

Wildlife Services

Protecting People
Protecting Agriculture
Protecting Wildlife

Factsheet

July 2010

National Wildlife Research Center Invasive Species Research Building



Wildlife Services (WS), a program within the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS), provides Federal leadership and expertise to resolve wildlife conflicts that threaten the Nation's agricultural and natural resources, human health and safety, and property.

Q. What is the U.S. Department of Agriculture's (USDA) National Wildlife Research Center?

A. The National Wildlife Research Center (NWRC) is the research arm of USDA's Animal and Plant Health Inspection Service's (APHIS) Wildlife Services (WS) program. As a nonregulatory program, WS provides Federal leadership in managing conflicts between people and wildlife. NWRC applies scientific expertise to the development of technical information and practical methods to resolve human-wildlife conflicts and maintain the quality of the environments shared with wildlife.

Q. Who benefits from the research conducted at NWRC?

A. There are many that benefit: wildlife managers, natural resource and agricultural managers, public health managers, and the American public and wildlife.

Wildlife managers and the public benefit from NWRC research because it provides information, tools and techniques, and a sound, scientific basis on which to make management decisions to resolve conflicts between people and wildlife.

Moreover, the American public benefits through the protection of agriculture, the management of wildlife diseases that threaten agriculture and/or human health, the reduction of aircraft and vehicle collisions with wildlife, and the reduction of conflicts where urban development has occurred in wildlife habitats.

Wildlife benefits through the development of humane and socially acceptable methods of wildlife damage management that reduce human-wildlife conflicts.

Q. How many people are employed with NWRC?

A. NWRC headquarters in Fort Collins, CO, currently employs about 140 scientists and support personnel. At any one time, approximately

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25 Colorado State University students are working, volunteering, or interning in various capacities. NWRC satellite field stations in 9 other locations employ another 70 people.

Q. Why did APHIS build the NWRC Invasive Species Research Building?

A. The Invasive Species Research Building (ISRB) is part of the NWRC master plan. The ISRB provides a secure environment to properly care for and study invasive wildlife species that threaten the Nation’s agriculture, natural resources, native wildlife, and threatened and endangered species. The facility provides a unique opportunity to study the ecology, biology, behavior, and physiology of invasive wildlife species and to develop management tools and strategies for mitigating damage and controlling the spread of invasive species. These tools are biologically sound, environmentally safe, and socially acceptable.

Q. Why is invasive species research important?

A. The number of invasive species in the United States is increasing and poses a serious threat to the health of native wildlife species and ecosystems.

In established ecosystems, there is a natural balance, and the plants and animals within those systems find this balance suitable for survival. When invasive species from other ecosystems are introduced, they can upset that balance and bring harm to the established plants and animals, and the ecosystem as a whole. Invasive species can reduce biodiversity, degrade habitats, alter native genetic diversity, transmit exotic diseases to native species, and further jeopardize threatened and endangered plants and animals.

In 1999, Executive Order 13112 took effect, requiring the National Invasive Species Council (of which USDA is a member) to produce a national management plan for invasive species every 2 years. This plan calls for leadership and coordination among council members, prevention of introductions to the

United States, early detection and response, control and management, provision of restoration, international cooperation, research, and promotion of public education and information management. The invasive species research conducted by NWRC scientists help meet these objectives.

Q. How does Executive Order 13112 define an invasive species?

A. The order defines an “invasive species” as a species that is:

1. Nonnative (or alien) to the ecosystem under consideration, and
2. Whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes). Human actions are the primary means of invasive species introductions.

Q. What types of research will be conducted in the ISRB?

A. NWRC is a leader in invasive vertebrate species research and works to develop effective management techniques to reduce or eliminate the adverse effects of invasive species on native wildlife, habitats, and people. NWRC is uniquely positioned to address wildlife damage management problems associated with invasive species.

The ISRB expands NWRC’s capabilities to study invasive wildlife species that have the potential to or are currently disrupting native ecosystems in the United States and its territories. Scientists study the ecology, behavior, and basic biology of these species, as well as potential control methods such as detection methods, lures, repellents, capture devices, toxicants, and reproductive inhibitors. Possible species to be studied in the facility include nutria, Norway rats, mongoose, Gambian giant pouch rats, starlings, pigeons, monk parakeets, bullfrogs, brown tree snakes, pythons, and Caribbean tree frogs.

Invasive species pose a serious threat to the health of native wildlife species and ecosystems in the United States.

The ISRB has been designed to have the ability to simulate temperature and humidity ranges from temperate to tropical ecosystems. The flexibility of these environmental controls allow for the year-round study of invasive wildlife species.

Q. How is animal care ensured?

A. NWRC has a specially trained team of wildlife veterinarians and animal care technicians. It is their sole responsibility to care for the wildlife housed at the center. As a result of the team's specialized skills in working with various types of wildlife, it often serves as a significant animal care resource for other Federal and State agencies, zoos, and wildlife organizations in other countries.

Q. What containment procedures are in place to protect the researchers and surrounding community?

A. The ISRB includes a level of security sufficient to prevent the inadvertent release of any invasive species. The animal laboratories include redundant barriers between the rooms and exterior corridors. Official standard operating procedures have been developed and are followed to ensure the building remains secure.

Q. What other types of measures have been taken to keep researchers, the surrounding community, and animals safe?

A. A principal priority of the NWRC is safety and security of people and animals. All studies require protocols that are reviewed and approved by the NWRC Animal Care and Use Committee. The protocols must address all safety measures prior to the beginning of any research study.

The construction of the ISRB met all applicable State and Federal regulations and the safety requirements of all groups that have jurisdiction, including: Colorado State University, Larimer County, City of Fort Collins, Poudre Fire Authority, and the Occupational Safety and Health Administration.

Each animal enclosure is designed to maximize the humane care and safety of the species it will house. All holding equipment is constructed to prevent injuries to animals.

Q. Who built the ISRB?

A. A private developer built the ISRB, and it was completed in December 2006. The private developer financed the construction, and USDA is leasing the building for 20 years with options to renew.

Q. Who authorizes the use of animals for research?

A. Either State or Federal collection permits are required for most animals collected for use in research.

Q. Once a study is complete, what becomes of the animals?

A. The continued humane care and treatment of the animals are paramount to NWRC. Depending upon the species and the kind of study, animals may be humanely euthanized.

Q. Isn't there a way to conduct research without using animals?

A. New invasive species arrive in the United States every year. The best way to find solutions for removing or managing invasive species is through careful and thorough research. This research needs to be conducted with relevant species in an appropriate environment. Solutions to these problems require the humane and safe use of animals in research activities.

Q. What value does the center add to the Fort Collins community and the United States?

A. The specialized field of wildlife damage management is becoming increasingly important and is one of the more significant issues in society today. Wildlife is a publicly-owned resource. Wildlife can cause conflicts and transmit diseases to humans, pets, and domestic livestock. The ISRB is designed to provide a safe, humane, and scientifically sound place to conduct wildlife research that is beneficial to wildlife

The Invasive Species Research Building can simulate temperature and humidity ranges from temperate to tropical ecosystems.

managers, disease biologists, health officials, and the American public. The research conducted at the ISRB will build upon the NWRC's recognition both nationally and internationally as a leader in significant, scientific wildlife research.

Q. Who else is involved with invasive species research?

A. NWRC has collaborative relationships with a number of Federal and State agencies and academic institutions. Examples of a few of our partners include: Colorado State University, U.S. Geological

Survey, U.S. Fish and Wildlife Service, Central Science Laboratory in the United Kingdom, Commonwealth Scientific and Industrial Research Organization in Australia, and Manaaki Whenua Landcare Research in New Zealand.

Q. How do I obtain more information on NWRC's invasive species research?

A. For more information on the NWRC's invasive species research, please go to http://www.aphis.usda.gov/wildlife_damage/nwrc on the Web.



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United States Department of Agriculture
Animal and Plant Health Inspection Service

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