

IDAHO DEPARTMENT OF FISH AND GAME

Ed Schriever, Director

Surveys and Inventories

FY2018 Statewide Report



Migratory Birds Fall and Winter Surveys, Production, and Harvest
(October 2017-March 2018),

Migratory Birds Spring Surveys and Summer Banding
(April 2018-September 2018)

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STATEWIDE REPORT SURVEYS AND INVENTORY

JOB TITLE: Migratory Birds - Fall and Winter Surveys, Banding, and Harvest

STUDY NAME: Migratory Birds Population Status, Trends, Use, and Habitat Studies

PERIOD COVERED: October 1, 2017 to March 31, 2018

MIGRATORY GAME BIRDS - FALL AND WINTER SURVEYS, BANDING, AND HARVEST

ABSTRACT

The results of harvest surveys are summarized and discussed. The U.S. Fish & Wildlife Service (USFWS) estimated duck harvest was down 32% and goose harvest was down 6% from 2016-2017 levels. The Department discontinued a separate waterfowl harvest survey for Idaho during 2010. Beginning with the 2016-2017 hunting seasons, a new process and schedule were used for setting annual migratory bird hunting regulations. Regulatory decisions are now made using biological data observed the previous year (i.e., 2017 frameworks were established with data from spring 2016). Results from a survey of migratory game bird hunters was used to guide season-setting for the 2017-2018 waterfowl hunting seasons.

YOUTH WATERFOWL HUNT

The USFWS again offered all states the option to hold a two-day youth waterfowl hunt during the 2017-2018 season. Pacific Flyway states that chose the option were required to reduce their regular seasons by two days so as not to exceed the 107-day maximum length for migratory game bird seasons. States were permitted to hold the hunt outside the regular season framework, but regular-season limits applied. The Commission selected the option, and chose September 30-October 125 for the youth hunt. It was open to licensed hunters 17 years of age and younger; full duck (including merganser), coot, and goose limits applied to participants.

STUDY OBJECTIVES

1. Determine production and trends of resident waterfowl.
2. Estimate waterfowl harvest, hunter participation, and hunter opinions.
3. Determine waterfowl movements, distribution, and survival rates.

PROCEDURES

1. Conduct fall and winter aerial counts of waterfowl.
2. Evaluate the usefulness of fall surveys and consider new techniques to assess waterfowl numbers.
3. Conduct a telephone survey of hunting license buyers.
4. Operate check stations or field checks.
5. Band waterfowl and monitor movements and survival rates.

Harvest data were collected and analyzed by the Bureau of Wildlife. Personnel stationed in the state's 7 regions and one sub-region collected all other data.

RESULTS

DUCKS (ALL SPECIES)

Current Management Plan Goals

1. Reverse the decline in the number of duck hunters.
2. Reverse the decline in duck harvest.
3. Determine duck nesting success at least twice (every other year) on all Wildlife Management Areas (WMAs) where waterfowl production is a priority.
4. Maintain a 30% nest success for upland nesting ducks on WMAs where waterfowl production is a priority.
5. Develop and implement a predator management strategy for priority WMAs where nest success is less than 30%.
6. Establish duck production surveys in at least one region in cooperation with the USFWS.

Management Areas

Background and Management Philosophy: See the 2007 Waterfowl Annual reports for a thorough history of the duck management areas in Idaho.

During January 2016, the Idaho Department of Fish and Game (Department) conducted a survey of migratory game bird hunters to help guide the waterfowl season-setting process for the five-year period from 2016-2020. Rather than scope limited options annually, this statistically-defensible survey provided hunter preferences within the bounds of the Federal Framework.

Based on hunter preferences identified in this survey, seasons were continuous rather than split. Seasons in north and southwest Idaho started later in October to provide hunting opportunity in late January, while seasons in eastern Idaho began earlier in October to allow for hunting opportunities prior to wetlands freezing. New hunt boundaries were also established; a new hunt area in Valley County was the most significant change.

Beginning with the 2016-2017 hunting seasons, a new process and schedule were used for setting annual migratory bird hunting regulations. Legal, administrative, and analytical burdens associated with establishing migratory game bird hunting regulations intensified during the last decade. As a result, a process that combines early and late season meeting schedules was adopted, with modifications to Adaptive Harvest Management (AHM) frameworks. Regulatory decisions were made using biological data observed the previous year (i.e., 2017 frameworks were established with data from spring 2016).

This single process and new schedule meant season frameworks (e.g., outside dates, season lengths, bag limits) were finalized earlier, and enabled state agencies to select and publish their

season dates well in advance of fall seasons. Furthermore, this process allowed the Commission to set seasons for all migratory game birds at the same time; consequently, all migratory game bird regulations were published in the same brochure.

For the 2017-2018 season, the USFWS offered a 107-day season for ducks, snipe, and coot statewide. The regular season was 105 days with no split, and the two-day youth waterfowl season was held September 30-October 1, statewide.

The description, season framework, and bag and possession limits for each Management Area are found in Appendix A.

Population Surveys

During 2010, two helicopter crashes occurred with Department personnel on board. In one instance, the pilot and both passengers sustained serious injuries, and in the other the pilot and both passengers were fatally injured. As a result, the Department conducted a flight safety review during which needs/risk assessment were completed. As a result, Midwinter Waterfowl surveys have not been conducted since 2011. Furthermore, in 2015, the USFWS Division of Migratory Bird Management reduced financial support for the Midwinter Waterfowl Survey, nationwide. Since then, only surveys that inform annual harvest management decisions have been conducted. Therefore, all Midwinter Waterfowl surveys have been discontinued in Idaho.

In 2016, the estimated mallard abundance was 11.8 million birds, which was similar to 2015, and 51% above the long-term average (USFWS 2016a). Western mallards consist of 2 substocks and are defined as those birds breeding in Alaska and those birds breeding in California, Oregon, Washington, and British Columbia. Estimates of the size of these subpopulations have varied from 0.28 to 0.84 million in Alaska since 1990 and 0.43 to 0.65 million in the southern Pacific Flyway since 2010. For 2016, the estimated breeding-population size of western mallards was 1.07 million (SE = 0.08 million), including 0.58 million (SE = 0.07 million) from Alaska and 0.48 million (SE = 0.04 million) from California-Oregon (USFWS 2016b).

Harvest Characteristics

Telephone Survey: In an effort to reduce costs and increase efficiency, the Department discontinued annual telephone harvest surveys for waterfowl in 2010. The USFWS annually estimates statewide harvest through the Federal Migratory Game Bird Harvest Information Program Harvest (Table 1).

Federal Migratory Game Bird Harvest Information Program: The goal of the program is to obtain improved harvest estimates for all species. By federal mandate, states provide the USFWS with names and addresses of all migratory game bird hunters, from which the USFWS draws a sample of hunters to survey. The Department has complied fully with the USFWS request for information every year since the 1997-1998 season. The USFWS estimated 231,700 ducks were harvested in Idaho during the 2017-2018 hunting season, which was down 32% from 2016-2017 estimates. According to USFWS Harvest Information Program estimates, the number of active adult duck hunters in Idaho was 15,800 (Table 1). Unfortunately, the company that provided the

USFWS with Idaho hunter information for the 2015-2016 season did not do so in a timely fashion. Consequently, estimated increases in both number of hunters and associated harvest estimates are abnormally larger. Estimates for the 2017-2018 season appear to be more similar to the long-term average of 242,400.

Waterfowl check stations were operated at the Boundary-Smith Creek, Pend Oreille, and Coeur d'Alene River WMAs on the opening Saturday of the 2017 duck season and on Sunday at Coeur d'Alene River WMA. A total of 61 hunters expended 201 hours of effort to harvest 179 ducks (2.9 ducks/hunter; 0.9 hours/duck). American widgeon and mallards comprised 43% and 20% of the harvest, respectively.

Management Implications

The Department continued to meet its 1991-1995 Waterfowl Management Plan (WMP) goals to reverse the decline in the number of duck hunters and ducks harvested. However, the WMP is outdated and may need to be updated to reflect current waterfowl management issues in Idaho.

See the 2007 Waterfowl Annual reports for a thorough history of the Idaho migratory waterfowl stamp and how the revenue it generated was spent. Currently, there is an annual budget of \$155,700 in the Habitat Improvement Program (HIP) for waterfowl habitat improvement or enhancement.

Future management will be directed toward improving and restoring wetland habitat to attract more ducks and other wetland birds as they migrate through Idaho. Habitat improvement will seek to increase local production and improve wetland function across the landscape. Furthermore, the Department continues to contribute to waterfowl conservation on the Canadian Prairies. Since 1988, the Department has contributed over \$595,400 to this effort; \$35,000 in 2018.

GEESE (ALL SPECIES)

Current Management Plan Goals

1. Increase Idaho's breeding Canada goose populations and wintering populations.
2. Increase the annual goose harvest to 50,000 birds.
3. Maintain the average number of geese harvested per hunter per season above 3.0.
4. Increase hunter days to 130,000 annually.

Management Areas

Background and Management Philosophy: Historically, the Pacific Flyway Council has recognized two populations of western Canada geese for management purposes (Subcommittee on Rocky Mountain Population Canada Geese 2000). They include the Rocky Mountain Population (RMP) and the Pacific Population (PP). Both populations occur in Idaho. However, during 2013 the Pacific Flyway Study Committee began the review process to update a management plan for western Canada geese that will combine both populations into one

management plan. See the 2007 Waterfowl Annual Reports for a thorough history of the goose management areas in Idaho.

For the 2017-2018 season, the USFWS offered a 107-day season for geese statewide. The regular season for Canadageese was 105 days with no split, and the two-day youth waterfowl season was held September 30-October 1, statewide. The duck and Canada goose seasons have opened concurrently since the 2003-2004 waterfowl season. However, beginning in 2015, an early Canada goose hunt has been held in the Southeast Region - in Bear Lake and Caribou counties - from September 1-15 to address agricultural depredation concerns.

During the 2008-2009 regulations cycle, the Pacific Flyway Council extended the white goose framework for Interior states to March 10. During 2017-2018, Idaho implemented a split light goose season in Area 4, which includes portions of the Magic Valley, Southeast, and Upper Snake regions in the American Falls Reservoir area. The season dates were from November 5, 2017 to January 19, 2018 and February 10 to March 10, 2018 to allow for hunting in late February and early March. In Area 3, in the southwest part of Idaho, there was a 105-day light goose season from November 26, 2017 to March 10, 2018. When all other waterfowl and migratory game bird hunting seasons, except falconry, are closed, recorded or electrically amplified bird calls or imitations of bird calls, and unplugged shotguns capable of holding more than three shells may be used to hunt light geese. The remainder of the state had light goose seasons concurrent with duck and Canada goose seasons.

During the 2013-2014 season, seasons for white-fronted and Canada geese were separated to allow a 107-day white-fronted goose season that extends beyond the last Sunday in January. In Area 3, in the southwest part of the state, seasons for white-fronted geese and light geese – snow and Ross’s geese – were open at different times for part of the season, with the white-fronted goose season open from November 6, 2017 through February 18, 2018. The remainder of the state had white-fronted goose seasons concurrent with duck and Canada goose seasons.

The description, season framework, and bag and possession limits for each Management Area are found in Appendix A.

Population Surveys

During 2010, two helicopter crashes occurred with Department personnel on board. In one instance, the pilot and both passengers sustained serious injuries, and in the other the pilot and both passengers were fatally injured. As a result, the Department conducted a flight safety review during which needs/risk assessment were completed. Aerial Midwinter Waterfowl surveys were discontinued in 2011. Furthermore, in 2015, the USFWS Division of Migratory Bird Management reduced financial support for the Midwinter Waterfowl Survey, nationwide. Since then, only surveys that inform annual harvest management decisions have been conducted. Therefore, all Midwinter Waterfowl surveys have been discontinued in Idaho.

Harvest Characteristics

Telephone Survey: In an effort to reduce costs and increase efficiency, the Department discontinued annual telephone harvest surveys for waterfowl in 2010. The USFWS annually estimates statewide harvest through the Federal Migratory Game Bird Harvest Information Program Harvest.

The Department used a mail-in/telephone survey to estimate light and white-fronted goose harvest from the late-winter season in 2018. Approximately 1,200 hunters harvested an estimated 12,800 light (snow and Ross's) geese, and approximately 600 hunters harvested an estimated 6,800 white-fronted geese.

Federal Migratory Game Bird Harvest Information Program: The goal of the program is to obtain improved harvest estimates for all species. By federal mandate, states provide the USFWS with names and addresses of all migratory game bird hunters, from which the USFWS draws samples of hunters to survey. The Department has complied fully with the USFWS request for information every year since the 1997-1998 season. The USFWS estimated 67,700 geese were harvested in Idaho during the 2017-2018 hunting season, which was down slightly 6% from 2016-2017 estimates (Table 1). According to USFWS Harvest Information Program estimates, the number of active adult goose hunters in Idaho was 15,800 (Table 1). Unfortunately, the company that provided the USFWS with Idaho hunter information for the 2015-2016 season did not do so in a timely fashion. Consequently, the estimated increases in both number of hunters and associated harvest estimates were abnormally large. Estimates for the 2017-2018 season appear to be more similar to the long-term average of 65,500.

Management Implications

Idaho hunter information was transferred to the USFWS in a timely fashion for the 2017-2018 seasons, and harvest information metrics for this reporting period appear are more similar to the long-term averages. The Department met its 1991-1995 WMP goal for total harvest and harvest per hunter per season. Estimated harvest of Canada geese in Idaho is higher than all other states in the Pacific Flyway.

The Department will continue to implement the HIP program (discussed previously in the duck section) to improve wetland habitat for geese and other wetland birds. Goose depredation problems are becoming significant in some urban areas and will require new strategies to manage these birds.

SANDHILL CRANE

The Department's goals and objectives for the sandhill crane are the same as those for the Pacific Flyway (Subcommittee on Rocky Mountain Population Greater Sandhill Cranes 2016), which is available at the Pacific Flyway website at: www.pacificflyway.org.

The RMP sandhill crane population continued to receive increased management emphasis during the reporting period in the Magic Valley, Southeast, and Upper Snake regions because of continued landowner concerns over crop damage. Surveys of RMP greater sandhill cranes in these three regions were initiated in 1995 to document total sandhill crane numbers, arrival dates, distribution, and age ratios.

TRUMPETER SWAN

The Department's goals and objectives for the trumpeter swans are the same as those for the Pacific Flyway (Subcommittee on Rocky Mountain Population Trumpeter Swans 2017), which is available at the Pacific Flyway website at: www.pacificflyway.org.

TUNDRA SWAN

The Department's 1991-1995 WMP goals for tundra swan are to: (1) maintain current migrations through Idaho, and (2) meet the demand for non-consumptive use. However, during the reporting period, this species received little management emphasis in Idaho. This is because the tundra swan is not currently hunted in the state, and the species benefits indirectly from other wildlife management programs.

AMERICAN COOT

The Department's 1991-1995 WMP goals for American coot are to: (1) maintain Idaho's population, (2) increase the harvest, and (3) provide maximum recreational opportunity. However, this species received little management emphasis during the reporting period. This is because the American coot is not a popular game bird in Idaho and because it benefits indirectly from other wildlife management programs.

WILSON'S SNIPE

The Department's 1991-1995 WMP goals for Wilson's snipe are to: (1) maintain Idaho's Wilson's snipe population and (2) maintain the harvest. However, during the reporting period, this species received little management attention. This is because the Wilson's snipe is not a popular game bird in Idaho and because it benefits indirectly from other wildlife management programs.

MOURNING DOVE

Current Management Plan Goals

Mourning doves (*Zenaida macroura*) continue to be a popular early-season species for hunting.

Management Areas

Season Framework

The 2017 season framework for doves in Idaho included a season length of not more than 60 consecutive days between September 1 and January 15. The daily bag limit was 15 mourning and white-winged doves in the aggregate. The possession limit was three times the daily bag limit, statewide.

Population Surveys

In 2013, the USFWS approved a new harvest strategy that uses the Lincoln estimator (Lincoln 1930, Otis 2006) as the primary monitoring method for mourning dove abundance (USFWS 2015). As a result, mourning dove coo-count surveys were discontinued. However, with a Lincoln estimator, when abundance falls below the closure threshold set in the harvest strategy and a hunting season closure is implemented, no data to monitor abundance is available. Thus, determining when a hunting season could be re-opened is problematic, since the monitoring data to estimate abundance are not available. Consequently, the development and evaluation of an additional robust estimator for use during a closed season is required to determine when abundance exceeds the closure threshold.

From 2015-2017, Department personnel participated in the *Modified Call-count Survey with Distance Sampling: A Pilot Study to Estimate the Abundance of Mourning Doves in the United States*. Modified call-count surveys were conducted in the Clearwater, Southwest, Magic Valley, and Upper Snake regions.

Harvest Characteristics

Harvest information on mourning doves is collected via the USFWS harvest survey. During the 2017 season, an estimated 108,500 doves were harvested in Idaho.

Management Implications

In 1987, the federal season framework reduced the maximum allowable season length to 30 days and maximum daily bag limit to 10. When the USFWS approved a new harvest strategy in 2014, season frameworks were increased to 60 days and a maximum daily bag limit of 15 mourning and white-winged doves in the aggregate. Possession limits were also increased to three times the daily bag limit. Hunting season regulations in Idaho have since reflected these changes.

AMERICAN CROW

Season Framework

Unchanged from 2006 (Appendix A).

Harvest Characteristics

Harvest data on American crows (*Corvus brachyrhynchos*) is not collected via the USFWS harvest survey..

Management Implications

Crows will continue to be a species with no active management in Idaho.

STATEWIDE REPORT SURVEYS AND INVENTORY

JOB TITLE: Migratory Bird Spring Surveys and Summer Banding

STUDY NAME: Migratory Bird Population Status, Trends, Use, and Associated Habitat Studies

PERIOD COVERED: April 1, 2018 to September 30, 2018

WATERFOWL PRODUCTION, SUMMER BANDING AND CRANE HARVEST

ABSTRACT

In 2018, 1,476 mallards were banded in Idaho. Since 2009, over 16,000 mallards have been banded by Department personnel in Idaho. In 2018, active nests of Pacific Population (PP) Canada geese were counted on the Boundary-Smith Creek, Pend Oreille, and Coeur d'Alene River WMAs; 87 nests were located. Aerial Canada goose breeding pair surveys were discontinued in 2011. Canada goose nesting surveys have been put on hold as the Pacific Flyway Study Committee revises the management plan for the Rocky Mountain and Pacific populations of Canada geese. As part of this process, new survey methodologies are being considered. In light of this, the Department has decided to postpone spring Canada goose surveys until the new methodologies have been designed and the management plan has been completed and approved by the Pacific Flyway Council.

The combination fixed-wing and ground count of Rocky Mountain Population sandhill cranes was completed in September 2018. A total of 4,469 cranes were counted in Idaho. In 2018, 550 sandhill crane tags were available on a first-come first-served basis. Hunts were held in six hunt areas during September and an estimated 269 cranes were harvested.

Mourning doves are banded statewide to inform the national mourning dove harvest strategy. Harvest rates from banding information, and harvest estimates from the Harvest Information Program are used to estimate mourning dove population size for the western management unit.

Tundra swans, American coots, and Wilson's snipe received little management emphasis; these species benefit from statewide programs aimed at other species. Department management area descriptions: duck, goose, and sandhill crane hunting season structures, and bag and possession limits for the previous season are provided in Appendix A.

STUDY OBJECTIVES

1. Determine production and trends of resident waterfowl.
2. Determine movements, distribution, and survival rates of resident waterfowl.

PROCEDURES

1. Conduct Canada goose breeding pair aerial surveys and nest searches for specific survey areas and implement a triggering mechanism for determining when to reduce the goose harvest.
2. Band locally-produced waterfowl and monitor movements and survival rates.
3. Trap Canada goose goslings and transplant them into areas where new flocks may be started or to supplement existing low populations.

REGIONAL REPORTS

DUCKS (All Species)

Panhandle Region

Population Surveys: Approximately 280 wood duck nest boxes located in the Panhandle were available for nesting during 2018. A total of 229 boxes were evaluated. Cavity-nesting ducks (wood ducks, common goldeneye, and hooded mergansers) used 145 (63%) of the boxes evaluated and all species had a 68% nest success. Wood ducks comprised 47% of nest box use and had 54% nest success. Hooded mergansers used 18% of the boxes and had 80% nest success.

Breeding pair surveys were only conducted on Boundary-Smith Creek WMA in 2018. One breeding pair survey was conducted in May and 138 breeding duck pairs were counted. The most predominant breeding duck species in the Panhandle are mallards, wood ducks, and to a lesser extent, redhead and ring-necked ducks.

Trapping and Transplanting: A total of 770 ducks were trapped and banded by Department personnel in the Panhandle Region during August and September 2018 (Tables 2 and 3). Mallards comprised 76% of the sample. Increased effort to band cinnamon teal was not as successful as in past years. Banding occurred at the Coeur d'Alene River, McArthur Lake, and Boundary-Smith Creek WMAs. No transplanting projects were conducted.

Management Studies: Since 1991, a total of 26,241 locally-produced ducks have been banded during breeding season at the Boundary-Smith Creek, McArthur Lake, Pend Oreille, and Coeur d'Alene River WMAs.

Management Implications: The installation of nest boxes in appropriate wetland habitat throughout the Panhandle Region has significantly increased production of cavity-nesting ducks, as seen in the significant percentage of wood ducks in the opening weekend waterfowl check station survey. Although wood ducks are the target species for this effort; common goldeneye and hooded mergansers frequently use these boxes. Through the Habitat Improvement Program (HIP), many of these nest boxes are now placed on private lands and contribute to the overall improvement in duck production throughout the region.

Clearwater Region

Population Surveys: The Midwinterwater Waterfowl Survey was discontinued prior to 2015.

A small breeding population of wood ducks nests in the Clearwater Region. From 1988-1998, in an attempt to enhance their presence, nest boxes were erected in conjunction with the Department HIP program. A landowner survey of wood duck use of nest boxes was discontinued in 2005 due to poor return rates on data cards. Many of these structures are no longer usable. Since 2001, the U.S. Army Corps of Engineers has installed over 30 wood duck nest boxes along the lower Snake and Clearwater River levee ponds and sloughs. A resident population resides in the valley and disperses out from this source.

Trapping and Transplanting: No ducks were banded in the Clearwater Region during this reporting period.

Management Implications: The development of ponds and shallow water areas through the HIP program has improved local duck nesting in the region, though no production surveys are conducted to monitor the response to these efforts.

Southwest (Nampa) Region

Population Surveys: No surveys to estimate duck nesting success and production were conducted on WMAs during the reporting period.

Trapping and Transplanting: A total of 599 ducks were trapped and banded by Department personnel in the Southwest Region during August and September 2018 (Tables 2 and 3).

Disease Testing: Department staff cooperated with USDA-Wildlife Services to collect avian influenza samples from 120 hunter-harvested ducks during the 2017-2018 season. Fifteen samples were also collected from live birds during banding activities in August and September 2018.

Habitat Conditions: No regional wetland surveys are conducted; therefore, the exact extent of wetlands is unknown. The waterfowl production from these wetlands is also unknown.

Management Implications: No new wetlands have been created during this reporting period.

Prescribed fire and herbicide are being used on WMAs to open up dense stands of vegetation. Opening these stands will make them more attractive and productive to waterfowl broods.

Waterfowl die-offs: Approximately 320 duck and goose carcasses were collected along the lower Boise River in February and March 2018. Tests of sample carcasses showed avian cholera as the primary cause of the die-off. Avian influenza was also present.

Southwest (McCall) Region

Population Surveys: No population surveys are conducted for ducks in the McCall sub-region. Ducks are numerous and mostly associated with the Lake Cascade ecosystem.

Various local groups, such as the Boy Scouts and Reservoir Association, erect wood duck nest boxes. No effort was made to monitor the number of boxes installed by these private organizations. Maintenance of these boxes is encouraged annually.

Trapping and Transplanting: No ducks were banded by the Southwest (McCall) Region during this reporting period.

Management Implications: The HIP program and other programs are utilized to enhance duck nest production. Priority is placed on projects that stabilize water levels and enhance nest productivity on Cascade Reservoir.

Magic Valley Region

Population Surveys: Magic Valley regional staff conducts an annual ground-based waterfowl survey at Hagerman WMA. In January 2018, 9,579 ducks were counted. This is a 26% decrease from 2017. Seven species of dabbling ducks and seven species of diving ducks were observed. Mallards were again the most abundant species (87%), and redheads were second most abundant at 4%.

Habitat Conditions: Precipitation during the 2017-2018 winter was below average in all major watersheds in the Magic Valley Region. Snake River flows were generally average during the nesting season.

Trapping and Transplanting: No ducks were banded in the Magic Valley Region during this reporting period (Tables 2 and 3).

Depredations: No depredations complaints during this reporting period.

Management Implications: Hagerman, Niagara, Billingsley Creek, Centennial Marsh, and Carey Lake WMAs annually produce ducks; however, much of the region's duck production occurs at Minidoka NWR and other inundated reaches of the Snake River.

Southeast Region

Population Surveys: Duck nest success and brood surveys had been conducted on the Sterling WMA periodically from the mid-1990s to 2016. In 2016, 44 breeding pairs and approximately four broods were detected on the WMA, with an estimated nest success rate of 9.0%. However, sample sizes over the last several years have been insufficient and this survey was discontinued in 2017. Water levels at American Falls Reservoir and all ponds on Sterling WMA were average to above average during the nesting and brood-rearing season.

Predator Management: Graduate student research from 1993-1995 indicated high magpie populations on the Sterling WMA in association with dense Russian olive stands. Russian olive stands were removed in the late 1990s to reduce predation and increase waterfowl nest success. Subsequent field observations suggested mammalian predators began to replace magpies following tree removal. Mammalian predator removal efforts were initiated in 1997 and continued through 2009, but have not been carried out since. In 2016, nest searches and nest

cameras were used to identify primary nest predators at Sterling WMA. All but one unsuccessful nest was characterized by all eggs disappearing, with no egg shell fragments present; cameras indicated these were likely magpie depredations. One nest that had egg shell fragments present was depredated by a skunk.

Trapping and Transplanting: No ducks were banded in the Southeast Region during this reporting period (Tables 2 and 3).

Waterfowl die-offs: One large die-off occurred on American Falls Reservoir during the 2009 reporting period where over 20,000 waterfowl and water birds died due to an avian botulism outbreak. Another, much smaller (~ 250 waterfowl), botulism outbreak occurred in the Shelly City Sewer lagoon during the 2009 reporting period. In August 2010, there was a small botulism outbreak - where approximately 20 ducks died - occurred at an industrial settling pond. Climatic conditions during this reporting period, however, were favorable and no botulism or other waterfowl die-offs were detected.

Upper Snake Region

Population Surveys: No waterfowl brood counts were conducted during this reporting period.

Habitat Conditions: Most ducks in the region are produced on Market Lake and Mud Lake WMAs and Camas National Wildlife Refuge (NWR). Duck production on all of these areas is influenced by water levels. Abnormally wet or dry years can reduce production. Numerous other areas of duck habitat, ranging from small beaver ponds and potholes to riparian communities along the Snake River occur throughout the region. Some areas are severely impacted by livestock grazing while other areas are impacted by irrigation withdrawal, invasive noxious weeds, or housing development. The region works with private landowners, local weed control areas, the Bureau of Land Management (BLM), U.S. Forest Service, Natural Resource Conservation Service, and other non-government groups to improve the quality of nesting and brood-rearing habitat through HIP.

The best wood duck habitat in the region is on the North Fork Snake River below St. Anthony, the South Fork Snake River below Burns Creek, and the Snake River above Roberts. These areas have excellent cottonwood riparian communities and numerous slow-flowing and backwater sloughs. Except for Cartier Slough WMA, Deer Parks WMA, and the Warm Slough Access Area, the land ownership is a mix of private and BLM lands. Market Lake, Mud Lake, and Sand Creek WMAs have limited wood duck nesting habitat around the edges of marshes and ponds.

Habitat Improvements: On WMAs throughout the region, corn, barley, and spring wheat are planted to benefit migratory and upland birds. On Market Lake WMA, 60 acres were planted and left standing for waterfowl and upland game use. On Mud Lake WMA, 300 acres were planted to food plots to benefit waterfowl and upland game in 2018. On Chester Wetlands and Sand Creek WMAs, 25 acres of food plots were planted to improve habitat for waterfowl in 2018. On Deer Parks Wildlife Mitigation Unit (WMU), 57 acres were planted and left standing for waterfowl in 2018.

Trapping and Transplanting: No ducks were trapped for transplanting in the Upper Snake Region during this reporting period. Habitat biologists banded 524 ducks during this reporting period (Tables 2 and 3).

Waterfowl Die-offs: No waterfowl die-offs occurred during this reporting period.

Depredation: No depredation complaints were received during this reporting period. However, the City of Idaho Falls has contracted with Wildlife Services to control ducks at the Idaho Falls Zoo from 2016 to present.

Predator Control: Hunters and trappers remove some predators during normal furbearer seasons.

Management Implications: Management direction in the 1991-1995 WMP is to maintain at least 30% duck nesting success on important duck-producing WMAs and increase duck production by improving nesting habitat on WMAs and through HIP. Production surveys are to be used on WMAs where duck production is a priority to monitor production and measures taken to increase production where it is low.

Nest success has not been monitored since the early 1990s. Mayfield nest success estimates at Market Lake WMA were around 20% each year surveys were conducted. This is below the objective of 30% for the WMA. Nest predation appeared to be caused by both avian and mammalian predators. Mammalian predation appeared higher on nests in large *Juncus* habitat blocks while avian predation appeared higher in fragmented cattail and hardstem bulrush habitat patches.

Results from nest searches and nest success estimates on Market Lake suggest ducks do not use some plant communities for nesting. Very few nests were found in *Juncus* meadows. Reseeding at least some of these communities to cover providing more structure (e.g., a rank bunchgrass) should be considered, and thereafter monitored for nest attempts and success.

Duck nest surveys conducted on Mud Lake WMA generally indicated above 30% nesting success.

The region has some excellent wood duck habitat along the Snake River but has lacked nesting boxes. Adopt-A-Wetland groups and habitat biologists have placed some nesting boxes along the Snake River. Incidental observations suggest a wood duck nesting population has established along the Snake River.

Salmon Region

Population Surveys: No population surveys are conducted for ducks in the Salmon Region.

Trapping and Transplanting: No ducks were banded in the Salmon Region during this reporting period.

Wood duck nest boxes in the region were not visited and/or cleaned.

GEESE (All Species)

Panhandle Region

Population Surveys: Canada goose nest surveys were conducted on the Coeur d'Alene River, Pend Oreille, and Boundary-Smith Creek WMAs in 2018. A total of 87 nests were located. One hundred thirty five nest platforms were checked and 60 platforms had active nests - a use rate of 44%.

During late summer 2018, at least 10 Canada Geese died in the greater Coeur d'Alene area. Dead geese were located in a residential area with a man-made lake. Geese appeared lethargic and in poor body condition prior to death. Four samples were submitted to the IDFG Wildlife Health Forensic Laboratory for necropsies. The geese were emaciated and had impacted feed in their esophagus comprised of grass, corn, and garbanzo beans. The most likely cause of death was impaction of the crop due to rapid consumption of dry seeds and beans.

Trapping and Transplanting: No Canada geese were banded or transplanted in the Panhandle Region during the reporting period.

Management Implications: Canada goose nesting initially increased in the Panhandle Region in response to the placement of man-made nest structures and a gosling transplant program. Production declined in the early 2000s, presumably in response to a lack of platform maintenance. An increased emphasis was placed on maintaining existing nest structures beginning in 2005, and the number of nesting geese initially increased. The number of nesting geese appears to be stable to increasing. Maintenance of nest platforms is no longer a management priority.

The Department HIP has significantly increased the number of nest structures erected on private property since 1988. There are more structures on private land than there are on Department property; however these are not surveyed at this time.

Clearwater Region

Population Surveys: An established flock of PP Canada geese nest in the Clearwater Region. These birds nest along roughly the lower 22 miles of the Clearwater River, primarily from Lewiston upstream to Peck. The 2014 breeding pair survey of this area resulted in a count of 51 indicated pairs and a total of 97 Canada geese. The Canada goose breeding pair survey was not conducted in 2018.

Numbers of active nests in this area were counted consistently from 1981 through 2006. Nesting success had been enhanced in this area with man-made nest structures placed on islands in the 1980s and early 1990s. Consistent data collection of goose nest structure use in the Clearwater Region began in 1988. The number of structures peaked at 80 in the early 1990s. Issues related to a burgeoning population in the late 1990s resulted in a change in management direction. The total number of structures slowly declined as those found unserviceable were removed. The last

structures were removed after the 2006 nesting season. Management direction will encourage natural ground nesting on the islands

Additional areas were surveyed for Canada goose nests beginning in 1992. These included farm ponds in the region where nesting structures were issued to landowners, and Mann Lake, Middle Fork Clearwater River, Palouse River, Potlatch River, and Red River. These surveys have been discontinued, as they applied to nest structure use only. Poor return rates on data cards were another factor in discontinuing this survey. Few of these structures remain intact for use by geese.

The ground-based, Midwinter Waterfowl Survey was discontinued in 2016.

Depredation: The number of goose complaints remained low over the reporting period. Increased hunting pressure and harvest, in and around past depredation complaint areas has effectively reduced calls concerning crop damage. Three complaints of crop damage were taken involving Canada geese. The lack of complaints reported around the Mann Lake area likely are a result of the reduction in the size of the waterfowl hunting closure in 2001.

Trapping and Transplanting: No Canada geese were trapped or transplanted in the Clearwater Region during the reporting period.

Management Studies: Problems associated with large numbers of geese at local parks, golf courses, and the Lewiston airport have subsided somewhat due to favorable habitat conditions and dispersal of birds. No trapping operations were conducted this year.

To address concerns about Canada geese in the urban environment of the Lewiston-Clarkston valley, interested parties continue to work together to apply management options available to control local goose numbers. Deterrent measures such as hazing and vegetation manipulation have been conducted by private businesses, state, and federal agencies in the area.

In 2004, the U.S. Army Corps of Engineers (USACE) applied for a permit from the USFWS to addle Canada goose eggs in specified areas on the Washington levee system and associated parks, and on one island shared by both Washington and Idaho. These sites were determined to have heavy nesting concentrations within city limits. Much of the local goose problem is tied to these areas. The USACE now annually treats between 30 to 60 nests in specified areas. The program is reportedly reducing the level of complaints and human health issues related to the local goose population.

Management Implications: Beginning in 2007, the region changed the method of monitoring Canada geese on the lower Clearwater River (Survey Area 5) from structure and ground nest searches to a pair and total goose count. Survey Area 6 was dropped as it tracked only the use of nest structures issued to landowners throughout the region. These structures are no longer being maintained for goose nesting and most have been removed. The adjusted management objectives for Survey Area 5 are a minimum of 40 breeding pairs and a minimum of 100 total geese.

Southwest (Nampa) Region

Population Surveys: The aerial Canada goose breeding pair survey was discontinued in 2011 due to safety concerns.

Climatic Conditions: Precipitation in the Southwest Region was below average during winter in the Weiser, Boise, and Payette basins and well below average in the Bruneau and Owyhee basins. Precipitation during spring and early summer was average in the Weiser, Bruneau, Boise, Payette, and Owyhee basins. Because no regional wetland surveys are conducted, the exact extent of wetlands is unknown. Waterfowl production from these wetlands is also unknown.

Trapping and Transplanting: No local geese (goslings or adults) were moved out of the urban area of Boise during this reporting period.

Disease Testing: No disease testing was conducted for geese during the planning period.

Management Implications: Breeding pair counts along the Snake and Payette rivers were below management objectives for six consecutive years (prior to 2011). This survey was curtailed in 2011 due to safety concerns. Canada goose surveys on the Deer Flat NWR also detected a marked decline in production coinciding with spring pair counts (decrease of 45% from 10-year average).

During June 2011, Southwest Region personnel partnered with Boise Parks and Recreation to mark Canada geese with color-coded bands. The ratio of marked to unmarked geese were monitored throughout the year. Observations of geese in Boise parks, indicate only 2% of all birds observed in winter are marked. Whereas, 50% of all birds observed during spring/summer are marked. Because nuisance goose complaints occur during winter, managing “non-resident” nuisance geese during this period is challenging and likely unproductive. Juvenile geese banded in Meridian and Boise were reported as harvested in at least seven states and two Canadian provinces.

Southwest (McCall) Region

Population Surveys: No population surveys were conducted for geese in the McCall subregion during the reporting period

Nesting survey and nest structure use data were not collected during the reporting period. Distribution of existing goose nest structures is coordinated region-wide through HIP.

Trapping and Transplanting: No Canada geese were trapped or transplanted in the Southwest (McCall) Region during the reporting period.

Management Implications: The 1991-1995 WMP directs the Department to reduce the harvest when the three-year average falls below minimum objectives. The minimum objective for Lake Cascade is 225 geese observed and 100 indicated pairs. The 3-year average for indicated pairs was approximately at this objective. These monitoring criteria were developed for the plan

without baseline data. Management objectives for these areas should be refined, using available data. These refined objectives should be incorporated into any updates to the 1991-1995 WMP.

Canada goose nesting surveys have been put on hold as the Pacific Flyway Study Committee revises the management plan for the Rocky Mountain and Pacific populations of Canada geese. As part of this process, new survey methodologies are being considered.

Magic Valley Region

Population Surveys: Canada goose breeding pair surveys and Midwinter Waterfowl surveys were discontinued in 2011 per statewide direction. Magic Valley regional staff conduct an annual ground-based waterfowl survey at Hagerman WMA. During January 2018, 3,857 Canada geese were counted, a 32% increase from 2016.

Habitat Conditions: Precipitation during the 2017-2018 winter was at or below average levels in all major watersheds in the Magic Valley Region. Snake River flows were generally normal to slightly below normal during the nesting season.

Depredation: One goose depredation complaint was received in 2017 in the Hagerman Valley. Chronic goose depredation complaints and public desire for more hunting opportunity in the Hagerman area led to a reduction in the size of the boundary of the Hagerman goose closure in 2015–2016. This change appears to have reduced depredation complaints.

Trapping and Transplanting: No Canada geese were trapped or transplanted in the Magic Valley Region during the reporting period.

Management Implications: Prior to 2011 when breeding pair surveys were discontinued, none of the survey areas in the region met the minimum breeding pair or total geese criterion. Increased bag limits (from 2/day to 4/day), poor nesting conditions, and reduced availability of artificial nesting structures are all factors that may have contributed to decline in observed spring goose numbers. With the exception of nesting structures on WMAs, many of the nesting structures in the Magic Valley were constructed in the late 1970s and are no longer functional or are located in areas that are no longer suitable.

Southeast Region

Population Surveys: Canada goose breeding pair surveys and Midwinter Waterfowl surveys were discontinued in 2011 per statewide direction.

Depredation: Approximately 10 complaints regarding depredating geese were filed with the Department during this reporting period; however, Wildlife Services personnel normally deal with waterfowl depredations. Most of these complaints come from the areas around American Falls and Blackfoot reservoirs. An early season goose hunt is held on an annual basis in Bear Lake and Caribou counties to help alleviate these depredations.

Trapping and Transplanting: No Canada geese were trapped or transplanted in the Southeast Region during this reporting period.

Management Implications: Prior to 2011 when breeding pair surveys were discontinued, goose populations were generally below the 1991-1995 WMP objectives (Connelly and Wackenhut 1990).

Waterfowl die-offs: No die-offs were detected during this reporting period.

Upper Snake Region

Population Surveys: Two surveys (counts of indicated pairs and total geese) were conducted annually on RMP Canada geese to estimate breeding population trends through 2011. These flights were discontinued in 2011 for employee safety reasons.

There were no monitoring efforts for success on maintained goose platforms at Deer Parks WMU or Chester Wetlands in 2018.

Habitat Conditions: Most goose nesting on Department WMAs occurs on nesting structures. Nesting on the South Fork Snake River occurs on islands, while nesting at Camas NWR, in the Teton Basin, the North Fork Snake River, and Island Park Reservoir occurs primarily on the ground.

Habitat on the South Fork Snake River and lower Henrys Fork Snake River is being impacted by the invasion of noxious weeds. The Department is a cooperating partner with local weed control districts to address this problem.

Habitat in the Teton Basin is being lost to summer home development. The Department HIP program has the potential to reduce this loss if landowner cooperation can be obtained.

Goose production along the South Fork is dependent upon water releases from Palisades Reservoir. The U.S. Bureau of Reclamation and the Department jointly researched river flows for optimal goose production during the early to mid-1970s. This study indicated flows between 8,000 and 16,000 cfs during nesting season were optimal for goose production. However, releases are scheduled to meet irrigation water rights and fisheries needs, which reduces goose production due to nest flooding most years.

Depredation: Landowners around the Mud Lake WMA, and north of Idaho Falls on the Snake River have observed increased numbers of geese during this reporting period and requested assistance from the Department and the USFWS. Wildlife Services has contracted with the City of Idaho Falls to control goose numbers along the greenbelt and the Idaho Falls Zoo. Several landowners throughout the Upper Snake Region were provided snow fencing, zong guns, and cracker shells to prevent goose depredations. Five goose depredations were investigated during this reporting period.

Predator Control Hunters and trappers remove some predators during normal furbearer seasons.

Trapping and Transplanting: No geese were trapped or transplanted during this reporting period.

Waterfowl Die-offs: No die-offs were detected during this reporting period.

Habitat Improvements:

Corn, barley, and spring wheat food plots were left standing for waterfowl and upland game. On Market Lake WMA, 60 acres were farmed during 2018. On Mud Lake WMA, 300 acres were planted to food plots to benefit waterfowl and upland game in 2018. On Chester Wetlands and Sand Creek WMAs, 25 acres of food plots were planted to improve habitat for waterfowl in 2018. On Deer Parks WMU, 57 acres were planted and left standing for waterfowl in 2018.

Management Implications: Canada goose production was increased in the region by erecting additional nest structures on the South Fork Snake River, Island Park Reservoir, and Teton River. Annual maintenance of structures on the South Fork was discontinued years ago and most have fallen into disrepair. There is no plan to rebuild these nest boxes due to increased resident populations and the potential for high depredations. Habitat biologists are also no longer servicing platforms on Island Park Reservoir because of conflicts with reservoir recreationalists.

Geese produced around Gem Lake cause annual depredations on malt barley. Goose nesting platforms were erected around Gem Lake as mitigation for the Idaho Falls hydropower project; however, no brood habitat was included in the mitigation plan. These geese are basically urban geese, which makes population management through harvest difficult.

Salmon Region

The Pacific Flyway Study Committee is currently revising the management plan for the Rocky Mountain and Pacific populations of Canada geese. As part of this process, new survey methodologies are being considered. In light of this, the Department has decided to postpone spring Canada goose surveys until the new methodologies have been designed and the management plan has been completed and approved by the Pacific Flyway Council.

Trapping and Transplanting: No Canada geese were trapped or transplanted in the Salmon Region during this reporting period.

SANDHILL CRANE

The Department's goals and objectives for Rocky Mountain Population (RMP) sandhill cranes are the same as those for the Pacific Flyway (Pacific Flyway Council and Central Flyway Council 2016).

Current Goals

1. Maintain the population between 17,000–21,000 cranes as measured by the recent 3-year average index of total cranes from the September pre-migration survey.

2. Maintain and protect suitable habitats in sufficient quantity and quality to support the population objective and recent past spatial distribution, while encouraging population expansion where desirable.
3. Provide for recreational uses of RMP cranes.
4. Minimize crop depredations by RMP cranes.

The RMP sandhill crane population continued to receive increased management emphasis during the reporting period in the Magic Valley, Southeast, and Upper Snake regions because of continuing landowner concerns over crop damage. Surveys of RMP greater sandhill cranes in these three regions were initiated in 1995 to document total sandhill crane numbers, arrival dates, distribution, and age ratios.

Background and Management Philosophy: Rocky Mountain Population greater sandhill cranes have caused crop damage in eastern Idaho for decades. In 1996, the Commission adopted rules that changed the classification of sandhill cranes from migratory nongame birds to migratory game birds and directed the Department to obtain Pacific Flyway Council and USFWS approval for an experimental controlled hunt in three areas. See the 2007 Waterfowl Annual Reports for a thorough history of the sandhill crane management areas in Idaho.

In 2009, the Commission authorized sandhill crane seasons that were no longer administered through controlled hunts. Tags are now available on a first-come, first-served basis. This decision was made because the harvest allocation for Idaho had increased in recent years, but the number of birds harvested had remained relatively steady. In 2012, the number of tags was reduced from 680 to 460 due to a decline in the number of cranes observed during the September survey. In 2014, the daily and season limits were decreased to 2 cranes. In 2016, hunts in Bear Lake, Fremont, and Jefferson counties were expanded to include 2 hunt periods – one during September 1-15 and a second from September 16-30. This change was made to increase hunter opportunity as the harvest allocation increased. In 2018, a crane hunt area was added in Oneida County in the Malad Valley. The other hunt areas and hunt periods remained unchanged. Tags were increased to 575 to accommodate the new hunt area. The description, season framework, and bag and possession limits can be found in Appendix A.

Southwest (McCall) Region

Breeding pairs of sandhill cranes occur in the Lake Cascade, North Fork Payette River, and Little Salmon River drainages. No management data are collected on these birds.

Magic Valley Region

In September 2018 crane surveys were conducted in the Silver Creek Valley and Camas Prairie. Two hundred and thirty-nine (239) cranes were observed in the Silver Creek Valley and 0 cranes were observed on the Camas Prairie. Carey Lake was not surveyed in 2018.

Southeast Region

Population Surveys: Personnel for the USFWS and a private contractor collect aerial survey information to determine total sandhill crane abundance during September in selected areas of the Southeast Region (Table 4).

Harvest Characteristics: A mail-in survey with a follow-up telephone survey of non-respondents was used to estimate hunter participation and harvest of sandhill cranes for each hunt (Tables 5 and 6). In 2018, 142 sandhill cranes were harvested in the Bear Lake hunt area, 14 cranes were harvested in the Swan Lake hunt area, and 16 cranes were harvested in the new Oneida county hunt area.

Management Implications: Concerns expressed by grain producers during the mid-1990s prompted the Department to collect baseline information that could be used to identify strategies to reduce crop depredation. Chesterfield Reservoir, Blackfoot Reservoir, Bear River Valley, and Grays Lake were identified as primary sites due to a history of depredation concerns. However, sandhill cranes stage and use grain fields throughout the region including Marsh Valley, Malad Valley, Swan Lake/Oxford Slough area, Bear Lake Valley, American Falls Reservoir, and Thomas Fork Valley.

Depredation: Depredations in the Southeast Region are managed using a lure crop program, most of which have been focused in Caribou County. There are very few complaints of sandhill cranes outside of the lure crop focus area.

Trapping and Transplanting: A total of 10 adult sandhill cranes were captured during the reporting period. All were fitted with an aluminum leg band and nine were fitted with a solar-recharging battery-powered GPS tracking device attached to the tarsus. These devices are a GPS-GSM wildlife tracking device by Cellular Tracking Technologies. Three of the cranes (two transmitters deployed) were captured near Samaria, ID (Oneida County), one was captured near Grace, Idaho on Whiskey Creek, one was captured near Woodruff, Idaho, one was captured at Twin Springs campground (Oneida County), two were captured near Chesterfield, Idaho, and two were captured on Blackfoot Reservoir.

Upper Snake Region

Population Surveys: Personnel for the USFWS and a private contractor collect aerial survey information to determine total sandhill crane abundance during September in selected areas of the Upper Snake Region (Table 4).

Harvest Characteristics: A mail-in survey with a follow-up telephone survey of non-respondents was used to estimate hunter participation and harvest of sandhill crane for each hunt (Tables 5 and 6). In 2018, 24, 57, and 16 cranes were harvested from Teton, Fremont, and Jefferson counties, respectively.

Depredation: The region received no sandhill crane depredation complaints during this reporting period.

Trapping and Transplanting:

A total of six adult sandhill crane adults were captured during the reporting period. All were fitted with an aluminum leg band and a solar-recharging battery-powered GPS tracking device attached to the tarsus. These devices are a GPS-GSM wildlife tracking device by Cellular Tracking Technologies.. Two cranes were captured at Chester Wetlands and four were captured at Camas National Wildlife Refuge.

Management Implications: Fall pre-migration staging area sandhill crane composition surveys were conducted in the Upper Snake Region for the first time in 1995. These baseline data were used to help identify strategies to reduce depredation concerns on pre-migration staging areas in the Fremont and Teton County areas.

Salmon Region

Sandhill cranes occur as scattered breeding pairs in the Lemhi, Pahsimeroi, and Salmon River valleys from Salmon to Stanley. No management data are collected on these birds.

TRUMPETER SWAN

The trumpeter swan is included in the 1991-1995 Nongame Species Plan; the Department's goals and objectives are the same as those of the Pacific Flyway (Pacific Flyway Council 2017). The 1991-1995 WMP contains no goals for this species. Data for trumpeter swans are included in this report for the historical record.

Current Goals

Population

1. Maintain a minimum RMP of 10,000 adults and subadult birds (white birds) using data from the North American Trumpeter Swan Survey.
2. Maintain an RMP U.S. breeding segment of at least 718 adult and subadult birds (white birds) using data from the September (Fall) Survey.
3. Encourage continued growth to restore an interconnected, self-sustaining breeding population that uses diverse habitats across the historic range of the species within the Pacific Flyway. Attain the desired distribution and numbers of white birds and nesting pairs with broods within the next 5 years.
4. Maintain a self-sustaining RMP Canadian breeding segment (as monitored by the North American Trumpeter Swan Survey), well distributed throughout Western and Northern Canada.

Habitat

1. Maintain, and when possible, improve quantity and quality of breeding and wintering habitats to support population objectives throughout the annual cycle.
2. Identify potential restoration areas that will support breeding range expansion, enhance connectivity and growth of breeding flocks, and increase the likelihood swans will use new wintering habitats.

Harvest

1. Ensure trumpeter swan conservation is considered to maintain compatibility with tundra swan hunting in the Pacific Flyway.

Information Needs/Research

1. Seek funds to address priority research and information needs, as well as habitat improvement and range expansion efforts.

Magic Valley Region

In 1994, 1995, and 1996, a pair of trumpeter swans successfully nested at White Arrow Ponds north of Bliss in Gooding County. Since then, trumpeter swans have made no attempt to nest at that site or attempts were brief and unsuccessful.

Successful nesting by trumpeter swans was also documented in 1995 and 1996 at the Department's Highway 46 Pond in Camas County. In 2002, a pair of trumpeter swans successfully nested and reared 3 juveniles on a private pond approximately 6 miles southeast of the Department's Highway 46 Pond.

During August 2006, Department staff found a pair of adult trumpeter swans with 3 cygnets on Spring Creek Reservoir in Camas County. No nesting trumpeters were documented in the region during 2007; however, a pair of adults was observed at Thorn Creek Reservoir by Department personnel on August 23, 2007. Trumpeters with cygnets were observed on the Snake River and at White Arrow Ponds during a February 2009 survey. No evidence of nesting trumpeters has been documented in the region since 2009.

Southeast Region

The Department's goals and objectives are the same as those of the Pacific Flyway (Pacific Flyway Council 2017). The 1991-1995 WMP contains no goals for this species. Data for trumpeter swans are included in this report for the historical record.

Upper Snake Region

The Department's goals and objectives are the same as those found in the Pacific Flyway Council Management Plan for trumpeters swan (Pacific Flyway Council 2017). The 1991-1995 WMP contains no goals for this species. Data for trumpeter swans are included in this report for the historical record.

In the Upper Snake Region, trumpeter swans have been a principal catalyst for thousands of acres of habitat protection and wetland restoration on private lands funded by such federal and state programs as the North American Wetland Conservation Act (NAWCA), the Land and Water Conservation Fund and Idaho's Landowner Incentive Program. Some of the most meaningful wetlands conservation/restoration work has occurred in Teton Basin, Idaho.

Motivated by the goals defined in the 2008 Pacific Flyway Management Plan, the strategic location of Teton Basin for Greater Yellowstone swan conservation, and increasing concern about possible extirpation of trumpeter swans in Yellowstone National Park, IDFG and partners

initiated a nesting trumpeter swan restoration project in 2013 with approval from the Greater Yellowstone Trumpeter Swan Working Group and Pacific Flyway Council.

Project partners initiated trumpeter swan translocations in Teton Basin in summer 2013 with the following project objective: Establish a minimum of 2 active nest sites in Teton Basin over a 10 year period. Project implementation was led by the IDFG and TRLT and focuses on 1) maintaining location records of released birds, 2) maintaining optimal habitat management at breeding marshes and 3) maintaining viable partner-landowner relationships.

The fifth TRUS release in Teton Basin was held at Huntsman Fox Creek Wetlands, located northwest of Victor, Idaho. All swans were marked with green neck collars with white alphanumeric codes and Federal tarsal bands, similar to previous years. Two captive-reared yearling trumpeter swans were released April 27, 2018 (female K20, male K21), followed by two more cygnets on May 10, 2018 (male K23, female K24). The delay in the second release was due to a seropositive test result for salmonella during health screening, and the birds could only be released once cleared. These yearling trumpeter swans were released into an enclosure surrounding the entire release wetland. Each swan was observed on the release wetland until early August when K23 was observed on a wetland located directly adjacent to the release site. Soon thereafter, all 2018 released yearlings were observed prospecting nearby wetland areas and the enclosure surrounding the release wetland was removed on August 23, 2018. Throughout September and October 2018 all four birds were observed on wetlands nearby the release site, including the Fosters Slough section of the Teton River.

TUNDRA SWAN

The Department's 1991-1995 WMP goals (Connelly and Wackenhut 1990) for the tundra swan are the same as those of the Pacific Flyway. However, during the reporting period, this species received little management emphasis in Idaho. Tundra swans are not currently hunted in Idaho, but benefit indirectly from other wildlife management programs.

Tundra swans migrate through the region in spring and fall, and some winter on the Snake River, the North Fork Snake River and the Teton River, but none are known to nest in the state.

AMERICAN COOT

The Department's 1991-1995 WMP goals for the American coot are to 1) maintain the Idaho population, 2) increase the harvest, and 3) provide maximum recreational opportunity (Connelly and Wackenhut 1990). However, during the reporting period, this species received little management emphasis. This is because the American coot is not a popular game bird in Idaho and because it benefits indirectly from other wildlife management programs.

WILSON'S SNIFE

The Department's 1991-1995 WMP goals for the Wilson's snipe are to 1) maintain Idaho's Wilson's snipe population and 2) maintain the harvest (Connelly and Wackenhut 1990). However, during the reporting period, this species received little management attention. This is

because the Wilson's snipe is not a popular game bird in Idaho and because it benefits indirectly from other wildlife management programs.

MOURNING DOVE

Because mourning dove coo-count surveys are no longer conducted, banding doves has become increasingly more important. The mourning dove banding quota for Idaho is 633 doves. Idaho has participated in a Pacific Flyway-wide effort to trap and band mourning doves since 2003. In 2018, 525 doves were banded, (Table 7). Since 2003, over 10,000 mourning doves have been banded in Idaho.

Panhandle Region

Population Surveys: Mourning doves are common, in low numbers, in the Panhandle. Most mourning doves are found during summer around agricultural lands near Worley, Plummer, Harrison, Post Falls, and Bonners Ferry. In 2018, 75 mourning doves were banded at CDARWMA.

Harvest Characteristics: In north Idaho, most mourning doves leave before the season opens. The season opener (September 1) coincides with the first cool evening temperatures of late August. Also, for most grain and grass crops, farmers burn their fields after harvest annually. Beginning in mid-August and ending in late September, most cover and food patches are consumed by fire.

Mourning dove hunting effort in Panhandle Region is very low. Harvest information on mourning doves is collected via the USFWS harvest survey. No regional harvest survey has been conducted since 1995.

Management Implications:

Widespread burning of crop residues practiced by area farmers coupled with the first cool evening temperatures of late August usually combine to move mourning doves south out of the region before hunting season opens.

Clearwater Region

Population Surveys: Historically there were two mourning dove call-count routes conducted in the Clearwater Region. By themselves, these routes did not provide an accurate index to dove production or population trends. However, when incorporated into the results from all other routes in the state, an index to statewide dove production was achieved. Beginning in 2015, a three-year experimental monitoring protocol was initiated by the USFWS to estimate mourning dove populations across the US that consisted of a single-observer survey that utilized distance sampling during point counts along established Call Count Survey (CCS) routes to estimate population abundance. One of these routes (1150) was located in the Clearwater Region. Since the protocol was different, results are probably not directly comparable with those collected previously. However, three doves were heard during this 20-mile/stop survey effort (0.15 doves heard per mile surveyed). An additional 35 doves were seen, representing 6 separate groups/flocks during this survey (but were not heard/calling).

Harvest Characteristics: Harvest information on mourning doves is collected via the USFWS harvest survey. No regional harvest survey has been conducted since 1995.

Trapping and Banding: The Clearwater Region has participated in a statewide effort to trap and band mourning doves since 2003. A delayed start and problems with trap-site selection resulted in no doves trapped in 2003. In 2004, a total of 63 doves were banded at three sites. All doves received a standard leg band; hatch-year doves also received a reward band. In 2005, a total of 10 doves were banded at two sites. Four individuals were recaptured during the course of the 2005 season (two adult males and two hatch-year birds). Annual capture efforts have continued to yield variable results (range of 7 to 109 doves, 2006-2013). A total of 46 doves were banded in 2013. In 2014, a personnel shortage in the regional wildlife program resulted in a total of just eight doves being banded in the region. Forty-four doves were trapped/banded in the Clearwater Region in 2015. No doves were banded in 2016, 2017, and 2018 in the Clearwater Region; however, personnel in the Panhandle Region conduct the annual capture efforts for all of North Idaho.

Management Implications: Dove management in the Clearwater Region consists of offering an annual hunting season as liberal as the federal season framework allows and conducting annual call-counts on routes located within the region.

Southwest Region

Population Surveys:

During August 2018, regional personnel counted mourning doves while conducting pheasant brood routes. Approximately 4.0 mourning doves were counted per mile in 2018, up 11% compared to 2017.

Roadside CCS routes were discontinued in 2013; however, a three-year experimental monitoring protocol was initiated by the USFWS from 2015-2017 to estimate mourning dove populations across the US that consisted of a single-observer survey that utilized distance sampling during point counts along established CCS routes to estimate population abundance. Two of these routes (1782, 2030) were conducted in the Southwest Region to assist with this effort.

Harvest Characteristics: Harvest information on mourning doves is collected via the USFWS harvest survey. No regional telephone harvest survey has been conducted since 1995.

Trapping and Banding: The Southwest Region has participated in a statewide effort to trap and band mourning doves since 2003 (Table 7). All doves banded between 2003 and 2007 were banded with US Geological Survey (USGS) toll-free bands. During 2008-2009, the USGS introduced web address bands. Since 2010, all doves have been banded with web-address bands. One hundred doves were banded in the Southwest Region in 2018 (Table 7).

Management Implications: Dove hunting in the Southwest Region remains popular with sportsmen. Management consists of providing liberal seasons and bag limits within the Federal framework, improving bird habitat on public and private lands, and securing access to lands on which to hunt.

Magic Valley Region

Population Surveys: Doves observed on August roadside surveys have ranged from 1.3 doves/mile in 2000 to 5.1 doves/mile in 2009. Number of doves observed on August routes has trended upward during the past 25 years. From 2000-2012, 4.1 doves/mile were observed and during 1986-1999, 2.4 doves/mile were observed.

Roadside CCS routes were discontinued in 2013; however, a three-year experimental monitoring protocol was initiated by the USFWS from 2015-2017 to estimate mourning dove populations across the US that consisted of a single-observer survey that utilized distance sampling during point counts along established CCS routes to estimate population abundance. One of these routes (2710) was conducted in the Magic Valley Region to assist with this effort.

Trapping and Banding: The Magic Valley Region has participated in a statewide effort to trap and band mourning doves since 2003 (Table 7). In 2018, 110 doves were banded at two locations throughout the region; a slight decrease from 2017 when 159 birds were banded (Table 7). Since 2003, over 3,000 doves have been banded in the region. Banding will continue during future reporting periods.

Harvest Characteristics: Harvest information on mourning doves is collected via the USFWS harvest survey. A telephone harvest survey of hunters has not been conducted by the Department since 1996.

Management Implications: Roadside survey data collected in the 1980s suggest as many as 50% of the doves in the Magic Valley Region migrated out of the area by the opening of hunting season on September 1. The onset of cooler weather, usually in early September, triggers movement of many of the remaining doves.

Southeast Region

Population Surveys: Wing barrels provide only a limited amount of data on mourning doves. Sample sizes are generally too small for analysis.

Roadside CCS routes were discontinued in 2013; however, a three-year experimental monitoring protocol was initiated by the USFWS from 2015-2017 to estimate mourning dove populations across the US that consisted of a single-observer survey that utilized distance sampling during point counts along established CCS routes to estimate population abundance. One of these routes (0850) was conducted in the Southeast Region to assist with this effort.

Harvest Characteristics: Harvest information on mourning doves is collected via the USFWS harvest survey. No regional telephone harvest survey has been conducted since 1995.

Trapping and Banding: The Southeast Region has participated in a statewide effort to trap and band mourning doves since 2003 (Table 7). However, from 2007–2012 no banding occurred in the region. During 2003–2006, 475 total doves were banded in the Southeast Region. In 2013,

banding efforts were again initiated. During this reporting period, 55 doves were banded in the Southeast Region, all of which were banded at Sterling Wildlife Management Area.

Management Implications: Management decisions rely heavily on population and harvest statistics collected nationwide by USFWS.

Upper Snake Region

Population Characteristics: Roadside CCS routes were discontinued in 2013; however, a three-year experimental monitoring protocol was initiated by the USFWS from 2015-2017 to estimate mourning dove populations across the US that consisted of a single-observer survey that utilized distance sampling during point counts along established CCS routes to estimate population abundance. Two of these routes (2210, 2520) were conducted in the Upper Snake Region to assist with this effort.

Harvest Characteristics: No doves were checked at check stations on opening weekend of the 2018 sage grouse season. Harvest surveys have not been conducted since 1996. Hunters report harvest directly to USFWS.

Trapping and Banding: The Upper Snake Region has participated in a statewide effort to trap and band mourning doves since 2003 (Table 7). In 2018, 121 doves were banded at banding stations at Menan, Idaho Falls, Rigby, and Mud Lake. Over 2,400 doves were banded in the region between 2003 and 2018.

Management Implications: The mourning dove is one of the most common nesting game birds in Upper Snake Region. However, in many years, the majority of birds have left the area prior to the hunting season opener (September 1) or shortly thereafter. Management efforts are aimed at minimizing sportsmen/landowner conflicts, and improving habitat indirectly through HIP (e.g., windbreaks, guzzlers, and CRP plantings). We will continue to take advantage of harvest opportunities as allowed by federal regulations.

Salmon Region

Abstract: Mourning doves breed in moderate numbers in Salmon Region, but are usually only lightly harvested here due to migration timing.

Population Surveys: The Salmon Region contains a breeding population of mourning doves. Prior to the reporting period, the only population information obtained was from call counts in the southern portion of Lemhi Valley. During 1985, 1986, and 1987, a total of four mourning doves were seen or heard along the route. Doves heard and seen increased in the 2000s, but declined to only one dove seen in 2010 and 2011. In 1988, the southern half of the route was relocated three miles to the east. Beginning in 2000, the western portion (approximately seven miles) of the route on Highway 28 was relocated to the north and east. The new section follows Lemhi Back Road from Leadore to Little Eightmile Creek. Call count routes in the region were discontinued in 2013.

Trapping and Translocation: As part of a national mourning dove banding project (under auspices of the USFWS), staff in the Salmon Region have captured and banded doves since 2003 (Table 7). Capture was conducted at two sites, Baker and Kirtley Creek, from 2003-2006. During 2011, Baker was the only capture site; we placed bands on 67 doves and recaptured 11 birds from previous years. Based on recapture rates across subsequent years, minimum survival rates were surprisingly high, particularly for birds captured during 2003 at the Baker site. Minimum survival rates for doves captured in 2003 at Baker were 42% through 2004 and 30% through 2005. Minimum one-year survival for doves captured in 2004 through 2010 at Baker ranged from 6% to 23%. For the reporting period, trap and banding sites have been dispersed across the region to four locations. In 2018, 65 doves were banded at two of the banding locations.

Harvest Characteristics: During years in which mourning doves delay their migration slightly, Salmon Region hunters are able to harvest moderate numbers of birds. In most years, harvest is low. Due to small sample sizes, telephone survey harvest data are imprecise at the county level.

Habitat Conditions: Mourning doves are common, but not abundant throughout the region, indicating that perhaps suitable habitat is limited. Most dove use is located in riparian willow habitats associated with cattle ranching operations; these habitats are likely to decrease as housing developments replace working ranches. However, dove numbers may remain stable if appropriate vegetation accompanies housing development.

Management Implications: The extended season (60 days) from 1983 to 1986 had little effect on harvest because many doves move out of the area soon after the September 1 opening date. Similarly, the 30-day season initiated in 1987 due to a general decline in mourning dove numbers in the western United States probably did not affect harvest in our area. Further, the current 60 day season has not affected harvest in our area.

AMERICAN CROW

The American crow continues to be a species with minimal active management.

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Table 1. Estimated waterfowl harvest numbers from USFWS waterfowl hunter survey for Idaho, 2008-present.

Year	Estimated adult duck hunters	Estimated adult goose hunters ^a	Total ducks harvested ^a	Total geese harvested ^a
2008	20,000	13,700	257,600	64,500
2009	15,400	11,100	286,600	58,300
2010	16,900	11,100	156,600	31,400
2011	14,200	12,800	209,500	51,000
2012	16,200	12,700	277,700	73,900
2013	19,400	15,600	320,400	70,300
2014	19,000	15,200	249,800	73,400
2015	11,800	9,400	173,700	44,100
2016	15,500	11,200	339,800	71,900
2017	17,700	15,800	231,600	67,700

^a Adjusted for exaggeration memory bias and juvenile hunter density.

Table 2. Ducks banded in Idaho by Department and USFWS personnel, 2018.

Species	Panhandle	Clearwater	Southwest	Magic Valley	Southeast	Upper Snake	Salmon	Total
American Green-winged Teal	6					1		7
American Widgeon						7		7
Blue-winged Teal	2							2
Canvasback						4		4
Cinnamon Teal	14					4		18
Gadwall	2					174		176
Mallard	582		599			295		1,476
Northern Pintail	8					2		10
Northern Shoveler						20		20
Redhead						14		14
Ring-necked	2							2
Wood Duck	154							154
Total	770	0	599	0	0	524	0	1,893

Table 3. Mallards banded in Idaho by Department personnel, 2010-Present.

IDFG Region	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Panhandle	1,086	971	455	1,776	1,053	867	942	1,775	582	9,507
Clearwater	3	0	0	0	0	11	0			14
Southwest	63	0	0	0	0	150	413	549	599	1,774
Magic Valley	59	0	0	0	0	0	0	9		68
Southeast	0	0	0	0	0	45	26			71
Upper Snake	633	788	14	380	565	21	266	163	295	3,125
Total	1,844	1,759	469	2,156	1,618	1,094	1,647	2,496	1,476	14,559

Table 4. September aerial and ground-based counts of RMP greater sandhill cranes in eastern Idaho, 2012-present.

Region/Area	2012	2013	2014	2015	2016	2017	2018
Magic Valley							
Camas Prairie	ND	21	ND	0	0	3	0
Carey Lake	0	0	ND	0	0	ND	ND
Silver Lake	281	421	431	575	31	31	239
Southeast							
American Falls Reservoir	103	288	155	71	198	91	324
Bear River Valley	559	410	778	1,272	1,301	681	1,625
Blackfoot Reservoir	434	333	520	537	600	187	193
Chesterfield Reservoir	40	103	49	196	43	59	77
Grays Lake	262	907	839	489	328	466	31
Malad River	96	248	325	320	582	384	151
Marsh Valley	193	122	238	149	178	179	178
Oxford Slough	136	136	205	214	0	197	81
Upper Snake							
Ashton-St Anthony	950	662	654	840	705	806	167
Camas NWR	60	200	375	426	179	107	270
Henry's Lake Flats	72	59	2	1	0	8	6
Island Park Reservoir	65	0	4	0	0	15	81
Kilgore	ND	ND	ND	ND	ND	ND	ND
Market Lake WMA	6	5	6	25	4	4	0
Mud Lake WMA	103	248	53	54	73	47	43
Teton Basin	572	1,065	1,130	1,285	1,221	801	1,003
Total	3,932	5,228	5,764	6,454	5,443	4,066	4,469

Table 5 Sandhill crane tag levels, estimated hunter participation, and harvest based on mail and telephone surveys, 2012-present.

Hunt Areas 1-6	2112	2013	2014	2015	2016	2017	2018
Bear Lake-Caribou County							
Tags available	295	180	160	195	300	357	357
Tags issued	279	180	160	195	305	331	331
Total hunters	131	87	83	109	154	168	193
Days hunted	389	207	197	277	387	439	551
% Success ^a	20	51	46	53	53	36	43
Harvest	139	93	74	104	161	119	142
Teton County							
Tags available	40	25	22	25	30	35	35
Tags issued	49	25	21	25	30	35	35
Total hunters	27	18	13	15	19	15	24
Days hunted	44	38	23	23	27	37	43
% Success ^a	59	7	62	56	87	37	69
Harvest	29	2	13	14	26	13	24
Fremont County							
Tags available	65	40	35	45	70	82	82
Tags issued	98	40	35	45	70	82	82
Total hunters	57	34	23	35	48	43	69
Days hunted	124	53	61	98	97	94	136
% Success ^a	55	58	71	64	56	43	70
Harvest	54	23	25	29	39	52	57
Jefferson County							
Tags available	20	10	10	10	40	47	47
Tags issued	40	11	10	26	40	49	47
Total hunters	17	7	6	13	26	22	39
Days hunted	59	9	1	34	50	55	74
% Success ^a	73	73	80	58	58	39	34
Harvest	29	8	8	9	23	19	16
Bannock County							
Tags available	30	15	13	15	25	29	29
Tags issued	30	15	15	15	25	29	29
Total hunters	19	11	11	11	15	14	19
Days hunted	46	38	33	15	26	44	74
% Success ^a	60	60	93	70	40	28	48
Harvest	18	9	14	10	10	8	14
Malad County							
Tags available							25
Tags issued							25
Total hunters							18
Days hunted							69
% Success ^a							64
Harvest							16

State Total								
Tags available	450	270	240	290	465	550	575	
Tags issued	496	271	241	306	470	526	549	
Total hunters	251	157	135	185	263	261	362	
Days hunted	662	345	325	447	241	670	947	
% Success ^a	60	49	56	54	55	38	49	
Harvest	269	135	134	166	258	202	269	

^a Success rate shown is harvest per permit issued.

Table 6. Age composition of sandhill crane harvest based on mail and telephone surveys, 2011-present.

Hunt Areas 1-6	2011	2012	2013	2014	2015	2016	2017	2018
Bear Lake-Caribou County								
Juvenile	26	21	8	4	15	20	14	7
Adult	115	118	85	70	89	141	115	134
Teton County								
Juvenile	3	5	0	1	0	5	0	2
Adult	27	24	2	12	14	21	13	22
Fremont County								
Juvenile	10	11	1	3	4	6	4	3
Adult	51	43	22	22	25	33	48	53
Jefferson County								
Juvenile	6	4	1	0	2	1	9	3
Adult	19	25	7	8	7	22	10	12
Bannock County								
Juvenile		2	0	1	0	2	0	4
Adult		16	9	13	10	8	8	10
Malad County ^a								1
Juvenile	0	4	0					15
Adult	5	3	0					

^a Malad County hunt was initiated in 2018.

Table 7. Mourning doves banded in Idaho, 2007-present.

Year	Adult Male	Adult Female	Unknown	Hatch Year	Unknown	Total
2007	242	91	20	309	35	697
2008	274	115	34	216	9	648
2009	191	75	20	252	1	539
2010	174	78	32	169	12	465
2011	163	74	25	93	3	359
2012	236	105	44	292	22	699
2013	213	99	28	184	3	527
2014	333	141	34	291	8	807
2015	331	141	39	266	18	795
2016	258	127	1	269	18	695
2017	269	117	24	247	20	677
2018	188	79	4	241	13	525
Total	2,872	1,242	305	2,829	162	7,433

APPENDIX A

IDAHO

2017-2018 SEASON

MIGRATORY BIRD RULES

Idaho Migratory Game Bird

2017-2018 Seasons & Rules



*Includes Seasons and Rules for
Crows, Doves, Sandhill Cranes and Waterfowl*
idfg.idaho.gov

GETTING STARTED

To use this brochure:

Hunting seasons and rules for all ducks, geese, sandhill crane, doves, and crow are available in this brochure. To get started:

- Pick the species and area you want to hunt, then refer to the section on that bird.
- Season and limit pages include maps for each hunting area.

There are two hunt areas for ducks, three hunt areas for Canada and white-fronted geese, and four hunt areas for light geese.

Page 8: Duck, snipe and coot seasons, limits and areas.

Pages 9-11: Goose seasons, limits and areas.

Page 12: Mourning dove and crow seasons and limits

Page 13: Sandhill crane seasons and limits.

Pages 22-31: Detailed rules and related information.

It is the responsibility of the hunter to become familiar with the rules that affect the hunt in which he or she is participating. Changes and updates made to migratory bird seasons and rules, since this brochure was printed on 5/31/2017, can be found on the Fish and Game website at <https://idfg.idaho.gov/rules>.

Remember!

Waterfowl hunters are required to possess/use:

- A valid Idaho hunting license or hunting passport.
- Migratory Bird (HIP) Permit.
- Federal Migratory Bird (Duck) Stamp for all hunters 16 years or older.
- Nontoxic shot.



License holder must validate stamp by signing across the front in ink.

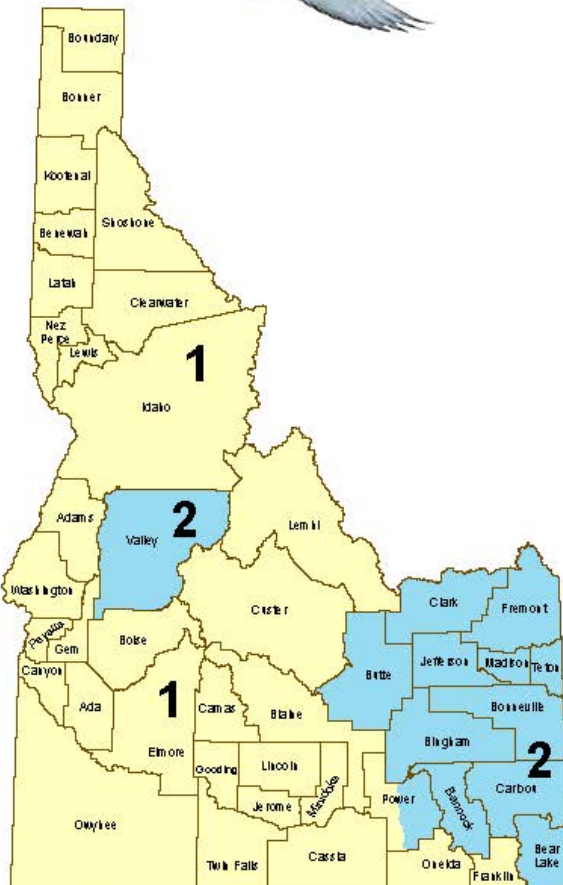
Available online @

<https://idfg.idaho.gov/duckstamp>

Seasons	September	October	November	December	January	February	March
Special Youth Hunt Statewide	Sept. 30th & Oct. 1st						
Duck Area 1		14th	2nd Scaup	26th			
Duck Area 2		7th	7th Scaup	31st	19th		
Canada Goose Area 1		14th			26th		
Canada Goose Area 2		7th			19th		
Canada Goose Area 3	1st-15th	7th			4th		
White-fronted Goose Area 1		14th			26th		
White-fronted Goose Area 2		7th			19th		
White-fronted Goose Area 3			6th		18th		
Light Goose Area 1		14th			26th		
Light Goose Area 2		7th			19th		
Light Goose Area 3			26th				10th
Light Goose Area 4			5th		19th	10th	10th

Statewide Duck (Including Merganser), Wilson's Snipe and American Coot Seasons, Limits & Hunt Area Descriptions

Daily Bag Limit: see below Possession Limit: 3 times daily bag limit



AREA 1

- October 14, 2017 - January 26, 2018
- Scaup Season:
November 2, 2017 - January 26, 2018

Area 1 includes all parts of the state NOT included in Area 2. (See yellow area on map)

AREA 2

- October 7, 2017 - January 19, 2018
- Scaup Season:
October 7, 2017 - December 31, 2017

Area 2 includes all lands and waters within the Fort Hall Indian Reservation, including private in-holdings; and the following counties: Bannock; Bear Lake; Bingham; Bonneville; Butte; Caribou; Clark; Fremont; Jefferson; Madison; the portion of Power County east of State Highway 37 and State Highway 39; Teton, and Valley. (See blue area on map).

Duck Bag Limit (Including mergansers)

Daily Bag Limit 7 of any kind, *except* shall not include more than the following:

- 2 female mallard
- 2 redhead
- 1 pintail
- 2 canvasback
- 3 scaup

Bag Limits for Wilson's Snipe and Coots

Wilson's Snipe

Daily Bag Limit: 8

Coots

Daily Bag Limit: 25

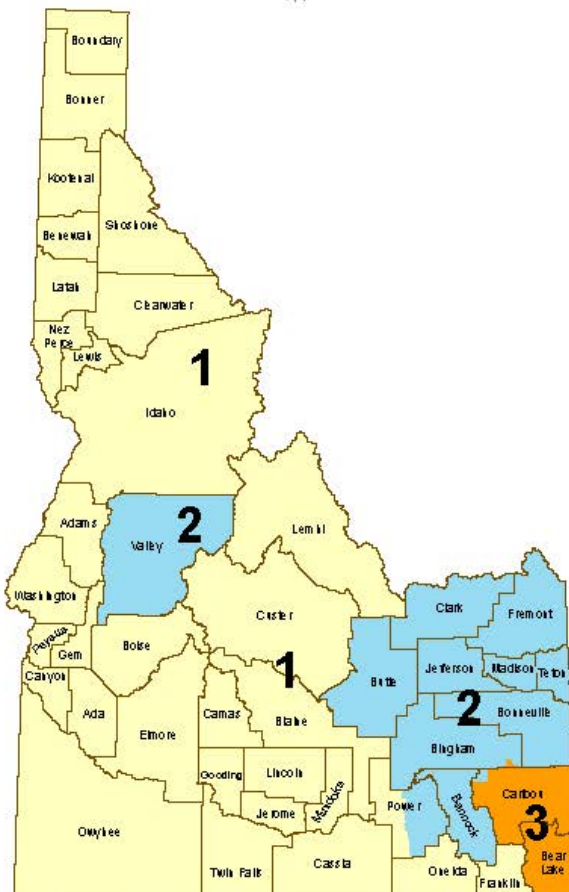


STOP AQUATIC HITCHHIKERS!™

Prevent the transport of nuisance species
Clean all recreational equipment
www.ProtectOurWaters.net

Canada Goose Seasons, Limits & Hunt Area Descriptions

Daily Bag Limit: 4 Possession Limit: 12



AREA 1

- October 14, 2017 - January 26, 2018

Area 1 includes all parts of the state NOT included in Area 2 and 3. (See yellow area on map).

AREA 2

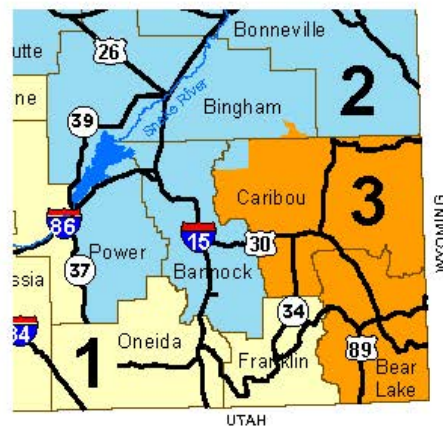
- October 7, 2017 - January 19, 2018

Area 2 includes all lands and waters within the Fort Hall Indian Reservation, including private in-holdings; and the following counties: Bannock; Bingham, except that portion within the Blackfoot Reservoir drainage; Bonneville; Butte; the portion of Caribou County within the Fort Hall Indian Reservation; Clark; Fremont; Jefferson; Madison; the portion of Power County east of State Highway 37 and State Highway 39; Teton, and Valley. (See blue area on map).

AREA 3

- September 1 - 15, 2017
(Daily bag limit is 5 during this time period only).
- October 7, 2017 - January 4, 2018

Area 3 includes Bear Lake County, the portion of Bingham County within the Blackfoot Reservoir drainage; and Caribou County, except that portion within the Fort Hall Indian Reservation. (See orange area on map).



White-fronted Goose Seasons, Limits & Hunt Area Descriptions

Daily Bag Limit: 10 Possession Limit: 30



AREA 1

• October 14, 2017 - January 26, 2018

Area 1 includes all parts of the state NOT included in Area 2 and 3. (See yellow area on map).

AREA 2

• October 7, 2017 - January 19, 2018

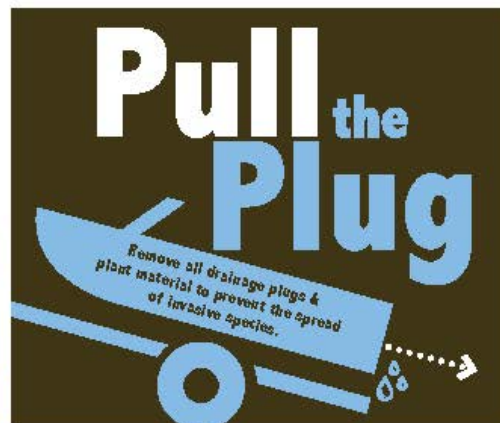
Area 2 includes all lands and waters within the Fort Hall Indian Reservation, including private in-holdings; and the following counties: Bannock; Bear Lake; Bingham; Bonneville; Butte; Caribou; Clark; Fremont; Jefferson; Madison; the portion of Power County east of State Highway 37 and State Highway 39; Teton, and Valley. (See blue area on map).

AREA 3

• November 6, 2017 - February 18, 2018

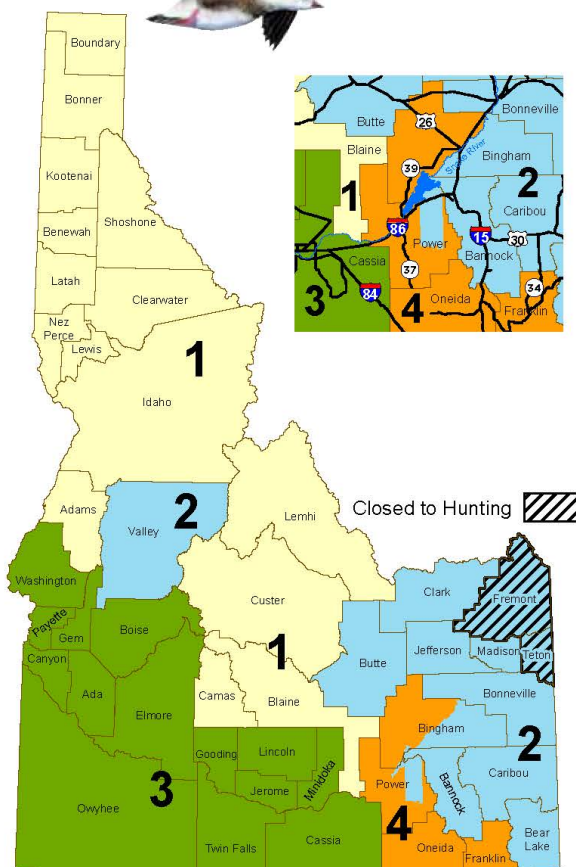
Area 3 includes the following counties: Ada, Boise, Canyon, Cassia, Elmore, Gem, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Payette, Twin Falls and Washington counties. (See green area on map).

• **Closures:** In the Southwest Region, Fort Boise and Payette River WMAs, and that portion of the Roswell Marsh Wildlife Habitat Area south of State Highway 18, and the Snake River Islands Unit of the Deer Flat National Wildlife Refuge will be closed February 1 - March 10, 2018.



Light Goose Seasons, Limits & Hunt Area Descriptions (Including: Blue, Ross's and Snow Geese)

Daily Bag Limit: 20 Possession Limit: 60



AREA 1

• **October 14, 2017 - January 26, 2018**

Area 1 includes all parts of the state NOT included in Area 2, 3 and 4. (See yellow area on map).

AREA 2

• **October 7, 2017 - January 19, 2018**

Area 2 includes all lands and waters within the Fort Hall Indian Reservation, including private in-holdings; and the following counties: Bannock; Bear Lake; portions of Bingham County east of the west bank of the Snake River, west of the McTucker boat ramp access road, and east of the American Falls Reservoir bluff; Bonneville; Butte; Caribou; Clark; Jefferson; Madison; portions of Power County below the American Falls Reservoir bluff and within the Fort Hall Indian Reservation; and Valley. (See blue area on map).

• **Closures:** Fremont and Teton counties

AREA 3

• **November 26, 2017 - March 10, 2018**

Area 3 includes the following counties: Ada, Boise, Canyon, Cassia, Elmore, Gem, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Payette, Twin Falls and Washington counties. (See green area on map).

• **Closures:** In the Southwest Region, Fort Boise and Payette River WMAs, and that portion of the Roswell Marsh Wildlife Habitat Area south of State Highway 18, and the Snake River Islands Unit of the Deer Flat National Wildlife Refuge will be closed February 1 - March 10, 2018.

AREA 4

• **November 5, 2017 - January 19, 2018**

• **February 10, 2018 - March 10, 2018**

Area 4 includes the following counties: Bingham County west of the west bank of the Snake River, east of the McTucker boat ramp access road, and west of the American Falls Reservoir bluff; Franklin; Oneida; and Power County, except below the American Falls Reservoir bluff and those lands and waters within the Fort Hall Indian Reservation. (See orange area on map).

Legal Hunting Methods for Light Geese

When all other waterfowl and migratory game bird hunting seasons, except falconry, are closed, recorded or electrically amplified bird calls or imitations of bird calls, and unplugged shotguns capable of holding more than three shells may be used to hunt light geese. These hunting methods apply to the light goose seasons in Area 3 from February 19 to March 10, 2018, and in Area 4 from February 10 to March 10, 2018.

Mourning Dove Seasons and Limits

Daily Bag Limit: 15 Possession Limit: 45

- **September 1–October 30, 2017**
- Migratory Bird (HIP) Permit—REQUIRED
- Shotgun capable of carrying no more than 3 shells—REQUIRED
- Federal Migratory Bird (Duck) Stamp—NOT REQUIRED
- Nontoxic Shot—NOT REQUIRED
- Shot Size: No person shall take mourning doves while in possession of shot larger than two tenths (0.2 inches) in diameter (size T).

Eurasian-collared doves are larger than mourning doves. They have a black collar on the top part of the neck, pale gray coloration, and dark primary feathers. These doves are an introduced species that have recently expanded their range into Idaho. Eurasian-collared doves will not count as part of your aggregate bag of doves as long as they are identifiable.

Eurasian-collared doves may be taken in any amounts and at any time by holders of the appropriate valid Idaho hunting or combination hunting license, provided such taking is not in violation of state, county, or city laws, ordinances, or regulations.

Mourning Dove



Pointed tail

Eurasian-collared Dove



Black collar

Square tail

American Crow Seasons and Limits

Daily Bag & Possession Limit: No Limits

- **October 1, 2017 - January 31, 2018**

No person shall take American crows:

- From one-half hour after sunset to one-half hour before sunrise.
- With trap, snare, net, rifle, pistol or a shotgun using shells exceeding three and one-half (3½) inches maximum length.
- From boats or other craft having a motor attached UNLESS the motor is completely shut off and forward progress has ceased, or the boat is drifting naturally or it is propelled only by paddle, oars, or pole, or it is beached, moored, or resting at anchor.

Areas Closed to Hunting

Areas closed to hunting of upland game birds are also closed to hunting of American crows.



Sandhill Crane Seasons and Limits

DAILY BAG LIMIT: 2 | SEASON LIMIT: 2



Sandhill Crane

Sandhill crane hunting occurs in eastern Idaho. One of the purposes of these hunts is to help reduce crop damage.

Tags will be available for purchase at 10AM MDT on August 1, first-come, first-served.

- **September 1-15 or September 16-30, 2018 depending on tag type.**
- **Sandhill Crane Tag—REQUIRED**
- **Migratory Bird (HIP) Permit—REQUIRED WITH FIRST TAG ONLY**
- **Federal Migratory Bird (Duck) Stamp—NOT REQUIRED**
- **Shotgun capable of carrying no more than 3 shells—REQUIRED**
- **Nontoxic Shot—NOT REQUIRED**
- **Shot Size: No person shall take sandhill crane while in possession of shot larger than two tenths (0.2 inches) in diameter (size T).**

Tagging

Immediately after any sandhill crane is harvested, the tag must be validated and securely attached. The tag must remain attached so long as the sandhill crane is in transit or storage.

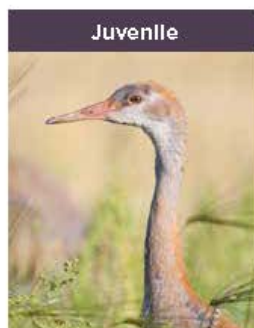
Species Identification

To legally transport any migratory game bird, one feathered wing or head must be left attached at all times while being transported until they reach their final destination.

Know Your Crane!

Please note the age of the crane you harvested. This data is important for crane harvest management.

An adult sandhill crane stands nearly four feet tall. Grayish plumage is accented by a featherless red head patch. Juveniles have tannish brown heads with no red.



Juvenile



Adult

Sandhill Crane Seasons, Limits and Tags		
Hunt Area	Season	Tags
1-Bear Lake	September 1 - 15	238
	September 16 - 30	119
2-Teton	September 1 - 15	35
3-Fremont	September 1 - 15	41
	September 16 - 30	41
4-Jefferson	September 1 - 15	23
	September 16 - 30	24
5-Swan Lake	September 1 - 15	29
6-Malad	September 1 - 15	25

Note: Daily limit is 2 for all hunts. The season limit is 2 cranes.

AREA 1

- Includes all of Bear Lake County and all of Caribou County **except that portion lying within the Grays Lake Basin.**

AREA 2

- Includes all of Teton County **except that portion lying west of state Highway 33 and south of Packsaddle Road (West 400 North) and north of the North Cedron Road (West 600 South) and east of the west bank of the Teton River.**

AREA 3

- Includes all of Fremont County except the Chester Wetlands Wildlife Management Area.

AREA 4

- Includes all of Jefferson County **except that portion beginning at the 1400 E/1750 N intersection, then west following the Mud Lake WMA boundary to the 1100 E/WMA Sparks Canal Road, then north and east following the Sparks Canal Road to the WMA North Bluff Road intersection, then east following the North Bluff Road to the WMA Lower Lake Road, then drawing a straight line south to the beginning point of 1750 N/1400 E intersection.**

AREA 5

- Includes Bannock County east of Interstate-15 and south of U.S. Highway 30; and all of Franklin County.

AREA 6

- **Includes that portion of Oneida County within the following boundary:** beginning at the Idaho/Utah border on Old Highway 191, then north along Old Highway 191, then west on 1500 S, then west on Highway 38 to 5400 S, then south to Pocatello Valley Road, then west and south on Pocatello Valley Road to 10000 W, then south on 10000 W to the Utah/Idaho border, then east to the beginning point.

Submitted by:

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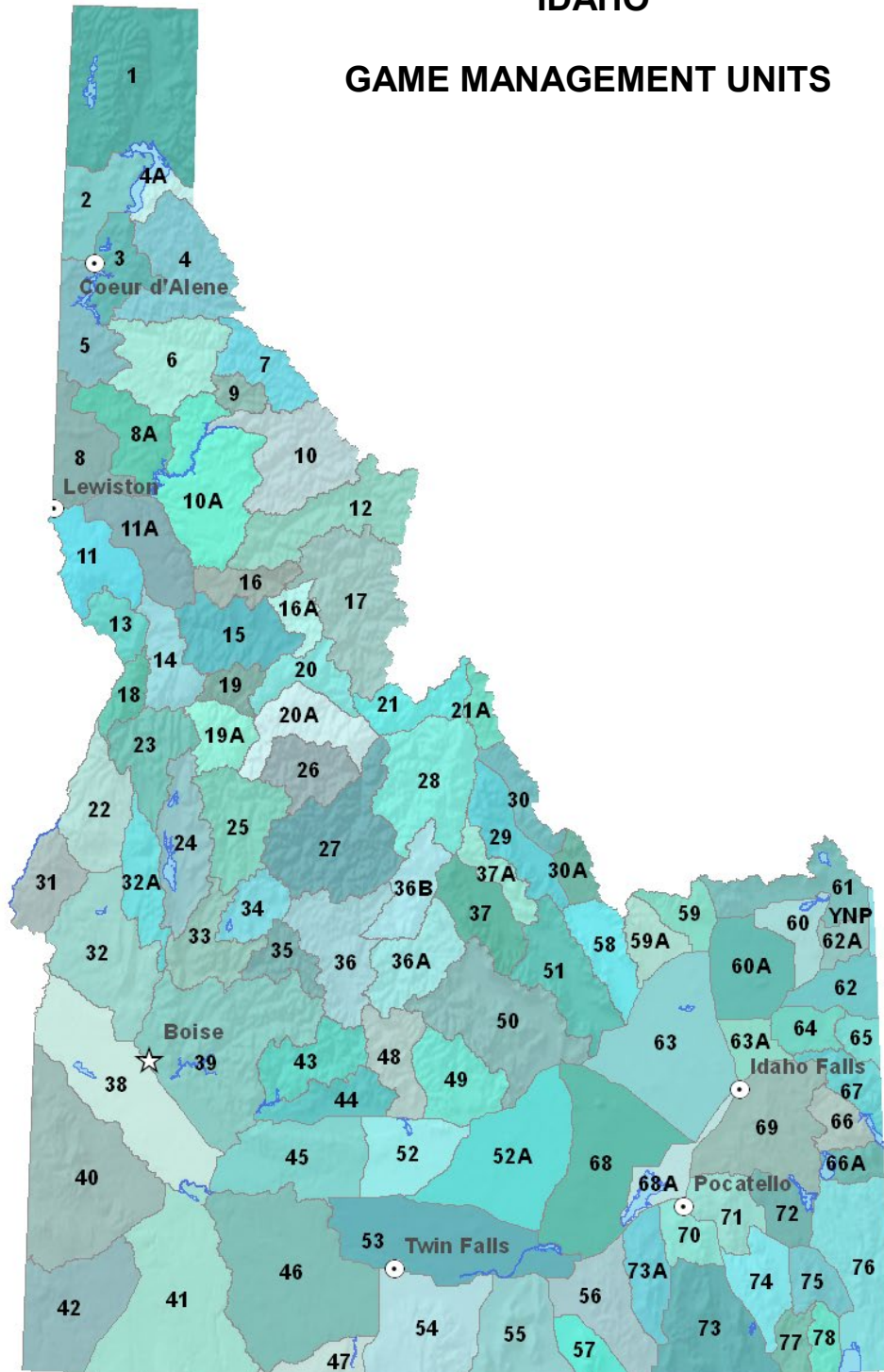
Approved by: IDAHO DEPARTMENT OF FISH AND GAME


Martha Wackenhut, Asst. Chief
Bureau of Wildlife


Toby Boudreau, Chief
Bureau of Wildlife

IDAHO

GAME MANAGEMENT UNITS



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.

