills, lawn furniture, and outdoor business properties become useless.

Protecting Infrastructure in Urban and Rural Areas

Roads, bridges, airport runways, dams, water drainage systems, and utilities are also vulnerable to wildlife damage. WS is frequently called upon to relocate or remove wildlife that threaten vital urban and rural infrastructure. Aquatic and burrowing animals, such as beavers, ground hogs, gophers, ground squirrels, and armadillos, often weaken foundations and accelerate erosion damage, causing structures to crack or even collapse. Birds and other wildlife frequently are responsible for electrical power outages that can result in thousands of dollars in damage and lost revenue. Monk parakeets, hawks, and vultures are well known for causing damage to urban infrastructure when they nest, roost, and perch on telephone poles and electrical and communication towers.

Brown tree snakes in Guam regularly cause electrical shortages and power outages that result in more than \$1 million in damage. WS engages in a successful damage management program to prevent large scale outages with cost savings of more than \$500,000 annually to the local power authority.

Resolving Beaver Damage—Beaver, one of the most destructive wildlife species, cause millions of dollars in damage to roads, bridges, dikes and dams, sewer and water treatment facilities, and landscape plants. Many experts believe the cost of beaver damage is greater than that caused by any other U.S. wildlife species. WS personnel across the contiguous States, from Maine to Arizona and from Florida to Washington, respond to beaver damage reports. In Mississippi and North Carolina, the problem's severity led State agencies to provide major funding for WS to conduct statewide beaver damage management programs. WS also provides large-scale programs in more than a dozen additional States, and responds to individual requests for assistance on a case-by-case basis.



United States Department of Agriculture
Animal and Plant Health Inspection Service

For years, WS has collected beaver damage data reported by private individuals and state agencies; the economic damage caused by beavers in the southeastern United States alone is estimated to have exceeded \$4 billion over a 40-year period. In 1999, WS began collecting data on damage prevented by its management efforts. In FY 2008, WS prevented an estimated \$81.7 million in beaver damage in 15 states. Even though WS provides beaver management assistance to about half of the State's counties in Mississippi, the aquatic rodent still causes an estimated \$100 million in damages to public and private property.

To prevent beaver damage, WS specialists break apart beaver dams that clog waterways and flood roads and timber resources. Beavers are removed from areas experiencing high levels of damage. WS has identified multiple research needs relevant to beaver damage management: information on attractants, search dogs, electronic frightening and detection devices, habitat modification, mechanical barriers, "natural/home-made" remedies, non-target concerns, repellants, toxicants, trap development, and basic biology. WS' National Wildlife Research Center (NWRC) is currently conducting research on a number of methods that could be used to prevent beaver damage. Increased wildlife populations in the last decade have coincided with increasing numbers of wildlife collisions with airplanes, trains, and automobiles. High-speed or mid-air collisions not only result in serious damage, they can be deadly. WS plays a significant role in helping to prevent birds, deer, coyotes, feral hogs, and other wildlife from causing such accidents. Collisions, however, are not the only threat posed to transportation. Rats, mice, and other rodents can also chew through engine wiring creating potentially dangerous consequences.

Deer Collisions with Automobiles – As wildlife populations increase and adapt to more urban settings, wildlife-vehicle collisions also increase. Deer are the largest wild animal most often involved in such accidents; other wildlife associated with vehicular collisions are elk, antelope, bear, feral hogs and moose.

The U.S. deer population is at an all time high. The white-tail deer population has increased from 300,000 in 1900 to 17 million in 2008. Overabundant deer populations, urban and suburban, lead to countless collisions each year. Although difficult to quantify because many accidents go unreported, one study estimates more than 1.5 million deer collisions with vehicles occur annually, resulting in repair costs of more than \$1.1 billion. Auto insurance claim statistics show eight of the top 10 states for the most deer/automobile accidents are east of the Mississippi River. WS works to reduce deer populations in heavily populated areas in order to increase public safety.

WS' research arm, the NWRC, has given high priority to research on the reproductive management of deer. NWRC researchers have successfully tested contraceptive vaccines on white tail deer. Research data shows the contraceptive is safe for the vaccinated animals with no associated danger to humans or wildlife eating vaccinated animals. Not intended to replace other management tools, the contraceptive vaccine is a tool for use in conjunction with other management methods. The vaccine can be used to help manage overabundant deer herds in urban and residential areas where other methods, such as hunting, are not always an option.

Wildlife/Aircraft Collisions – Wildlife can pose a serious threat at airports across the United States. The majority of wildlife strikes are caused by birds, although large mammals are also involved. Through a balanced effort involving research and wildlife management, WS is reducing the incidence of damage to aviation caused by wildlife. WS is recognized internationally for its scientific expertise in reducing such hazards at airports and military bases across the Nation and around the world. In FY 2008, 772 airports and military airbases received assistance, increasing 97% from 1990 when WS' involvement with airport wildlife hazard management began. In FY 2008, WS provided services to mitigate wildlife hazards to aviation at over 60% of the Nation's airports that are Federally regulated for public service. (See the separate report "Protecting Commercial and Military Aircraft and Passengers.")

Wildlife Population and Property Protection

- More than one million collisions occur annually between vehicles and deer, the largest wild animal most often involved in accidents.
- The direct cost of a deer-motor vehicle strike ranges from \$2-2,800 per collision in insurance claims
- The estimated total cost associated with such collisions were \$7,870 for deer, \$17,100 for elk, and \$28,100 for moose.
- Pennsylvania, the top ranked state for deer-vehicle collisions, estimates between 12,000 and 40,000 collisions, annually. Numbers are difficult to assess due to the non-reporting of less serious crashes.
- WS provided wildlife damage management assistance to 772 commercial and military airports in FY 2008.
- Highly successful conservation and environmental programs have resulted in population increases for almost all species of large flocking birds in recent decades.
- In all, 380 different species of birds have been reported struck by civil aircraft from 1990-2008.
- Wildlife strikes annually cost U.S. civil aviation more than \$625 million and cause approximately 600,000 hours of downtime.



