IDAHO DEPARTMENT OF FISH AND GAME

Ed Schriever, Director

Project F19AF00860

Final Performance Report
Wildlife Restoration and Basic Hunter Education

WILDLIFE HEALTH LABORATORY

July 1, 2019 to June 30, 2020

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Boise, Idaho
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FEDERAL AID IN WILDLIFE RESTORATION
FINAL PERFORMANCE REPORT

State: Idaho

Grant number: F19AF00860

Grant name: Wildlife Health Laboratory

Report Period: July 1, 2019 to June 30, 2020

Report due date: September 28, 2020

Location of work: Statewide

Strategy 1: Research, Survey, Data Collection and Analysis

Standard Objective 1: Conduct 5 disease and/or species specific investigations by 30 June 2020.

Results:
The Wildlife Health Program (WHP) conducted 10 or more disease or species investigations during the grant period. The investigations were conducted on moose, bighorn sheep and mountain goat hunter surveillance samples and diseases surveillance efforts for chronic wasting disease (CWD), brucellosis, white-nose syndrome and mycoplasma. Additional projects included treponema-associated hoof disease (THAD) surveillance and testing on elk, deer and moose; as well as annual plague and rabies monitoring. The WHP handled 4,290 biological cases during the grant period. In addition, the WHP conducted genetic analyses on 1,009 biological samples from wolves, bobcats, bears and mountain lions and nutritional analysis on 679 plant samples from bighorn sheep ranges in Idaho.

Standard Objective 2: Conduct 150 necropsy investigations by 30 June 2020.

Results:
The WHP conducted 220 cause of death necropsy investigations during the performance period. 1,002 hunter surveillance, targeted surveillance, and cause of death were submitted to the lab for analyses to assess the health and disease status in Idaho’s wildlife populations. This included evaluation of moose heads for meningeal worms, carotid artery worms, ocular issues, tick densities and CWD sampling. The WHP and Idaho Department of Fish & Game (IDFG) Regional staff partnered with US Geological Survey (USGS) and US Fish and Wildlife Service (USFWS) to assess avian carcasses found under transmission lines to determine cause of death, especially those associated with gunshot wounds and electrocution. Finally, TAHD is a novel disease in Idaho and the WHP worked with the regions and Washington State University to conduct surveillance for deer, elk and moose with hoof abnormalities to assess TAHD distribution in Idaho.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
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<tbody>
<tr>
<td>Necropsy/Tissue Samples</td>
<td>1,002</td>
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<tr>
<td>Moose Hunter Surveillance</td>
<td>439</td>
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<tr>
<td>Bighorn Sheep and Mtn. Goat</td>
<td>103</td>
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<tr>
<td>Targeted CWD Surveillance</td>
<td>240</td>
</tr>
<tr>
<td>Necropsies or Investigations</td>
<td>220</td>
</tr>
</tbody>
</table>
Standard Objective 3: Create or manage 4 databases by 30 June 2020.

Results:
WHP staff work with the IDFG Wildlife Bureau, Idaho Fish and Wildlife Information Systems (IFWIS), and past IDFG Information Systems Bureau staff to manage and curate health related data in the WHP database, the statewide animal database and the big game mortality reporting (BGMR) database. Staff are also working with the database managers to provide quality control for the eventual merging all databases into one statewide master database. This is an ongoing project that requires coordination, knowledge of data quality control and understanding of the nuances of health matrices. In addition, during this grant period the WHP purchased and began the creation of a new genetics database called Progeny. This new database will allow the WHP to store genotype and location data for all the genetics samples collected in Idaho, housed in the WHP or sent off as part of cooperative research and management projects.

Standard Objective 4: Develop 3 techniques by 30 June 2020.

Results:
WHP staff developed 3 techniques of analyses during the grant period. These techniques are as follows:
- Validated species-specific genetic analyses for canids, ursids, and felids.
- Validated and quality controlled individual genetic analyses for wolves
- Developed and validated in-house nutritional analyses for fiber and lignin

Strategy 2: Training and Education
Standard Objective: Conduct 8 Fish and Wildlife Technical Training events by 30 June 2020

Results:
The WHP has conducted 11 training events across the state during the grant period. These have included the following:
- 3 CWD educational presentations to Idaho County Commissioners, District 7 Board of Health and the Idaho Department of Environmental Quality (DEQ) Solid Waste managers meeting.
- 5 Biological Sampling and Collection Training events with more the 110 participants
- 4 Chemical Immobilization Training events for crews working on beavers, mountain lions, wolves and bear.
- 2 career educational workshops for children and teenagers about wildlife biology and wildlife genetics at the Wild Sheep Foundations Youth Conservation Education Exposition

Strategy 3: Outreach
Standard Objective 1: Inform/Communicate with 100 individuals by 30 June 2020.

Results:
The WHP has provided information and communication to over 100 individuals in 3 CWD educational presentations to Idaho County Commissioners, District 7 Board of Health and the Idaho DEQ Solid Waste managers meeting.
**Standard Objective 2:** Produce 2 products by 30 June 2020.

**Results:**
The WHP staff in conjunction with the IDFG CWD team, Communications Bureau, and regional staff created multiple products during the grant period. CWD related products include the following:

- CWD internal fact sheets
- CWD public brochure
- CWD business card
- Updates to CWD information page in IDFG big game proclamation/regulations
- Updates to the CWD webpages
- Hunter CWD harvest sample look up on the web site
- Multiple statewide and regional press releases

In addition, the WHP created a TAHD awareness page in IDFG big game proclamation/regulations and created species-specific sampling guidelines for Regional staff.

**Strategy 4: Technical Assistance**

**Standard Objective:** Provide technical assistance to 5 organizations by June 30, 2020.

**Results:**
The WHP provided the following technical assistance during the grant period:

- Technical comments to Food and Drug Administration (FDA) and Center for Disease Control (CDC) on brucellosis select agent status
- Idaho’s annual brucellosis coordination meeting between IDFG, Idaho State Department of Agriculture (ISDA), & U.S. Department of Agriculture (USDA)
- University of Idaho technology transfer and validation for Idaho’s wolf genetics project
- Participation and technical comments for the Office of Emergency Management’s Idaho All Hazards Mitigation Plan
- Development of materials and technical comments for the Idaho Falls Board of Health - CWD presentation and discussion
- Presentation and discussion at the DEQ Solid Waste Meeting
- Joint IDFG and DEQ presentation and discussion about solid waste and prions at the Idaho County Commissioner meeting
- Provide analysis and technical feedback to California Department of Fish & Game bear genetics validation and standardization
- Coordination and technical assistance to the Association of Fish & Wildlife (AFWA) Heath Committee relating to COVID – 19 and bats
- Provide technical assistance and coordination of statewide TAHD Surveillance
- Western Association of Fish and Wildlife Association (WAFWA) Regional CWD coordination meetings
- USGS rabbit hemorrhagic disease (RHDV2) coordination meetings
- Provide technical assistance to Idaho’s One Health Consortium and Idaho Department of Health and Welfare tabletop exercise on pesticide exposure and wildlife
- Coordination with University of Idaho and Washington State on graduate moose research projects
Strategy 5: Facilities/Areas Operations & Maintenance


Results:
The WHP operates and maintains the Eagle Campus Wildlife Health Laboratory (WHL), garage outbuildings adjacent to the lab and a portion of the Eagle Campus dormitory. The WHP is also responsible for a portion of the upkeep and maintenance on the campus grounds. For this grant period, operation and maintenance activities included work on the well, maintenance of dorm plumbing, mechanical and electrical, WHL walk-in freezer repairs, and grounds maintenance. Operations were improved in the north garage with the installation of an HVAC system to support the functioning of the -80 freezers during excessive heat and cold.

Multi-purpose Projects/ Relationship with other grants:

Statewide Wildlife Research
Most research projects – for any sampling or health assessments of live animals

Statewide Surveys & Inventory
Coordination and Administration – Coordination of health and disease activities with survey and inventory projects

Capture, Radio-mark, and/or Telemetry Monitoring – By statute all wildlife handled by IDFG have to have health assessment and interagency agreed upon disease testing conducted.

Survey and Monitoring – Wildlife health program participates in check stations to collect health metric data and works in the BGMR to ensure genetic data is collected and documented in the system.

Collection and Analysis of Harvest Data – Wildlife Health Program data is intimately connected to all data gathered for live animal or harvest data. Health metrics are tied directly back to harvest and research animals.

Discuss differences between work anticipated in grant proposal and grant agreement and that actually carried out with Federal Aid grant funds.
None

List any publications or in-house reports resulting from this work.

Reports, Presentations, and Posters
Publications
None

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Federal Aid Coordinator

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Toby Boudreau, Chief
Bureau of Wildlife
The Federal Aid in Wildlife Restoration Program consists of funds from a 10% to 11% manufacturer’s excise tax collected from the sale of handguns, sporting rifles, shotguns, ammunition, and archery equipment. The Federal Aid program then allots the funds back to states through a formula based on each state’s geographic area and the number of paid hunting license holders in the state. The Idaho Department of Fish and Game uses the funds to help restore, conserve, manage, and enhance wild birds and mammals for the public benefit. These funds are also used to educate hunters to develop the skills, knowledge, and attitudes necessary to be responsible, ethical hunters. Seventy-five percent of the funds for this project are from Federal Aid. The other 25% comes from license-generated funds.