

March 2013

The Trapline

United States Department of
Agriculture

Animal & Plant Health
Inspection Service

Wildlife Services



Cooperating with:

Nevada

Department of Agriculture

Division of Resource Protection



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Mission Statement

The Nevada Wildlife Services Program (WS) is a collaborative program involving the Nevada Department of Agriculture's Division of Resource Protection (State) and the USDA-APHIS-Wildlife Services Program (federal), whose mission is to protect agriculture, natural resources, property, and the human health and safety of the citizens of Nevada from the threat of injury, damage, or resource loss due to wildlife.

Introduction

During March, wildlife damage management work was conducted on an estimated **9.4** million acres of land under agreement. On these lands, WS personnel helped Nevada's farmers and ranchers protect over **\$111** million in agricultural resources such as cattle, sheep, and livestock feed; and over **\$21** million in natural resources. Additionally, WS assisted **302** persons and entities with technical assistance which involves providing information or equipment to cooperators so they can resolve problems themselves. Cooperators reported **\$3,456** in damage and WS Specialists verified another **\$58,714** in damage to other agricultural resources. These losses would be much higher without an effective wildlife damage management program. During March, coyotes accounted for **\$18,151** in verified losses, mostly to livestock, and **525** coyotes were taken with a variety of management methods to resolve these and other ongoing complaints. WS routinely collects blood samples or oral swabs from species taken or handled during normal control activities for monitoring the presence of plague, avian influenza, and other diseases. In March, **50** samples were processed.

The following excerpts are a selection of activities and events of this program which occurred during the month of March, 2013.

Resource Protection

State Office

During March, 2013, the State Office trap loaning program checked out **14** cage traps. The species distribution for the traps loaned out were: skunks (**5**), ground squirrels (**7**) and raccoons (**2**). Information regarding baits to use, trap placement tactics, handling of trapped animals and safety precautions to take when working with the wildlife species were provided for all equipment loaned.

East District

On March 1st, the Ely plane responded to a request for assistance from a cattle rancher, in Nye County. The rancher reported that coyotes had killed two of his newborn calves, valued at \$1,500. With the help of District Supervisor (DS) Joe Bennett as the ground crew, eight coyotes were removed near the location of the kills. No further losses have been reported.

On March 11th, a cattle rancher in southern Elko County reported the loss of one calf, valued at more than \$700. Wildlife Specialist (WS) Derril Fry traveled to the location and confirmed that coyotes had killed the calf. WS Fry was able to locate and shoot one coyote near the kill. WS Fry also requested the Elko plane to respond to the complaint. In two mornings, the Elko plane was able to remove seven coyotes near the kill. WS Fry provided the rancher with technical assistance in the form of non-lethal recommendations. To date, no further losses have been reported.



On March 11th, Scott MacDonald started working for Wildlife Services. WS MacDonald will be working on Nevada Department of Wildlife (NDOW) project 21, protecting sage grouse in eastern Nevada. WS MacDonald comes from Arizona and has worked on wildlife protection projects in the past with the Arizona Game and Fish Department. We would like to welcome WS MacDonald to the Nevada Wildlife Services program.

On March 12th, a cattle rancher in south western White Pine County contacted WS Scott Little concerning the loss of one calf, valued at more than \$700. On March 15th, the Ely plane responded to the location. With the assistance of WS Little as the ground crew, three coyotes were removed. No further losses have been reported.



On March 18th, a cattle rancher in northern Elko County contacted the Reno office concerning a problem with ravens. The rancher emailed a photo of a calf that had been injured by ravens. Ravens had pecked at the calf's tail until it had severed. On March 20th, Pilot Ken Baer and Crew Member (CM) Wayne Rowley traveled to the location and confirmed the raven damage. Hard boiled chicken eggs treated with DRC-1339 were placed out near the site of the damage. Several ravens were removed. Technical assistance was also provided in the form of non-lethal recommendations to help prevent future raven problems.

On March 18th, a cattle rancher contacted WS Virgil Fullerton concerning a problem with ravens. The rancher reported that ravens had injured a calf, resulting in \$200 in losses. WS Fullerton traveled to the location and confirmed the damage. WS Fullerton utilized eggs treated with DRC-1339 to remove 20 ravens. No further losses have been reported. Technical assistance was also provided in the form of non-lethal recommendations.

During March, work began at a large power company in eastern Nevada. Ravens have been/are building nests on the power poles, causing many power outages to rural Nevada homes and ranches. Many farms are starting their pumps to irrigate fields and the raven nests are causing outages. Several thousand dollars in damage have been documented. Eggs treated with DRC 1339 have been placed out in areas with problems. The work will continue into the summer months.

West District

During the week of March 4th through March 8th, DS Jack Spencer conducted a routine field inspection with WS Ben Miller on the Washoe County Mule Deer Project (hunt unit 014). During the inspection, a male lion's territorial scratch was found, which contained bighorn sheep hair in the lion scat. The lion recently entered the project area, with its direction of travel heading toward adjacent hunt unit 012. WS Miller and DS Spencer placed trail snares in the canyon, anticipating that it would return in the coming weeks. Particular care was taken in the placement of the trail snares, because the area where the lion was traveling had 35-40 resident bighorn sheep in the canyon. On March 20th, WS Miller checked the trail snares, finding that he had captured the roughly 145 pound male lion with an NDOW ear tag. WS Miller also found where the lion had killed two mule deer (valued at \$3,000) not far from the capture site. The lion had been tagged two years prior by NDOW, about 44 miles to the north. WS Miller will continue to protect mule deer, bighorn sheep and antelope within the protection area.



On March 4th, WS George Hansen checked leghold traps around the lambing grounds in Lander County. During the trap check, WS Hansen found that he had captured two invasive red foxes and as he approached, one fox pulled out of the trap. The other red fox was dispatched. Red foxes have been steadily moving into the West District from the east. Last year, WS John Peter saw two red foxes, in Humboldt County, along the Oregon border and these were the first red foxes he has seen in nearly 30 years of trapping that area.

On March 4th and 5th, Pilot Wes Gossard and CM Brandon VanderMay conducted aerial operations, around several calving areas, in Humboldt County. WS Peter's phone has been ringing off the hook with ranchers calling and requesting coyote relief near their young vulnerable calves. During the two day flight, 23 coyotes were removed with most of the coyotes removed in and around the calving areas. WS Peter provided ground support, during aerial operations. Livestock protection efforts will be ongoing.

On March 7th, Pilot Gossard and CM VanderMay conducted aerial operations near several sheep bands along the California border, in Washoe County. The sheep producers reported sporadic sheep losses and WS Keopke and WS-CA George Affonso provided ground support for the aerial crew. During the flight, seven coyotes were removed with the ground crew locating several for the plane. To date, no further livestock losses have been reported in the immediate area, however, as sheep move into new areas, different coyotes will likely become a problem. Protection efforts will be ongoing.

On March 12th, a large power company, in Humboldt County, reported that ravens had caused \$80,000+ in damages. The power company reported that an electrical crew has been removing raven nests, twice a week, and they were still falling behind from the persistent ravens. The spokesman for the power company reported that it is common for ravens to cause: transformer fires, power

outages for residents and loss of power to water agricultural crops. WS Peter will help with some raven removal along the power lines as time allows. With a 4.1% increasing trend in Nevada's raven population from 1966 to 2011 (Sauer, J. R., J. E. Hines, J. E. Fallon, K. L. Pardieck, D. J. Ziolkowski, Jr., and W. A. Link. 2012. *The North American Breeding Bird Survey, Results and Analysis 1966 - 2011. Version 12.13.2011 USGS Patuxent Wildlife Research Center, Laurel, MD*), ravens have caused a lot of problems from depredating livestock and sage grouse nests to starting rangeland fires.

On March 7th, Pilot Gossard and CM VanderMay conducted aerial operations near several calving areas, in Lander County. During the morning operation, seven coyotes were removed. WS Hansen provided ground support, during aerial operations.

On March 13th, WS Nick Smith was busy running M-44's around several cattle and sheep producers in Douglas County. During WS Smith's ground check, he removed seven coyotes, six with the use of M-44s and one with the use of leghold traps. Livestock losses have been nearly nonexistent with WS Smith's continued livestock protection efforts and several of the ranchers commented to his supervisor of the good work WS Smith is performing.

On March 14th, Pilot Gossard and CM VanderMay conducted aerial operations around several cattle and sheep ranches, in Lyon County, as requested by livestock producers. During the flight, the aerial crew removed one problem coyote that was evading ground control efforts. Livestock protection efforts are ongoing.

On March 15th, Pilot Gossard and CM VanderMay conducted aerial operations around several calving areas, in Humboldt County.

Several ranchers reported calf losses to coyotes and had observed groups of coyotes near the calves. The aerial crew started working the areas with damage and immediately spotted five coyotes eating on a calf as it lay half out of the cow's birthing canal. The aerial crew promptly removed the 17 offending coyotes in and around the calves. The aerial crew guided WS Koepke to the site of the cow with the calf hanging half out of the cow's birth canal. WS Koepke inspected the grizzly scene and was surprised the cow was still alive. WS Koepke retrieved the rancher and together they managed to pull the half eaten calf out, which saved



the cow. The cattle producers were very pleased with the protection efforts and to date no further livestock losses have been reported. The aerial crew, on numerous occasions, has witnessed coyotes in the act of chasing, killing and eating livestock and wildlife such as mule deer and antelope.

On March 18th, DS Spencer conducted a field inspection with WS Koepke, in Churchill County. Sev-



eral calving and sheep ranches were visited during the inspection. Three separate ranchers had high praise for the protection efforts WS Koepke provided for their livestock operations. During the daylong trap check, WS Koepke removed seven coyotes with the use of trail snares. DS Spencer will continue to conduct field inspections with his highly valued employees.

During the month of March, WS Peter was busy running equipment on dozens of cattle and sheep producers in Humboldt and Pershing Counties. One cattle producer lost two calves (valued at \$1,600) in one night, to coyotes. During the month, WS Peter removed 57 coyotes with the use of M-44s, and two more with snares. WS Peter will continue to protect his many livestock producers.

On March 21st, Pilot Gossard and CM VanderMay conducted a 50 minute flight near Winnemucca, before weather shut aerial operations down for the day. Though the flight was very short, the aerial crew removed 11 problem coyotes out of the calving area.

On March 25th, WS Hansen was busy trapping around several lambing areas, in Lander County. The lambing season is currently underway and the work days become long and tedious. During the day, WS Hansen removed four coyotes with the use of traps. WS Hansen will continue to protect livestock in Lander County.

On March 27th, DS Spencer conducted a routine field inspection with WS Smith, in Douglas County. The first ranch that was visited reported that several black bears had moved in around the lambing areas and harassed the sheep. NDOW manages black bears, so the complaint was turned over to them. WS Smith placed additional M-44s and trail snares at a different location that experienced occasional lamb losses. During the day, WS Smith removed three coyotes by using M-44s. WS Smith will continue to protect livestock on the many ranches in Douglas and Lyon Counties.

On March 19th, WS Koepke checked equipment around several calving and sheep areas, in Churchill County. During his check, WS Koepke removed five coyotes with the use of snares and M-44s. WS Koepke will continue to protect livestock.

On March 27th, a large electric power company reported that ravens had built five separate nests on transformers and several blew, causing \$10,000 in damages. WS Peter placed DRC-1339 treated egg baits around the damage sites, which resulted in the removal of 29 ravens. Protection efforts are ongoing.

During the month of March, Wildlife Biologist (WB) Bowers continued work on the Wildlife Hazard Assessment (WHA) for a Naval Air Station (NAS) in Northern NV. The WHA involved conducting structured surveys on the airfield and the surrounding area, as well as general observations. This data was collected for a 12 month period in order to determine seasonal and spatial trends of wildlife usage on the airfield and surrounding area. Now that the data collection is complete, WB Bowers is analyzing the data and writing the WHA, which will include recommendations regarding species management, habitat alterations, and agricultural management practices. WB Bowers will also continue surveys on and around the airfield in order to monitor for changes in wildlife presence and activity.

During the month of March, WB Bowers continued working with the propane cannons on the airfield in order to deter horned larks and great blue herons from using/crossing the area. When strategi-

cally placed, the propane cannons seem to keep the horned larks from the highest risk areas. It has yet to be determined if the propane cannons will be effective in keeping great blue herons from crossing the airfield. However, WB Bowers has witnessed common ravens altering their flight paths around the airfield as a result of the propane cannons going off. Common ravens are fairly intelligent (for birds) and recognize the loud booms as a potential threat. Coyote activity seemed to decrease on the airfield as well. WB Bowers has noticed a decrease in horned lark activity on and around the airfield with the warming weather.

WB Bowers attended the quarterly Bird Aircraft Strike Hazard (BASH) meeting where current hazards were discussed, as well as future concerns. As a result of the concern of a possible BASH incident involving a great blue heron, WB also attended a conference call with the environmental department where possible methods/actions were discussed. WB Bowers will continue to work with and educate the environmental department and other interested agencies/parties to try to come up with a way to reduce the potential for a BASH incident involving great blue herons.

Throughout the month of March, WB Luke Barto continued to protect aviation safety at a local airport, removing: eight pigeons, nine California ground squirrels, four European starlings, three striped skunks, eight yellow bellied marmots and one black tailed jack rabbit. Rodents, such as the marmots and ground squirrels, threaten arriving and departing aircraft, to a lesser degree, but also gnaw on sensitive electrical wiring used for navigational aid.

WB Barto also utilized non-lethal harassment techniques to disperse: 82 ducks, 32 Canada geese, two American crows and one California gull. In addition to harassment, WB Barto caught and transferred one feral/free ranging domestic cat from the aforementioned airport. Domestic animals such as cats and dogs that are captured on airport property are then transferred to Washoe County Animal Control for the safety of the animal, as well as aviation.

WB Barto utilized his newly crafted modified Swedish Goshawk trap to capture and translocate two Cooper's hawks from the above mentioned airport. Predatory birds (such as Cooper's hawks) can be oblivious to their surroundings while scanning and attempting to catch a prey animal, and in doing so, can become a strike hazard to arriving and departing aircraft at airports. Capture and translocation of predatory birds from an airport provides not only a safer environment for aviation, but for our newly translocated feathered friends as well.

WB Barto continued surveillance of wildlife/runway crossings at the above mentioned airport. Continued monitoring of wildlife overtime can illustrate trends in wildlife movement and behavior, which enable biologists in preventing wildlife strikes through habitat manipulation and prey base suppression.



New and Developing Methods

Nothing to Report

Valuing and Investing in Employees

Nothing to Report

Information and Communication

On March 14th-16th, State Director (SD) Mark Jensen and DS Bennett attended the Wildlife Damage Management Committee Meeting in Sparks.

On March 26th, SD Jensen attended the Nevada Board of Agriculture Meeting, in Sparks.

Emerging Trends/Issues

Monitoring for zoonotic disease is critical, not only for the safety of Nevadans but also for livestock and wildlife populations. WS' Wildlife Specialists are the first line of defense against outbreaks through continued disease sampling of animals handled for depredation purposes. From urban areas (such as airports) to remote rural areas where livestock and wildlife are protected, WS routinely submits blood samples for monitoring of plague, tularemia, and other zoonotic diseases.

This disease monitoring would not take place without the dedicated efforts of our Wildlife Specialists who live and work throughout Nevada. (**See Tularemia Surveillance update next page**).

Equal Employment Opportunity/Civil Rights (EEO/CR)

Nothing to Report

Future Meetings and Events

NDOW Commission Meeting. May 10th and 11th, in Reno. SD Jensen to attend.



PROGRAM ACTIVITY REPORT (PAR)

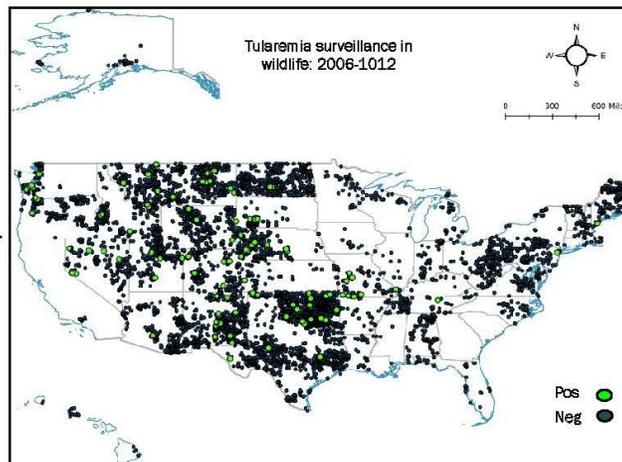


Tularemia Surveillance Update

Tularemia is a highly infectious zoonotic disease caused by the bacterium *Francisella tularensis*. It is considered to be one of the most infectious pathogens ever studied. The bacterium has the ability to readily aerosolize, and to cause morbidity and mortality in wildlife, domestic animals, and people. It also has the potential to serve as a bioterrorism agent. Human tularemia cases are still reported every year in the United States, with an average of 150 cases per year, most of which are associated with tick bites. For these reasons, tularemia is a disease of concern for animal and public health officials, as well as for biosecurity agencies.

Despite the potential risks, relatively little is known about tularemia transmission and ecology. This is in part because more than 200 species have been documented with naturally occurring tularemia infections, and multiple vectors (e.g., ticks and biting flies,) are thought to be involved in transmission. It is also believed

capable of persisting in the environment under ideal conditions (e.g., moist soil and water). In short, *F. tularensis* could potentially be ubiquitous in the environment, in arthropod vectors, and in mammalian host species.



The NWDP, with assistance from the Centers for Disease Control (CDC), have been implementing a national monitoring system for *F. tularensis* in wildlife. Blood samples collected by NWDP wildlife disease biologists are tested for evidence of *F. tularensis* antibodies. While testing has been reduced in recent years, several hundred samples are still screened

annually from areas where limited data is available and from areas where human tularemia cases are a concern. Of 21,768 samples tested since 2006, 161 were *F. tularensis* antibody positive, resulting in a relatively low seroprevalence of 0.7% across multiple species. Coyotes are one of the species with the highest exposure rates overall.

In 2012, NWDP biologists collected nearly 5,000 wildlife samples that were either placed in the National Nobuto Storage Archive or sent to the CDC for testing. Additional wildlife data were also provided by the Washington State Department of Health. The seroprevalence of 2012 samples tested to date is

0.2% (n=353). One of the samples was from a beaver with an extremely high *F. tularensis* titer, possibly indicating recent exposure or re-exposure to the pathogen.

For additional information, please contact Sarah Bevins,

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The original artwork on this page was created by the National Wildlife Disease Program's Erika Kampe and Sarah Goff

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