



Animal and Plant
Health Inspection
Service

Aug. 26, 2014

Office of the
Administrator

1400 Independence
Avenue SW
Washington, DC
20250

Dear Stakeholders:

This is the time of year when families from across the country and around the world travel hundreds and even thousands of miles to visit our national parks, rangelands, and other natural areas in hopes of seeing bears, deer, elk, wolves, raptors and many other wildlife species in their native habitats. In the last 25 years, these beautiful animals have become more abundant thanks in large part to successful conservation and management efforts, including efforts by our Wildlife Services (WS) program.

More animals mean tourists are more likely to catch a glimpse of them, but it also increases the likelihood of wildlife conflicts. As the program responsible for wildlife damage management, WS works at the request of other Federal and State government agencies as well as private landowners and companies to help resolve a diverse range of conflicts that wildlife can cause. WS helps keep wildlife, especially birds, off runways and out of the surrounding air space to avoid collisions that could lead to lengthy delays or worse—potentially life-threatening situations. The program also works with farmers to prevent wildlife from eating their crops and killing their livestock, protects threatened and endangered species from predators, and helps stop the spread of wildlife diseases such as rabies, brucellosis and tuberculosis.

Our work is based on sound science and many of the available methods and tools to address problems caused by wildlife are developed by our very own researchers at the National Wildlife Research Center (NWRC) headquartered in Fort Collins, CO. The center is led by Dr. Larry Clark, and in fiscal year 2014, approximately 18 percent, or \$19 million, of WS' overall budget was set aside for research, the majority of which was devoted exclusively to the development of nonlethal tools and techniques. WS' Wildlife Biologist Michael Marlow, a full-time resource management specialist, helps WS' State offices along with external partners adopt these nonlethal approaches when and where appropriate.

At any given time, the center, which has eight field stations and 150 employees across the United States, has more than 400 active studies underway assessing everything from reproductive inhibitors and wildlife disease sampling strategies to high-tech hazing systems for Canada geese and aerosolized chemicals to expose brown tree snakes that like to hide in cargo holds in Guam. Some of our scientists are experts in predator management while others have spent years studying bird behavior, wildlife diseases or rodent populations. Regardless of their expertise, everyone's goal is to use science to help resolve wildlife conflicts safely and humanely.

Unique genetic studies currently underway at NWRC are using “environmental DNA”—fragments of DNA found in water, air, and soil—and “non-invasive DNA”—fragments found in scat, saliva and hair samples collected off the landscape—to identify individual animals in the ecosystem. This is especially relevant for tracking endangered species like the Mexican wolf, detecting invasive species like the Burmese python and feral swine, and, in some cases, identifying predators responsible for livestock attacks. Such technology can even help estimate wildlife populations. Instead of temporarily capturing the animals and taking blood samples, non-invasive DNA analysis has the potential to provide the same results but without any stress to the animals.

Not all of NWRC’s research, however, involves high-tech solutions. Livestock protection dogs have been in use for centuries to help protect sheep and other livestock from attacks by predators. NWRC is studying European breeds of guardian dogs with the goal of reducing conflicts from wolves and grizzly bears here in the United States. As of July, NWRC placed 62 puppies of various breeds with 17 sheep herds owned by producers in several Western States. NWRC’s researchers are partnering with the producers to determine which breeds are the most effective in preventing attacks and to identify training methods that other producers could employ with livestock protection dogs on their own farms. While livestock protection dogs alone are not enough to prevent all predator attacks, this study could help to expand their use and more readily provide producers with another nonlethal resource.

Because lethal management is sometimes necessary to resolve wildlife conflicts, NWRC is also researching new methods to help ensure toxicants and rodenticides are ingested only by targeted species. For example, feral swine feeders being developed by private companies and evaluated by NWRC open only in response to the sounds of feral swine grunting and snorting. NWRC researchers are also looking to incorporate avian repellents in commonly used rodenticides to help keep birds out of harm’s way.

The future success of wildlife damage management depends on the development of new tools and techniques that are environmentally sound and socially responsible. While these new methods are developed for our own employees’ use, NWRC works hard to promote their use in the private sector as well. By investing in research and transferring new technology like rodenticides, reproductive inhibitors and snake traps and to other wildlife damage managers, pesticide companies and producers, NWRC is fostering innovation that is being adopted literally worldwide.

I’ve only gleaned the surface of the important research taking place at NWRC and its field stations. If you’re interested in learning more about NWRC, please take a look at the center’s recently published [2013 Accomplishment Report](#).

Sincerely,



Kevin Shea
APHIS Administrator