

IDAHO DEPARTMENT OF FISH AND GAME

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Wildlife and Sport Fish Restoration
Pittman and Robertson

Final Performance Report



Statewide Surveys & Inventory

July 1, 2019 to June 30, 2020

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Federal Aid in Wildlife Restoration Annual Performance Report

State: Idaho

Grant number: F19AF00858

Grant name: Statewide Surveys & Inventory

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

Report due date: September 28, 2020

Location Information: Work for this Survey & Inventory Project Proposal will be conducted across the state in all counties and habitat types.

Need Statement:

The Idaho Department of Fish and Game (IDFG) and the Idaho Fish and Game Commission are charged with the preservation, protection, perpetuation, and management of all wildlife to provide continuous supplies for hunting and other wildlife-based opportunities. Management recommendations and actions, including establishment of appropriate harvest levels, require scientific information on population distribution, status, trend, health status, survival, and cause-specific mortality.

Purpose:

The purpose of this project is to survey Idaho's wildlife populations to document changes in populations and adjust management actions to promote sustainable populations for benefit of the hunting public and others.

Timeline: July 1, 2019 through June 30, 2020, timelines for specific activities are identified in the approach details.

Results and Benefits: See individual project reports contained herein.

Strategy 1. Coordination and Administration

Standard Objective:

Administer 1 grant by June 30, 2020

Activity Tag:

Project coordination and administrative support, compliance, and monitoring.

Approach:

Administration and coordination activities include budget management, programmatic and project planning and reporting, compliance, meeting attendance, supervision, and professional training and development.

Results:

Management recommendations and actions, including establishment of appropriate harvest levels, require scientific information on population distribution, status, trend, health status, survival, and cause-specific mortality. The survey and inventory program was implemented during this grant cycle by 55 primary full time staff distributed among 9 offices in 7 administrative regions of the state. Seasonal temporaries and other full time staff associated with other projects contributed to the grant objectives part time. These staff persons required supervision, coordination, and administration to effectively and efficiently implement the survey and inventory program. Lead program staff for the Survey and Inventory grant met together with 8 Regional Wildlife Managers once during the grant cycle to develop strategies and prioritize captured efforts, and program managers from the headquarters wildlife bureau office held a work plan meeting in each of the 7 administrative regions to discuss program obligations, resources, and priorities to accomplish survey and inventory program objectives. Numerous telephone conferences and staff meetings were held throughout the year among wildlife managers and staff around the state to provide input and direction to ensure objectives were accomplished, including to prioritize winter big game survey activities.

Strategy 2. Research, Survey, Data Collection and Analysis

Standard Objective(s):

Job 1. Conduct 19 investigations by June 30, 2020

Job 2. Conduct 32 investigations by June 30, 2020

Job 3. Conduct 13 investigations by June 30, 2020

Activity Tag(s)

Job 1 & 2. Fish and wildlife species data acquisition and analysis.

Job 3. Utilization data acquisition and analysis.

Job 1 – Capture, Radio-mark, and/or Telemetry Monitoring

Continuation of statewide population monitoring efforts through capture, radio-marking and/or telemetry monitoring will provide population health information and aid in improving our understanding of survival, mortality factors, and seasonal movement information critical to assessing population status.

Results:

Bighorn Sheep:

IDFG continued to monitor survival of 4 radio-marked California bighorn sheep in GMU 42 (Owyhee River). These were the only radio-marked California bighorn sheep monitored. IDFG also monitored Rocky Mountain bighorn sheep. Three bighorn sheep were captured and radio-collared in the South Beaverhead PMU (4 monitored). Thirty-four (34) bighorn sheep were monitored in the Lost River Range (GMUs 37, 50, 51). One bighorn sheep ram was captured and radio-collared in the East Fork PMU (GMUs 36, 36A). Including that ram, a total of 15 bighorn sheep was monitored in the East Fork during this reporting period. Four bighorn sheep (3 ewes, 1 ram) were captured, radio-collared and monitored in the Hells Canyon PMU. Two rams in the Lower Panther-Main Salmon PMU and 1 ram in the Tower-Kriley PMU were captured, radio-collared and monitored during this reporting period. All active GPS collars continue to provide waypoints used to determine seasonal movements, distribution, and habitat use.

Additional bighorn sheep captured and monitored for research in the Hells Canyon population management unit (PMU) are reported in the research grant report.

Biological samples were collected from bighorn sheep when they are captured and radio-marked, during necropsy of dead bighorn sheep (marked and unmarked), and from hunter harvested animals. All bighorn sheep hunters (n=99) were mailed a sampling kit to collect biological samples on their harvested bighorn sheep. Additional samples were also collected from hunter-harvested bighorns at the regional offices. Fifteen (15) California and 53 Rocky Mountain bighorn sheep were harvested in 2019. Analysis of collected samples was conducted under the Wildlife Health Program grant (F19AF00860).

Black Bear:

No capture, radio-marking, or telemetry of black bears occurred for the purpose of monitoring during this reporting period. Although nuisance bears are occasionally relocated, black bears were not a focus of IDFG-lead capture or collaring efforts.

Regional population staff assisted research with black bear capture planning and collar monitoring in GMUs 6, 10A and 32A, and will be reported in the Wildlife Research Report (F19AF00856).

Elk:

A total of 169 elk calves were captured, radio collared, and monitored during this report period. Captures took place during December 2019 and January 2020. A total of 124 (73%) monitored radio-collared elk calves survived until June 1, 2020. Major causes of mortality included mountain lion predation, malnutrition, and wolf predation.

Biologists monitored 510 cow elk during this reporting period. No additional adult cow elk were captured for management purposes and all adult cow elk monitored were captured and radio-collared in previous years. A total of 495 (97%) survived until June 1, 2020. The major cause of mortality was mountain lion predation.

The elk GPS radio collars collect approximately 2 locations a day. The data are used to document seasonal movements, distribution and range use patterns. See results in the Wildlife Research Report (F19AF00856).

Furbearers:

The southwest region staff captured, radio-marked and monitored movements of one beaver. Twenty-five beavers were captured radio tagged and monitored in in the Upper Snake Region. Blood and tissue samples were collected from 17 individuals to catalog DNA and disease information. Animals were monitored on a weekly basis to inform survival rates, cause of mortality, and movement patterns.

Gray Wolves:

No wolves were captured and radio-marked specifically for population and monitoring purposes during this reporting period. However, 4 wolves were captured for other purposes (e.g., predation management, livestock depredation control) with other funding sources. During the reporting period, 16 wolves were monitored with GPS collar coordinate uploads for monitoring of survival, seasonal movements and distribution under this grant.

Grizzly Bears:

Fourteen unique grizzly bears were captured on 18 occasions during the reporting period. This included 4 females and 10 males. Nine captures were of new individuals that have never been previously marked. Twelve of the bears were fitted with radio-collars. All trap sites received prior approval from the land management agencies. Trapping efforts and trap site signing followed protocols established by the Interagency Grizzly Bear Study Team. By radio-collaring bears, we document ages of first reproduction, average litter size, cub and yearling survival, how often a female produces a litter, causes of mortality, and estimates of survival among different sex and age classes of bears

Migratory Game Birds:

During the reporting period, 1,089 mallards were captured and banded in the Panhandle, Southwest, and Upper Snake regions to inform the Western Mallard Adaptive Harvest Management model for the Pacific Flyway. An additional 349 ducks – primarily gadwall – were banded during capture operations.

Seven sandhill cranes were captured, banded, and fitted with GPS transmitters in the Magic Valley (2), Southeast (1), Southwest (2), and Upper Snake (3) regions during the reporting period. Overall, 23 sandhill cranes were monitored with GPS transmitters during the reporting period.

Mourning doves were captured and banded in nearly every region of the state. Overall, 616 mourning doves were banded in Idaho to inform and support the national mourning dove harvest strategy.

Moose:

Thirteen (13) moose were captured and moved from urban areas during the reporting period. Of these, 6 were radio-marked and monitored. These animals are reported in capture and translocation.

Biological samples were collected from moose during capture and translocation and from necropsy of dead moose that were found in the regions. Biological samples were collected from hunter harvested moose. All moose hunters (n = 634) were mailed a sampling kit to use to collect biological samples on their harvested moose. Additional biological samples were collected at the regional offices. Hunters harvested 478 moose in 2019. Analysis of samples was conducted under the Wildlife Health Program Grant (F19AF00860).

Additional moose were captured and monitored for the statewide moose research project. These moose are reported in the research grant report.

Mountain Goat:

No mountain goats were captured and radio-marked during this reporting period.

Biological samples were collected from hunter harvested mountain goats. All mountain goat hunters (n = 44) were mailed a sampling kit to use to collect biological samples on their harvested goat. Additional biological samples were collected at the regional offices. Hunters harvested 34 mountain goats in 2019. Analysis of samples was conducted under the Wildlife Health Program Grant (F19AF00860).

Mountain Lion:

During FY20, Southeast Region staff captured one mountain lion and radio collared it in response to conflict with homeowners. This lion was opportunistically equipped with GPS collars and monitored. While nuisance mountain lions are occasionally captured and relocated, mountain lions are not a focus of IDFG-lead capture or collaring efforts.

Regional population staff assisted the research program with mountain lions capture and collar monitoring in GMUs 6, 10A, 32A, and the Bear River Range (74, 75 and 77); this will be reported in the Wildlife Research Report (F19AF00856).

Mule Deer:

A total of 190 mule deer fawns were captured, radio collared and monitored during this reporting period. Capture took place during December 2019 and January 2020. A total of 119 fawns survived (63%) until June 1, 2020. Major causes of mortality included malnutrition and mountain lion predation.

Biologists captured 56 adult mule deer does and monitored them along with 395 adult mule deer does captured and radio-collared in previous years for a total of 451 adult mule deer does monitored during this report period. A total of 419 survived (93%) until June 1, 2020. The major cause of mortality was mountain lion predation.

Blood and fecal samples are collected from each adult doe captured. These samples are tested for disease surveillance pregnancy rates. Analysis of samples was conducted under the Wildlife Health Program Grant (F19AF00860).

The GPS radio collars collect approximately 2 locations a day. The data will be used to document seasonal movements, distribution and range use patterns. Results can be found in the Wildlife Research Report (F19AF00856).

Pelican:

No transmitters were deployed in 2020. IDFG will continue to explore avenues for capturing female pelicans in the Blackfoot River system.

Pronghorn:

IDFG staff captured and monitored pronghorn in GMUs 39, 40, 41, 42, 45, and 49. All captured pronghorn were fitted with GPS collars and biological samples were collected during capture. Analysis of samples was conducted under the Wildlife Health Program Grant (F19AF00860). Survival, cause-specific mortality, migration, and habitat use will be derived from the data collected from the radio-marked animals. During this reporting period, 9 pronghorn were captured and monitored in GMU 40 and 12 in GMUs 45 and 49. An additional 25 pronghorn were monitored in GMUs 39, 40, 41, and 42.

Upland Game:

No Columbian sharp-tailed grouse, greater sage-grouse, or wild turkeys were captured and marked for monitoring or demographic purposes during this reporting period. All capture and telemetry efforts for greater sage-grouse were conducted under the Wildlife Research grant (F19AF00856).

White-tailed Deer:

No capture of white-tailed deer occurred for purposes of monitoring or demographic information during this reporting period under this grant. However, research continued in portions of GMU 10A and 15, and capturing and radio collaring were a part of that research. Please see State Wildlife Research Report (F19AF00856) for more information.

Job 2 – Survey and Monitoring

The proposed wildlife surveys are critical to assess population status relative to management plan objectives, and population trends. Metrics of population size inform our assessment of management actions, including harvest seasons and bag limits for game species.

Results:

Bighorn Sheep:

A total of 3 GMUs were surveyed in the Lost River Range PMU by helicopter to generate estimates of herd abundance and age and sex ratios. There was a total of 444 bighorn sheep observed during the survey (226 ewes, 72 lambs, and 146 rams). This survey took approximately 42 hours of flight time.

Black Bear:

Population monitoring consisted of monitoring trends in harvest demographics (sex and age obtained from tooth cementum analysis) via mandatory checks of all harvested bears.

Black bears were monitored incidentally to camera trap surveys for wolf distribution during this grant period. During early fall 2019, 736 data cards were retrieved from 776 cameras deployed during the previous report period. Analysis of black bear images obtained from cameras will be in cooperation with the State Wildlife Research Report (F19AF00856). IDFG personnel deployed a total of 696 unbaited cameras in the field during June 2020.

Elk:

An aerial sightability survey was performed in the Island Park Zone (GMUs 60, 60A, 61, 62, and 62A) in January/February, 2020. The total population estimate for the zone was 4,653 elk (2,635 cows, 777 bulls, 1,239 calves). This resulted in a bull:cow:calf ratio of 29:100:47. The current estimate exceeds population objectives for adult cows and total bulls, but is below objective for adult bulls at 135 total adult bulls estimated in the zone at the time of the survey

An aerial sightability survey was performed in the Palisades Zone (GMUs 64, 65, and 67) in January/February, 2020. The total population estimate for the zone was 631 elk (312 cows, 186 bulls, 130 calves). This resulted in a bull:cow:calf ratio of 60:100:42. The current estimate is below population objectives for adult cows and adult bulls (73 total adult bulls estimated in the zone at the time of the survey), but is within objective for total bulls.

During January 2020, a sex/age composition survey for the Panhandle Zone was flown in GMUs 1 and 6. A total of 315 elk were classified, resulting in a calf:cow ratio of 39:100.

Also in January 2020, a sex/age composition survey for the Sawtooth Zone was flown in GMUs 33 and 35. A total of 1,532 elk were classified, resulting in a calf:cow ratio of 32:100.

Furbearers:

The remaining remote fisher camera stations were retrieved in the Clearwater Regions, and data contributed to the multi state project. A total of 28 camera stations for wolverines and other forest carnivores were placed in the McCall, Magic Valley, Southeast, and Upper Snake Regions. Data cards were retrieved in the Spring/summer of 2020.

No river otter eDNA or latrine surveys were conducted. Latrine surveys are scheduled to begin in FY 2021.

Bobcat jaws were collected and processed from 219 harvested animals, representing 22% percent of the annual harvest. Jaws were processed and submitted for aging, and tissue samples extracted for DNA and sex identification.

Gray Wolf:

We will determine location of all harvested wolves for monitoring purposes through a mandatory check of harvested wolves.

During early fall 2019, 776 cameras deployed during the previous report period were retrieved. A total of 736 SD cards produced 10,339 images from FY2019 cameras. In June 2020, IDFG staff deployed 696 unbaited remote cameras in a stratified random sampling framework across the state. Data cards will be retrieved during early fall 2020. These data will be used in conjunction with a variety of covariates in an occupancy model framework to determine wolf distribution. Analysis of wolf images obtained and occupancy and abundance estimates from cameras will be in cooperation with Statewide Wildlife Research Report (F19AF00856).

Grizzly Bears:

Grizzly bears were monitored through remote cameras deployed in the Panhandle and Upper Snake regions and were monitored incidental to camera trap surveys for wolf distribution throughout the grant period. During fall 2019, data cards were retrieved from cameras deployed during the FY19 reporting period. Cameras were placed in the field during June 2020 and data cards will be retrieved during early fall 2020.

Upper Snake Regional staff performed aerial surveys with a focus of locating females with young. Surveys are conducted in 4 flight observation units in June and repeated in July. One grizzly bear was observed during surveys conducted in July, 2019 and June, 2020. In the Greater Yellowstone Ecosystem the annual grizzly bear population estimate is derived from the number of unduplicated females with cubs of the year observed. To augment survey flight efforts, an additional 21 cameras were deployed between June and August 2019 with the primary purpose of monitoring female grizzly bears and cubs of the year in the project area. We documented approximately 20 unique grizzly bears at the sites and observed multiple females with young.

Migratory Game Bird:

Staff in the Magic Valley, Southeast, and Upper Snake regions participated in the September 2019 Survey of the Rocky Mountain Population of Greater Sandhill Cranes. Trumpeter swan productivity surveys were conducted in conjunction with this survey effort.

Canada goose nest surveys, wood duck nest box monitoring, swan migration surveys, and duck pair and brood counts were conducted in the Panhandle Region.

Moose:

Moose were incidentally counted during elk and mule deer surveys in GMUs 1, 60A, 62, 64, 65, 67, 72, 74, 75, and 78.

Remote cameras were deployed for other species statewide. Moose are observed in photos taken by these remote cameras. Data analysis continues to determine if remote cameras can be used to estimate moose densities.

Mountain Goat:

Aerial surveys were flown in 7 GMUs to estimate mountain goat herd abundance and age ratios. Approximately 121 hours were flown statewide.

A population survey were conducted in GMU 67, Palisades PMU. We observed 63 mountain goats including 50 adults, and 13 kids. In GMU 1, 11 mountain goats were counted in the Cabinet PMU (9 adults, 1 kids, 1 track) and 58 mountain goats in the Selkirk PMU (47 adults, 6 kids, 5 tracks). A total of 137 mountain goats (28:100 kids:adults) were observed in the Middle Fork PMU (GMUs 20A, 21, 26, 27). A ground survey was conducted in the Seven Devils PMU (GMU 22). Sixty-seven adults were observed with a kid:adult ratio of 31.3.

Mountain Lion:

Population monitoring consisted of monitoring trends in harvest demographics (sex and age obtained from tooth cementum analysis) via mandatory checks of all harvested mountain lions.

Mountain lions were monitored incidentally to camera trap surveys for wolf distribution during this grant period. During early fall 2019, of the 776 cameras deployed during the previous report period, 736 data cards were retrieved. IDFG personnel deployed a total of 696 unbaited cameras in the field during June 2020 and data cards will be retrieved fall 2020. Analysis of mountain lion images obtained from cameras will be in cooperation with our research program grant.

Southeast Regional staff assisted the research program in deploying and retrieving 90 unbaited trail cameras in GMUs 74, 75 and 77. Photos of mountain lions will be use refine a mountain lion population abundance model. Analysis of mountain lion images will be cooperation with the Wildlife Research grant (F19AF00856).

Mule Deer:

During the month of December 2019, helicopter surveys were conducted across 12 Data Analysis Units (DAU) to document age/sex composition data. Fawn to doe ratios ranged from 53 to 77 fawns per 100 does. Buck doe ratios ranged from 12 to 30 bucks per 100 does.

Mule deer abundance surveys were conducted in the Portneuf, Island Park, Palisades and Weiser-McCall DAUs during the months of January and February 2020. Population estimates are as follows:

- Portneuf (GMUs 74,75,77 and 78):11,500
 - 12,800 in 2015
- Island Park (GMUs 60,60A,61,62,62A and 63A):5,694
 - 5,644 in 2014)
- Palisades (GMUs 64,65 and 67):3,504
 - 4,476 in 2017
- Weiser-McCall (GMUs 22,23,24,31,32 and 32A).....23,142
 - 35,816 in 2010

Pronghorn:

Ground surveys were conducted in in GMUs 46, 47, and 49. Reported ratios are 51 bucks per 100 does and 29 fawns per 100 does in GMUs 46 and 47. In GMU 49, there were 35 bucks and 29 fawns per 100 does.

Ground surveys and aerial surveys were conducted in GMU 68 and 98 pronghorn were counted.

Ground surveys were conducted in the Donkey Hills portion of GMU 37 and 250 pronghorn were classified. The buck:doe:fawn ratio was 41:100:18. An aerial survey was flown in GMU 37 after the ground survey and 158 pronghorn were classified. Buck:doe:fawn ratio was 49:100:24.

Ground and aerial composition surveys were conducted in the Pahsimeroi (GMU 37). The ground count, conducted in late July of 2019, yielded a sample size of 425 pronghorn with a fawn ratio of 21:100 does and a buck ratio of 28:100 does. The aerial survey conducted a few days later generated a sample of 182 with a fawn ratio of 36:100 does and a buck ratio of 32:100 does.

Ground and aerial composition surveys were conducted in GMU 30A to estimate fawn and buck ratios in late July and early August of 2019. The sample size for the ground count was 214 pronghorn with a fawn ratio of 37:100 does and a buck ratio of 62:100 does. Aerial surveys conducted in 30A observed 193 total pronghorn with a fawn ratio of 51:100 does.

Aerial and ground survey were conducted in GMUs 51 and 58. Observers documented 216 pronghorn during aerial surveys in GMU 51 and 226 pronghorn during ground surveys for a total of 442. The buck to doe ratio for aerial surveys was 0.19 and 0.46 for ground surveys. The fawn to doe ratio was 0.44 for aerial surveys and 0.62 for ground surveys. Observers documented 447 pronghorn during aerial surveys in GMU 58 and 398 pronghorn during ground surveys for a total of 845 pronghorn. The buck to doe ratio for aerial surveys was 0.23 and 0.30 for ground surveys. The fawn to doe ratio was 0.39 for aerial surveys and 0.45 for ground surveys.

Upland Game:

To assess greater sage-grouse status and trends, 524 leks were counted on 84 lek routes during this reporting period; an additional 894 leks were counted, but not part of lek routes. Lek counts were conducted in the Southwest, Magic Valley, Southeast, Upper Snake, and Salmon regions.

To assess Columbian sharp-tailed grouse status and trends, 47 leks were counted on 11 lek routes; an additional 94 leks were counted, but not part of lek routes. Lek counts were conducted in the Southwest, Magic Valley, Southeast, and Upper Snake regions.

To assess population status and trend of upland game birds, 40 road-side surveys were conducted in the Clearwater (12), Southwest (20), and Magic Valley (8) regions during this reporting period; 800 miles were surveyed.

White-tailed Deer:

Personnel have attempted to collect sightability data on white-tailed deer incidentally while conducting past elk and mule deer surveys. This data was analyzed with the mule deer sightability model to evaluate if it would provide any useful index to whitetail population status. The results of this effort were not encouraging and the practice has been discontinued.

Management staff assisted research staff in deploying approximately 100 cameras, primarily in GMU 6 during Spring and Summer 2020.

Job 3 – Estimating Harvest

The proposed wildlife harvest surveys provide critical information on hunter harvest, hunter effort, hunter success rates, and other information on hunter behavior. These data enable the IDFG staff to assess harvest season effectiveness and inform recommendations for future season and bag limit adjustments to maintain populations at levels consistent with management plan objectives.

Results:

Bighorn Sheep:

IDFG issued 17 California bighorn sheep tags in 2019. Sixteen (16) hunters successfully harvested a ram and completed the big game mortality report. Unsuccessful hunters returned their tags or reported by phone to confirm that they did not harvest a bighorn sheep.

IDFG issued 73 Rocky Mountain bighorn sheep tags plus the auction and lottery tag hunters also hunted Rocky Mountain bighorns for a total of 75 tags in 2019. Fifty-three (53) hunters harvested a ram and completed the big game mortality report. Unsuccessful hunters returned their tags or reported by phone to confirm that they did not harvest a bighorn sheep.

Black Bear:

A mandatory check program was conducted statewide during the report period. Forms were completed for 3,384 black bears taken by hunting. The number of completed harvest mortality reports received is expected to vary from year to year given changes in harvest under a general

hunting season framework. In addition, a BGMR form was completed for 39 black bears that were not harvested but for which we obtained mortality information. Mortality information from non-harvested black bears is valuable in assessing population dynamics and factors influencing population status.

A mandatory check program was conducted statewide during the report period. A total of 1,816 black bears (54%) were checked by Department personnel, with an additional 1,532 bears (46%) checked at one of 56 contracted private checkpoint vendors. A variety of harvest-related information was collected from these bear including hunter information, hunt area, method of take, bear sex and age, and other characteristics. Teeth were collected from 3,336 harvested bears (97%) for use in age determination.

It is not atypical for additional reports completed for harvest during this reporting period to be submitted late, so the final number of reports received will likely increase modestly.

Elk:

During the 2019 hunting season, approximately 110,000 hunters were estimated to have pursued elk across the state of Idaho, resulting in an estimated 652,000 hunter days in the field. Hunters took 20,532 elk of which 11,418 were antlered and 9,114 antlerless. Of the antlered animals taken, 38% had at least 6 points on one side.

Regional staff operated 19 check stations with a total of 69 check station days. Staff collected harvest data from 14,508 hunters and morphological measurements from 371 elk.

Furbearers:

One hundred thirty-two otters were harvested in the 7 administrative regions with a total statewide quota of 155. Quotas were met in 4 of the 7 regions. Location, sex, and date of harvest was collected by staff and a CITES tag was affixed to each harvested animal. A total of 991 bobcats were harvested statewide. Location, sex, date, and method of harvest was recorded by staff and a CITES tag was affixed to each harvested animal. At the time of reporting a total of 1,407 fur-taker report cards were submitted of the 2,053 trappers who purchased a trapping license. Since reporting is necessary to purchase a license for the upcoming season, we expect this number to increase. Data are used to calculate catch per unit effort for 13 species of furbearer and one species of big game (wolf). Additionally, any person reporting trapping beaver was sent an additional form requesting the number of animals harvested per GMU and what watershed within the GMU. This information is being used to better understand where beaver trapping pressure exists in relation to efforts of using beaver as a restoration tool.

Gray Wolf:

Big Game Mortality Reports were completed for 580 wolves, greater than the number estimated to be checked (450). Forms were completed for 457 harvested wolves (225 wolves taken by hunting and 232 wolves taken by trapping). In addition, a BGMR form was completed for 123 wolves that died of non-harvest-related causes. Mortality information from non-harvested wolves is valuable in assessing population dynamics and factors influencing population status.

A mandatory check program was conducted statewide during the report period. A variety of harvest-related information was collected from these wolves including hunter information, information on hunt characteristics, and wolf sex and age information. Teeth were collected from 474 harvested wolves (81%) for age determination. DNA samples were collected from 474 teeth collected from harvested wolves.

Grizzly Bears:

In September 2018, a federal judge reinstated grizzly bears of the Greater Yellowstone Area to the Endangered Species Act list. As a result no hunt for grizzly bears occurred.

Migratory Birds:

IDFG conducted surveys of tag holders to estimate harvest of sandhill cranes (167) in the Southeast and Upper Snake regions. Surveys were also conducted to estimate the number of Canada geese harvested (282) during early Canada goose seasons in the Southeast Region.

The Harvest Information Program reported an estimated 165,300 ducks were harvested in Idaho during the 2019-2020 season. Canada goose harvest estimates were not available for this reporting period.

Harvest surveys for light and white-fronted geese were not conducted during this reporting period.

Moose:

During 2019 hunting season, 634 moose hunters reported the harvest of 482 moose. This included 421 males and 61 females. These totals include Super Hunt tags. Unsuccessful hunters returned their tags or reported by phone to confirm that they did not harvest a moose.

Mountain Goat:

During 2019 hunting season, 44 mountain goat hunters reported the harvest of 34 mountain goats. The total includes 27 males and 7 females. Unsuccessful hunters returned their tags or reported by phone to confirm that they did not harvest a mountain goat.

Mountain Lion:

The number of mountain lions checked (753) was higher than the anticipated target number to be checked (700). Harvest seasons were not changed substantially during the report period, and mountain lion tag sales (reflective of effort) did not change substantially.

A total of 419 harvested mountain lions (56%) were checked by IDFG personnel, with an additional 334 lions (44%) checked at one of 37 private checkpoint vendors. A variety of harvest-related information was collected from these 753 lions including hunter information, information on hunt characteristics, and bear sex and age information. Teeth and DNA were collected from 723 harvested lions (96%). In addition, a BGMR form was completed for 65 lions

that were not harvested. Mortality information from these non-harvested lions are valuable for monitoring population status and key factors of annual mortality.

Mule Deer:

During the 2019 hunting season, an estimated 90,500 hunters pursued mule deer across the state of Idaho resulting in an estimated 483,000 days in the field. Hunters harvested 23,680 mule deer of which 18,600 were antlered and 5,050 antlerless. Of the antlered animals taken 40% had at least 4 points on one side.

Regional staff operated 19 check stations with a total of 69 check station days. Staff collected harvest data from 14,508 hunters and morphological measurements and biological samples from 1,547 mule deer. Chronic wasting disease samples were taken from selected mule deer at check stations. All samples tested negative. Analysis of samples was conducted under the Wildlife Health Program Grant (F19AF00860).

Pronghorn:

An estimated 4,285 (includes unlimited tags) controlled hunt tag holders hunted pronghorn and harvested 1,618 pronghorn in 18,382 days of hunting during the 2019 season. Harvest was reported by internet website, mail, and telephone. No check stations were run specifically for pronghorn.

Average statewide horn measurements were 11.3 inches in the any weapon hunts and 11.6 inches in the archery hunts.

Upland Game:

To obtain an index to annual production, wing barrels were deployed in several regions of the state. There were 31 barrels in the Southwest Region, 18 barrels in the Magic Valley Region, 18 barrels in the Southeast Region, 18 barrels in the Upper Snake Region, and 8 barrels in the Salmon Region. The most common species in wing barrels were forest grouse, sage-grouse, and Columbian sharp-tailed grouse.

Wing envelopes (2,500) were distributed to hunters to increase data collection of sage- and Columbian sharp-tailed grouse wings for the 2019 hunting season.

Over 8,600 surveys were sent to hunters to estimate upland game harvest and hunter activity. Another 8,700 surveys were sent to turkey hunters to estimate harvest and hunter activity.

White-tailed Deer:

Statewide, an estimated 54,800 hunters took approximately 21,500 white-tailed deer for a 39% hunter success rate during the 2019 hunting season. Of the 21,500 deer taken, approximately 14,000 were antlered animals of which 21% had 5 points on at least one side.

The regions ran 19 check stations for 69 days checking 14,508 hunters and 382 white-tailed deer to assess harvest information and collect morphological measurements. Chronic wasting disease

samples were taken from selected white-tailed deer at check stations. All samples tested negative. Analysis of samples was conducted under the Wildlife Health Program Grant (F19AF00860).

Strategy 3. Species Stocking

Standard Objective:

Stock 3 species of wildlife by June 30, 2020

Activity Tag:

Production and stocking for recreational or subsistence purposes.

Results:

Moose:

Moose occasionally occupy urban settings and if they are deemed a nuisance or threat to public safety they are captured and moved to areas outside of town. In the Panhandle Region, one moose was captured and translocated. Three (3) moose were captured in urban areas and relocated in the Magic Valley Region during this reporting period. Twelve (12) moose were captured and moved to more remote areas in the Southeast Region. In the Upper Snake Region, 16 moose were moved from urban areas to more remote areas in the region. Twenty (1 in the Magic Valley, 9 in the Southeast, and 10 in the Upper Snake) of the translocated moose were radio-marked to monitor their movements and survival post translocation. Moose were captured via ground or aerial immobilization.

Turkeys:

To address nuisance/depredation issues, 153 turkeys were trapped in the Southeast Region; 49 of these birds were translocated within the region to augment existing populations, while 104 birds were translocated to Nevada. Capture methods included baited walk-in traps and rocket nets.

Beavers:

Beavers were opportunistically captured and translocated from problem areas (areas of conflict with private property and/or infrastructure) to streams identified as sites suitable for beaver. Beaver were trapped and translocated in the following regions: Southwest = 5; Magic Valley = 20 animals; and Upper Snake = 44.

Strategy 4. Technical Assistance

Standard Objective(s):

Job 1: Provide technical assistance to 20 individuals by June 30, 2020.

Job 2: Provide technical assistance to 5 organizations by June 30, 2020.

Job 3: Participate on 4 technical committees by June 30, 2020.

Activity Tag:

Job 1: Assistance to private individuals.

Job 2: Assistance to other organizations.

Job 3: Participation on technical committees.

Job 1 Individual Technical Assistance:

Provide timely and science-based technical assistance on wildlife and wildlife habitat management to private individuals.

Results:

Technical assistance to private individuals is a regular occurrence and staff spends a considerable amount of time interacting with thousands of individual members of the public each year.

Technical assistance often takes the form of providing individuals with data or information that is specific to their interest. Examples include private landowners wanting to improve wildlife habitat on their property, interested public wanting to learn more about wildlife movements and/or habitat use, and hunters looking for suggestions on places to pursue game.

Job 2 Organizational Technical Assistance:

Provide technical advice and information on IDFG management programs and policies to organizations.

Results:

The IDFG provided technical assistance to multiple private and governmental organizations during this reporting period. This includes sharing data, technical advice, and information on IDFG policies and programs. Technical assistance was provided to the following:

- Participating in the Hells Canyon Bighorn Sheep Initiative committee. Members of this group include IDFG, Oregon Department of Fish and Wildlife (ODFW), Washington Department of Fish and Wildlife (WDFW), US Forest Service, Bureau of Land Management, Wild Sheep Foundation - National and Idaho, Washington, and Oregon chapters. Other participants at the meetings included the Nez Perce Tribe, Confederated Tribes of the Umatilla, Washington State University (WSU), and the Asotin Conservation District.
- Participating in the Western Association of Fish and Wildlife Agencies (WAFWA) Wild Sheep Working Group (WSWG). Membership in the WSWG includes all western states and provinces that are members of WAFWA (n = 24). Meetings are also attended by the Forest Service, Bureau of Land Management, and multiple chapters of the Wild Sheep Foundation.
- Providing a state representative and 2 presentations at the WAFWA Pronghorn Workshop.
- Providing a state representative at the North American Moose Workshop.
- Providing information and interview to Idaho Public Television for a mountain goat television/internet production.
- Providing bighorn sheep data to Western Watershed's Project.
- Providing a state representative and 2 presentations at the WAFWA Pronghorn Workshop.
- Sharing data with Oregon Department of Fish and Wildlife (ODFW) and Nevada Division of Wildlife (NDOW) on cross border movements of pronghorn.
- Provided a state representative to the WAFWA Western Quail Working Group

- Provided 2 state representatives to the WAFWA Sage- and Columbian Sharp-tailed Grouse Workshop
- Technical assistance was provided to both the USFS and BLM on beaver translocation approaches, removal methods, and site identification for process based restoration techniques.
- IDFG works closely with the USDA Forest Service in patrolling campgrounds, looking for improperly stored attractants, and providing education materials to campers to try to reduce conflicts with bears through outreach and education efforts and securing attractants on public and private land.
- IDFG has provided recommendations to the USDA Forest Service in managing livestock grazing allotments and sheep bands near to active wolf dens and rendezvous sites, and consults continually throughout the year with USDA Wildlife Services regarding resolving wolf depredations on livestock and impacts to ungulate populations.
- Technical assistance to the Bureau of Land Management (BLM) on livestock allotment renewals
- Technical assistance to the U.S. Forest Service (USFS) on timber stand management projects
- Technical assistance to both the BLM and USFS on motorized travel management
- Technical assistance to the Idaho Department of Lands on timber and livestock management
- Technical assistance to the Bureau of Reclamation on reservoir water levels and effects on wintering deer and elk
- Technical assistance to numerous counties and municipalities on potential effects of development on wildlife and habitats

Job 3 Technical Committees:

Participate on at least 4 professional technical committees.

Results:

- Provided a state representative at the WAFWA forest carnivore subcommittee and AFWA Furbearer Technical Working Group annual meetings.
- Provided a state representative to each of the Pacific Flyway Council, Pacific Flyway Non-game Technical Committee, and the Pacific Flyway Study Committee meetings.
- The IDFG participates as a member of the Interagency Grizzly Bear Study Team, which is responsible for long-term monitoring and research efforts on grizzly bears in the Greater Yellowstone Ecosystem (GYE).
- Western Association of Fish and Wildlife Association's (WAFWA) Mule Deer Working Group
- WAFWA Wild Sheep Working Group
- WAFWA Western Quail Working Group
- WAFWA Wildlife Health Committee
- WAFWA Human-Wildlife Conflict Committee
-

Strategy 5. Planning

Standard Objective:

Develop/revise 5 plans by June 30, 2020

Activity Tag:

Species Management Planning.

Approach:

Develop/revise management plans for Upland Game, White-tailed deer, Mule deer, Moose, and Turkeys. The plan process includes draft plan development, public involvement, recommendation to Fish and Game Commission, and adoption of final plan.

Results:

An Upland Game Management Plan was approved by the Fish and Game Commission in July 2019. The plan is currently available on the IDFG website at <https://idfg.idaho.gov/sites/default/files/idaho-upland-game-management-plan-2019-2025.pdf>

A management planning team is currently working on developing a Wild Turkey Management Plan. As part of this process, a wild turkey hunter opinion survey was conducted during June 2020.

Management plans for both mule deer and white-tailed deer were adopted during this reporting period. Development of both plans began in fall 2018 and included development of draft plans, incremental approvals from the Fish and Game Commission, and public scoping. Final versions of the plans were approved by the Fish and Game Commission in summer 2019.

The Mule Deer Management Plan is available on the IDFG website at <https://idfg.idaho.gov/sites/default/files/plan-deer-mule-2020-25.pdf>

The White-tailed Deer Plan is available on the IDFG website at <https://idfg.idaho.gov/sites/default/files/plan-deer-white-tailed-2020-25.pdf>

The draft Moose Management Plan was approved by the Commission in March 2020. The plan is currently being prepared for printing and distribution. The plan is available on the IDFG website at <https://idfg.idaho.gov/sites/default/files/plan-moose.pdf>

If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.

N/A

Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with WSFR grant funds; include differences between expected and actual costs.

N/A

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

None.

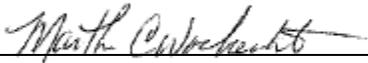
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FEDERAL AID IN WILDLIFE RESTORATION

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.

