## IDAHO DEPARTMENT OF FISH AND GAME

## Steven M. Huffaker, Director

**Project W-170-R-28** 

## **Progress Report**



## WATERFOWL PRODUCTION AND SUMMER BANDING

Study II, Job 2 April 1, 2004 to September 30, 2004

## Prepared by:

Jim Hayden, Brian Helmich	Panhandle Region
Jay Crenshaw, Miles Benker	
Jon Rachael, Neil Johnson	Southwest (Nampa) Region
Jeff Rohlman	Southwest (McCall) Region
Randy Smith, Bruce Palmer	Magic Valley Region
Carl Anderson, Corey Class	Southeast Region
Daryl Meints, Justin Naderman	Upper Snake Region
Tom Keegan, Greg Painter	Salmon Region

Compiled and edited by: Tom Hemker, Wildlife Program Coordinator

December 2004 Boise, Idaho



Findings in this report are preliminary in nature and not for publication without permission of the Director of the Idaho Department of Fish and Game.

The Idaho Department of Fish and Game adheres to all applicable state and federal laws and regulations related to discrimination on the basis of race, color, national origin, age, gender, or handicap. If you feel you have been discriminated against in any program, activity, or facility of the Idaho Department of Fish and Game, or if you desire further information, please write to: Idaho Department of Fish and Game, PO Box 25, Boise, ID 83707; or the Office of Human Resources, U.S. Fish and Wildlife Service, Department of the Interior, Washington, DC 20240.

This publication will be made available in alternative formats upon request. Please contact the Idaho Department of Fish and Game for assistance.

# TABLE OF CONTENTS

ABSTRACT	1
STUDY OBJECTIVES	2
PROCEDURES	2
RESULTS	2
DUCKS (ALL SPECIES)	2
CURRENT MANAGEMENT PLAN GOALS	2
MANAGEMENT AREAS	3
Management Area One	3
Management Area Two	4
Management Area Three	4
REGIONAL REPORTS	5
Panhandle Region	5
Clearwater Region	6
Southwest (Nampa) Region	6
Southwest (McCall) Region	7
Magic Valley Region	7
Southeast Region	8
Upper Snake Region	8
Salmon Region	10
GEESE (ALL SPECIES)	11
CURRENT WATERFOWL MANAGEMENT PLAN GOALS	11
MANAGEMENT AREAS	11
Management Area One	11
Management Area Two	11
Management Area Three	12
Management Area Four	13
Management Area Five	14
REGIONAL REPORTS	14
Panhandle Region	14
Clearwater Region	15
Southwest (Nampa) Region	17

# **TABLE OF CONTENTS (Continued)**

Magic Valley Region	18
Southeast Region	19
Upper Snake Region	19
Salmon Region	22
SANDHILL CRANE	22
REGIONAL REPORTS	24
Southwest (McCall) Region	24
Magic Valley Region	24
Southeast Region	24
Upper Snake Region	25
Salmon Region	26
TRUMPETER SWAN	26
REGIONAL REPORTS	26
Magic Valley Region	26
Upper Snake Region	26
TUNDRA SWAN	27
REGIONAL REPORTS	27
Magic Valley Region	27
Upper Snake Region	27
AMERICAN COOT	27
COMMON SNIPE	27
LITERATURE CITED	28
APPENDIX A	37
LIST OF FIGURES	
Figure 1. Distribution of Pacific and Rocky Mountain Canada geese populations within Idaho	29
Figure 2. Idaho Canada goose survey areas	

# **TABLE OF CONTENTS (Continued)**

# LIST OF TABLES

Table 1.	Ducks banded in Idaho by IDFG and USFWS personnel, 2004	31
Table 2.	Mallards banded in Idaho by IDFG and USFWS personnel, 1991-2004	31
Table 3.	Idaho goose population survey areas (RMP in gray), 2004 counts, three-year averages, and management objectives.	32
Table 4.	Active nests, indicated pairs, and total number of Canada geese (RMP in gray) in Idaho, 2000-2004.	33
Table 5.	September aerial counts of RMP greater sandhill cranes in eastern Idaho, 1997-2004	34
Table 6.	Sandhill cranes counted during ground-based surveys in eastern Idaho, 1997-2004	34
Table 7.	Sandhill crane permit levels, estimated hunter participation and harvest based on mail and telephone surveys, 2000-2004	35
Table 8.	Age composition of sandhill crane harvest based on mail and telephone surveys, 2000-2004.	36

## PROGRESS REPORT SURVEYS AND INVENTORIES

STATE:IdahoJOB TITLE:Waterfowl Production and<br/>Summer BandingPROJECT:W-170-R-28STUDY NAME:Upland Game and Waterfowl

STUDY: II Population Status and Trends

JOB: 2

**PERIOD COVERED:** April 1, 2004 to September 30, 2004

#### **ABSTRACT**

Data collected on resident ducks, Canada geese, sandhill cranes, trumpeter swans, and tundra swans from April 1 through September 30, 2004 are reported. Data were collected and analyzed by Idaho Department of Fish and Game personnel stationed in the state's seven regions and one sub-region. Data are presented in regional reports prepared by regional personnel and compiled by Bureau of Wildlife personnel.

In 2004, the fourteenth year of a Pacific Flyway preseason mallard and pintail banding program, Idaho banded 2,588 mallards. To date, 34,620 mallards have been banded in Idaho. Active nests of Pacific Population (PP) Canada geese counted on man-made structures on five survey areas in north Idaho totaled 395 in 2004 compared to 305 in 2003. Indicated breeding pairs of PP Canada geese on survey areas in southern Idaho totaled 1,329 in 2004, down from 1,371 in 2003. Waterfowl Management Plan (WMP) active nest or indicated breeding pair objectives are based upon three-year averages (2002-2004). Indicated breeding pairs of Rocky Mountain Population (RMP) Canada geese counted on 22 survey areas totaled 1,590 in 2004, down from 1,741 in 2003. Of 14 RMP Canada geese flocks with objectives, four are meeting or exceeding the WMP indicated breeding pair objectives based upon three-year averages (2002-2004).

One hundred one geese (56 goslings and 45 adults) were transplanted in 2004 in attempts to minimize property damage complaints and prevent growth of the urban goose population in the Southwest Region. To help understand the movements of geese involved with depredation problems in the Upper Snake Region, 128 geese (71 local and 57 adult) in 2003 and 67 geese (51 local and 16 adult) were captured and relocated from the Gem Lake area in June 2004. All geese were leg-banded and neck-collared in those two regions prior to transplanting. The early Canada goose season in Nez Perce County was eliminated in 2003.

Data collection continued in 2004 on RMP greater sandhill cranes in three southern regions to provide information on recruitment rates, arrival dates of sub-adults and family groups into premigration areas, whooping crane use periods, and total sandhill cranes present in mid-September. During September aerial surveys of staging areas, 7,152 sandhill cranes were counted. Controlled hunts were held in early September on sandhill cranes in three areas to help reduce crop damage; 143 were harvested.

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

#### 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.

#### 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 U.S. Fish and Wildlife Service (USFWS).

#### MANAGEMENT AREAS

### **Management Area One**

The description, season framework, and bag and possession limits of Management Area One can be found in Appendix A.

<u>Background and Management Philosophy</u>: Management Area One was established in 1985 by emergency order of the Idaho Fish and Game Commission (Commission). This order came as a result of a 1985 USFWS regulation which allowed Indian tribes to have hunting seasons for non-tribal members which differ from the remainder of the state. The first boundaries of Area One included only part of the Fort Hall Indian Reservation and were arrived at after negotiations between the Department, USFWS, and the Shoshone-Bannock Tribes. The Department did not object to the Tribes' request for a special hunt area because impacts to resident and migrant ducks and law enforcement problems were expected to be minimal. Area One was enlarged after the 1985-1986 hunting season to include the entire Fort Hall Indian Reservation and portions of adjacent counties. The purpose was to place the entire reservation under one set of rules to avoid disputes between the Tribes and the state over Reservation boundaries.

Several times during the late 1980s and early 1990s, the USFWS denied the Department's request to rezone the state. This rezoning would have placed all of northern, central, and southeastern Idaho in one area and southwestern Idaho in another. The USFWS's reasons for denial were low duck numbers continent-wide, a fear of increased harvest, and a strict moratorium on rezoning until duck populations rebounded.

Prior to the 1985-1986 hunting season, the state was divided into two areas: those counties and parts of counties within the Columbia Basin Mallard Wintering Area (northern and southwestern Idaho), and the remainder of the state (central and southeastern Idaho). Bag and possession limits prior to the 1985-1986 season were seven and 14, respectively. Beginning in 1985-1986, season length and bag and possession limits were reduced as mandated by the USFWS because of poor duck production and recruitment continent-wide resulting from drought and habitat degradation.

Early in 1991, the USFWS and Pacific Flyway evaluated the effects of zones on duck harvests. They concluded that zones do not influence harvest and, consequently, the moratorium was lifted on changing zones beginning with the 1991-1992 season. As a result, the Department rezoned the state. It retained Area One with its previous boundaries and divided the remainder of the state into two zones or hunt areas.

For the 2003-2004 season, the Department changed the boundaries for Area One to include all of northern, central, and southeastern Idaho (see Appendix A).

For additional season framework information, refer to the 2003 version of this report. For 2003-2004, the USFWS offered the same 107-day season as in 2002-2003 with the exception of a 60-day "season within a season" for both pintails and canvasbacks. The Tribes chose to start their

season one week earlier than the rest of the state, but both seasons were 105 days with no split. The two-day youth waterfowl season was September 27-28.

## **Management Area Two**

The description, season framework, and bag and possession limits of Management Area Two can be found in Appendix A.

<u>Background and Management Philosophy</u>: Management Area Two was established in 1991 as a result of the USFWS lifting its moratorium on zone changes. This area includes those counties that generally freeze up early. From 1985-1986 through 1990-1991, this portion of the state was included with south-central and southwestern Idaho because the USFWS prohibited more than two zones (the Fort Hall area and the remainder of the state). Prior to 1985-1986, much of Area Two was included in the Columbia Basin Mallard Wintering Area that had a 100-day season and bag and possession limits of seven and 14, respectively. Beginning with the 1997-1998 season, Area Two and Area Three were combined and renamed Area Two to simplify the hunting brochure.

For the 2003-2004 season, the Department changed the boundaries for Area Two to include southwestern and south-central Idaho (See Appendix A).

For additional season framework information, refer to the 2003 version of this report. For 2003-2004, the USFWS offered the same 107-day season as in 2002-2003 with the exception of a 60-day "season within a season" for both pintails and canvasbacks. The Tribes chose to start their season one week earlier than the rest of the state, but both seasons were 105 days with no split. The two-day youth waterfowl season was September 27-28.

#### **Management Area Three**

<u>Background and Management Philosophy</u>: Management Area Three was established in 1991-1992 as a result of the USFWS lifting its moratorium on zone changes. This area includes those counties that normally freeze up later than those in Area Two. From 1985-1986 through 1990-1991, this portion of the state was included with north and eastern Idaho because the USFWS prohibited more than two zones (the Fort Hall area and the remainder of the state). Prior to 1985-1986, Area Three was included in the Columbia Basin Mallard Wintering Area which had a 100-day season and bag and possession limits of seven and 14, respectively.

Beginning with the 1997-1998 season, Area Three was combined with Area Two and renamed Area Two to simplify the hunting brochure and the state was left with only two duck management areas.

#### REGIONAL REPORTS

### **Panhandle Region**

<u>Population Surveys</u>: Approximately 85% of over 1,000 wood duck nest boxes located in the Panhandle were available for nesting in 2004. A total of 349 boxes were evaluated of which cavity nesting ducks (wood ducks, common goldeneye, bufflehead, and hooded mergansers) utilized 116 (33%). Of the 116 nests, 60 (52%) were determined to have successfully hatched.

Breeding pair/brood duck production surveys were conducted on the Pend Oreille and Coeur d'Alene River WMAs in 2004. Two breeding pair surveys were conducted in May, followed by brood counts conducted in June (twice) and July (once). These dates are within the suggested time window for surveys in northern Idaho.

On the Coeur d'Alene River WMA, 40 of 114 observed waterfowl pairs produced broods (35% success). On the Pend Oreille WMA, 44 waterfowl pairs were observed followed by 67 broods, indicating a sampling error. The majority of breeding pairs observed throughout the Panhandle Region were mallards and wood ducks.

<u>Trapping and Transplanting</u>: A total of 2,215 ducks were trapped and banded by Department personnel in the Panhandle Region during the summer of 2004 (Tables 1 and 2). Mallards comprised 90% of the sample. Banding occurred at the Coeur d'Alene River, Pend Oreille, McArthur Lake, and Boundary Creek WMAs. No transplanting projects were conducted.

<u>Management Studies</u>: Since 1991, a total of 11,434 locally produced ducks have been banded during the breeding season at the Boundary Creek, McArthur Lake, Pend Oreille, and Coeur d'Alene River WMAs.

Waterfowl check stations were operated at the Boundary Creek, Pend Oreille, and Coeur d'Alene River WMAs on Saturday and Sunday of the 2004 duck season opener. A total of 175 hunters were checked and 312 ducks were harvested (1.78 ducks/hunter).

<u>Management Implications</u>: The installation of nest boxes in appropriate wetland habitat throughout the Panhandle Region has significantly increased production of cavity-nesting ducks. Although wood ducks are the target species for this effort, common goldeneye and hooded mergansers are also frequent users of 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.

Wetland restoration efforts were completed on Boundary Creek WMA in 2002 and water levels attained the maximum possible elevation for the third time in 2004. The Boundary Creek WMA was expanded by 623 acres in 2004 through an agreement with Ducks Unlimited and additional wetland restoration efforts are in progress. Completion of wetland developments on the WMA resulted in the addition of a significant waterfowl breeding area to the Panhandle.

## **Clearwater Region**

<u>Population Surveys</u>: The number of ducks present in the Clearwater Region is so small that little active management is possible. No population surveys for ducks are conducted within the Region.

A small breeding population of wood ducks nest in the Clearwater Region. Since 1988, in an attempt to enhance this species' presence, nest boxes have been erected in conjunction with the Department's HIP program. Seventy nest boxes were available in 2004. A poor return on data cards required estimating that 15% were used by wood ducks by those cooperators responding to the survey. Use of these wood duck nest boxes has been commonly shared with other non-game species.

<u>Trapping and Transplanting</u>: No ducks were banded in the Clearwater Region during this reporting period (Tables 1 and 2).

<u>Management Implications</u>: 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 this. Future production surveys may be worthwhile at trapping sites if numbers increase.

### Southwest (Nampa) Region

<u>Population Surveys</u>: No surveys for estimating duck nesting success and production were conducted on WMAs during the reporting period.

<u>Trapping and Transplanting</u>: No ducks were banded in the Southwest (Nampa) Region during this reporting period (Tables 1 and 2).

<u>Habitat Conditions</u>: Precipitation in the Southwest Region was below normal during the winter and below average during the spring and summer. Because no regional wetland surveys are conducted, the exact extent of wetlands is unknown. The waterfowl production from these wetlands is also unknown.

The Southwest Region did not inventory wood duck nest boxes in 2004.

<u>Management Implications</u>: As the Department implements the statewide HIP program, it is anticipated that the number of acres of wetland will increase, contributing to the goal of increasing Idaho's resident and wintering duck populations.

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

## Southwest (McCall) Region

<u>Population Surveys</u>: No population surveys are conducted for ducks in the McCall subregion. Ducks are numerous and mostly associated with the Cascade Reservoir 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.

<u>Trapping and Transplanting</u>: No ducks were banded by the Southwest (McCall) Region during this reporting period, although 596 ducks were banded by the USFWS at Deer Flat NWR (Tables 1 and 2).

<u>Management Implications</u>: The HIP program and other programs will be utilized to enhance duck nest production. Priority will be placed on projects that stabilize water levels and enhance nest production on Cascade Reservoir.

## **Magic Valley Region**

<u>Population Surveys</u>: Breeding pair and brood surveys were conducted for the first time in 2004 on the Hagerman and Niagara Springs WMAs. Three breeding pair surveys were conducted in May followed by three brood counts in June, July, and August at each WMA. At Hagerman WMA, 16 of 36 duck pairs produced broods (44% success). On Niagara Springs WMA, 11 of 21 duck pairs produced broods (52% success). The majority of breeding pairs observed throughout both WMAs were mallards, gadwalls, and wood ducks.

Documented duck production in the Magic Valley Region exceeded expectations this year at 0.47 broods per pair.

<u>Habitat Conditions</u>: Precipitation during the 2003-2004 winter and spring was below average in most major watersheds in the Magic Valley Region; however, good early summer rains provided some needed moisture. Nesting conditions near ponds, reservoirs, and canals was poor to fair as many of these areas soaked up the precipitation and did not provide much in the way of additional habitat. Snake River flows were low during the nesting season.

<u>Trapping and Transplanting</u>: No ducks were banded in the Magic Valley Region during this reporting period (Tables 1 and 2).

<u>Management Implications</u>: Although ducks are produced annually on Hagerman, Niagara, Billingsley Creek, Centennial Marsh, and Carey Lake WMAs, most of the Region's duck production occurs on canals, small lakes, and stock ponds. Without average to above average precipitation during the winter of 2004-2005, duck production in 2005 along canals, small lakes, and stock ponds will be very limited. At WMAs, where duck production is a priority, breeding pair and brood surveys will be conducted when personnel and budget constraints allow.

## **Southeast Region**

<u>Population Survey</u>: In an effort to increase nesting success at the Sterling WMA, mammalian nest predators have been trapped and removed from the American Game, Johnson, and Fingal segments annually since the mid-1990s. These segments have been part of a treatment program (Russian olive removal) to improve nest success. Twenty-seven predators were removed after 1,188 trap nights between February 1 and June 1, 2003. Department staff also removed predator den sites when practical.

No ground nests were located during the report period. Twenty-four wood duck nest boxes are located in the Region. No boxes were checked during this report period.

<u>Climatic Conditions</u>: Precipitation during the winter was near average; spring precipitation was at or above average in 2004. During the nesting period, precipitation was near normal. Ponds and other wetlands available for waterfowl nesting and rearing were average.

<u>Trapping and Transplanting</u>: No ducks were banded in the Southeast Region during this reporting period (Tables 1 and 2).

<u>Management Implications</u>: The 1991-1995 WMP identified a goal of increasing resident duck populations in the Southeast Region. Since no surveys are being conducted to monitor overall resident population, it is unknown whether this goal has been met. In prior years, waterfowl moralities due to botulism have been noted within the Region.

### **Upper Snake Region**

<u>Population Surveys</u>: Twenty-seven wood duck nest boxes checked on Cartier WMA had 15% wood duck nest success. However, five wood duck nest boxes checked at Gem Lake mitigation area found no successful wood duck hatching. No other nest searches or population surveys were conducted during 2004.

Banding: No ducks were banded in the Region during 2004.

<u>Climatic Conditions</u>: Weekly showers starting in late May and continuing through early July resulted in good grass growth, but continued drought conditions left marshes dry or with very limited water conditions throughout the nesting season. These conditions provide only marginal nesting and brooding conditions for both over-water and upland nesters, especially on Market Lake WMA and Camas National Wildlife Refuge (NWR). Exceptions to these conditions occurred on Mud Lake WMA where lower irrigation demand improved nesting and brood-rearing conditions, and the lower stretches of the Henrys Fork and the Teton Valley which had improved nesting and brood-rearing conditions due to reduced flooding during the nesting season and improved water levels and wetland conditions over summer.

<u>Habitat Conditions</u>: Most ducks in the Region are produced on Market Lake and Mud Lake WMAs and Camas 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 is working with private landowners, local weed control areas, the Bureau of Land Management (BLM), U.S. Forest Service (USFS), Natural Resource Conservation Service (NRCS), 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 of the Snake River below St. Anthony, the South Fork of the 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 the Cartier Slough WMA, the Deer Parks Wildlife Mitigation Area, and the Warm Slough Access Area, the land ownership is a mix of private and BLM. Market Lake, Mud Lake, and Sand Creek WMAs have limited wood duck nesting habitat around the edges of marshes and ponds.

<u>Habitat Improvements</u>: The Department participated in two waterfowl cost-share HIP projects in the Teton Valley during the summer of 2004. One project cost-shared with NRCS (Kearsley riparian enhancement project) on Little Pine Creek improved nesting and brood-rearing habitat on 12 acres of wetlands and installed several small water-flow structures in the creek. The second project cost-shared with Ducks Unlimited, NAWCA, and NRCS (Kirk wetland project) near lower Teton Creek created 15 acres of shallow wetland for waterfowl nesting and brood-rearing.

On Market Lake WMA, a ten-acre food plot was planted on the north agricultural fields to benefit upland birds and waterfowl and an additional six acres of fallow land on the north agricultural fields was seeded to permanent cover. Additionally, three separate food plots totaling eight acres was seeded to wheat, corn, and millet and left standing for upland birds and waterfowl on the south agricultural fields. Eighteen acres of wheat and 16 acres of corn were also share-cropped and left standing for upland birds and waterfowl.

Marsh improvement projects on Market Lake WMA included removal of ten acres of Russian olive around the Main Marsh, Triangle Marsh, and East Springs Marsh. Herbicide was also used to treat 50 acres of dense cattail vegetation on the Main Marsh to improve the open-water:emergent-vegetation ratio to benefit waterfowl brood habitat.

On Deer Parks WMU, 386 acres were share-cropped to wheat and corn and the Department's share (34%) was left standing for upland game and waterfowl. Ten new wood duck boxes were also installed along the south pasture slough.

Twenty-seven wood duck boxes were maintained on Cartier WMA and five were maintained on Gem Lake mitigation area.

<u>Trapping and Transplanting</u>: No ducks were banded in the Upper Snake Region during this reporting period (Tables 1 and 2).

Waterfowl Die-offs: No waterfowl die-offs were noted in the Region during summer 2004.

<u>Depredation</u>: The Region did not receive any duck depredation complaints in 2004.

<u>Predator Control</u>: The Department did no predator removal for waterfowl during 2004; however, hunters and trappers remove some predators during the normal furbearer seasons.

<u>Management Implications</u>: 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.

Mayfield nest success estimates at Market Lake WMA have been around 20% each year that surveys have been done. 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 the nest searches and nest success estimates on Market Lake suggest that ducks are not using some plant communities for nesting. Very few nests were found in the old *Juncus* meadows. Reseeding at least some of these communities to cover providing more structure (e.g., a rank bunchgrass) should be considered and the areas then monitored for nest attempts and success.

Duck nest surveys conducted on Mud Lake WMA have 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 is established along the Snake River.

#### **Salmon Region**

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

<u>Trapping and Transplanting</u>: No ducks were banded in the Salmon Region during this reporting period (Tables 1 and 2).

#### **GEESE (ALL SPECIES)**

#### CURRENT WATERFOWL 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

## **Management Area One**

The description, season framework, and bag and possession limits of Management Area One can be found in Appendix A.

<u>Background and Management Philosophy</u>: Management Area One includes both Pacific Population (PP) and Rocky Mountain Population (RMP) Canada geese (Figure 1). The boundary between the two populations is U.S. Highway 93 from the Idaho-Nevada border to Shoshone, State Highway 75 from Shoshone to Challis, and U.S. Highway 93 from Challis to the Montana-Idaho border. The Pacific Population occurs west of this boundary; the Rocky Mountain Population occurs to the east.

Area One was created in 1990 to implement changes in seasons, limits, and hunt area boundaries identified in the 1991-1995 Waterfowl Management Plan. Area One originally included only Benewah, Bonner, Boundary, Kootenai, and Shoshone counties. In 1993, the counties of Clearwater, Idaho, Latah, Lewis, and Nez Perce were added to Area One to take advantage of an increasing resident Canada goose flock. In 1998, Bear Lake, Bonneville, Butte, Caribou, Clark, Custer, Franklin, Fremont, Jefferson, Lemhi, Madison, Oneida, and Teton counties were included in Area One to simplify the hunting brochure. In 2003, Area One was expanded to include Adams and Valley counties and all of Area Three (the Fort Hall Indian Reservation).

The 1990-1991 goose season opened two weeks prior to the duck season. The 1991-1992 goose season opened the same day as duck season. The 1992-1993 through 1996-1997 goose seasons opened one week before the duck season. The 1997-1998 through 2001-2002 goose seasons opened the same day as duck season. The 2002-2003 goose season opened one week after the duck season, while in 2003-2004, the seasons again opened on the same day.

### **Management Area Two**

The description, season framework, and bag and possession limits of Management Area Two can be found in Appendix A.

Background and Management Philosophy: Management Area Two (southwestern Idaho) contains PP Canada geese (Figure 1). Prior to the 1991-1992 season, southwestern Idaho (part of the Southwest Region) was in Area Three and had restricted limits for part of the season to protect local breeding flocks. For the 1991-1992 season, southwestern Idaho was combined with the rest of central Idaho (the Clearwater Region; the remainder of the Southwest Region; and parts of the Magic Valley, Southeast, Upper Snake, and Salmon regions) to create the new Area Two. This was possible because southwestern Idaho flocks had exceeded breeding pair objectives, and it was determined they could sustain the additional harvest resulting from a 93-day season and bag and possession limits of two and four, respectively, season-long. The season and limits were the maximum allowed by federal regulations for southwestern Idaho but not for the Clearwater Region.

In 1992-1993, Area Two was reduced slightly in size to simplify the boundary between Area Two and Area Four. This was accomplished by placing all of Custer and Lemhi counties in Area Four, rather than splitting the counties on Highways 75 and 93. For the 1993-1994 season, Area Two was reduced further by placing five northern counties (Clearwater, Idaho, Latah, Lewis, and Nez Perce) in the more liberal Area One to take advantage of an increasing local flock of Canada geese.

For the 1994-1995 season, federal regulations allowed for a 100-day season and bag and possession limits of four and eight, respectively. The Department selected the 100-day season to take advantage of the healthy local population and strong migrant population but chose bag and possession limits of three and six dark geese, respectively, instead of the maximum allowed over concerns that a daily bag of four would result in an over-harvest of local geese. In 1998-1999, the Department added south-central Idaho (Area Three from 1991-1992 through 1997-1998) to Area Two to simplify the hunting rules and hunting brochure.

For the 2002-2003 season, the Department split Area Two back into two separate areas (Area Two and Area Four) and raised the bag and possession limits for Area Two to four and eight geese, respectively. In 2003-2004, Area Two was reduced and Adams and Valley counties were added to Area One. Area Two currently includes all of Washington, Payette, Gem, Boise, Canyon, and Ada counties, plus portions of Owyhee and Elmore counties.

In 1990-1991, the goose season in Area Two opened two weeks prior to the duck season. The 1991-1992 goose season opened the same day as the duck season in the northern portion and one week earlier than the duck season in the southern portion. For the 1992-1993, through 1996-1997 seasons, goose season opened one week prior to duck season. The 1997-1998 through 2001-2002 goose and duck seasons opened on the same day. For 2002-2003, the goose season opened one week after the duck season, while in 2003-2004, the seasons again opened on the same day.

#### **Management Area Three**

The description, season framework, and bag and possession limits of Management Area Three can be found in Appendix A.

Background and Management Philosophy: Management Area Three (south-central Idaho) has been under restrictive harvest management (more conservative than allowed by federal regulations) for many years to minimize the harvest of local geese. Seasons have had delayed opening dates and/or reduced bag and possession limits for all or part of the season. Management Area Three was Management Area Four prior to the 1991-1992 season. It includes both PP and RMP geese (Figure 1). The area was enlarged slightly for the 1991-1992 season to include parts of Camas and Elmore counties and an additional portion of Blaine County because of low goose production. The area was enlarged again in 1992-1993 to include all of Blaine and Camas counties because of low goose production.

The 1990-1991 season was the first season for many years that ran the maximum of 93 days allowed by federal regulations. From 1994-1995 through 1997-1998, seasons were extended to 100 days, the maximum allowed, but restrictive limits (two dark geese) were retained to protect local flocks. For 1998-1999 through 2001-2002, the dark goose daily limit was increased to the daily limit (three) and Area Three was combined with Area Two to simplify hunting rules and the hunting brochure; the number designation for the Area was changed to Area Two. In 2002-2003, zones were changed again and the former Area Three (prior to 1998-1999) became Area Four. In 2003-2004, the Area was again renamed Area Three.

The 1990-1991 goose season opened two weeks prior to the duck season. Beginning in 1991-1992, goose seasons in Area Three opened one week prior to the duck season. The 1997-1998 through 2001-2002 goose and duck seasons opened on the same day. The 2002-2003 goose season opened one week after the duck season, while in 2003-2004, the seasons again opened on the same day.

#### **Management Area Four**

<u>Background and Management Philosophy</u>: Management Area Four was created in 1991-1992 to take advantage of increased limits and a 93-day season allowed by federal regulations. Bag and possession limits were increased from two and four, respectively, to three and six, respectively, for 1991-1992 due to increasing numbers of geese throughout the population. Beginning in 1993-1994, the season was increased to 100 days, the maximum allowed by federal regulations. Beginning in 1995-1996, daily bag and possession limits were increased to four and eight, respectively.

Prior to 1991-1992, Area Four was combined with central Idaho to form Area Two. Goose seasons for Area Four have always been set to take full advantage of all days and maximum limits allowed by federal regulations. The 1990-1991 goose season in eastern Idaho opened two weeks prior to the duck season. In 1991-1992, the Area Four goose season opened the same day as duck season. For 1992-1993 through 1996-1997, the goose season opened one week prior to the duck season. The 1997-1998 goose and duck seasons opened on the same day.

In 1998-1999, Area One (north Idaho) and Area Four (central and eastern Idaho) were combined to simplify the hunting brochure. The number designation for the area was changed to Area One and the state was left with only three goose management areas through the 2001-2002 season. For the 2002-2003 season, the Department split Area Two into two separate areas and designated

south-central Idaho as Area Four. In 2003-2004, the Department combined Areas One and Three (now called Area One) and the state was again left with only three goose management areas.

## **Management Area Five**

<u>Background and Management Philosophy</u>: Management Area Five was created in 1987 to conform with Area One for ducks. This was made necessary because the Shoshone-Bannock Indian Tribes requested a goose hunting season for non-tribal members which differed from the rest of the state. See "Ducks, Management Area One" for additional information. The Department has not objected to the Tribes' request for a special goose season because their impacts on local and migrant geese and law enforcement problems have been minimal.

Area Five remained in place through the 1997-1998 season. In 1998, the Department combined areas and Area Five was renamed Area Three through the 2002-2003 season. In 2003, the Department combined Area Three (the Fort Hall Indian Reservation) with Area One. The state has not had an Area Five since 1998.

#### REGIONAL REPORTS

## **Panhandle Region**

<u>Population Surveys</u>: Canada goose nest surveys were conducted on the McArthur Lake, Pend Oreille, and Coeur d'Alene River WMAs in 2004 (Figure 2). A total of 328 nests were located.

Historically, McArthur Lake WMA produced the greatest number of geese in the Panhandle Region, peaking at 117 nests in 1982. By 1987, this number had declined to 55 nests, attributable primarily to raven depredation. Predator control efforts were implemented and helped to stabilize production. During dam reconstruction, the reservoir was drained from September 1994 to March 1995, and the number of goose nests declined to 24 and stayed suppressed. In 2001, only 12 nests were observed. A goose pasture renovation was completed in 2001 to stimulate production. Production subsequently increased to 33 nests in 2003. An increase to 61 nests occurred in 2004 (Table 3).

The Coeur d'Alene River WMA began with few nests in 1979 and, after an aggressive gosling transplant program coupled with erecting nest structures, the population increased dramatically. During normal runoff years, successful ground nesting in this area is impossible due to spring flooding. In April 1997, severe flooding on the Coeur d'Alene River damaged or swept away 50% of the elevated nest structures on the WMA for the second consecutive year. The number of nests declined from 86 in 1997 to 77 in 1998. The nest platforms were replaced during the summer of 1998 and the number of nests increased initially and stabilized at approximately 92-108 nests (Table 4).

The Pend Oreille WMA consists of scattered parcels along Pend Oreille Lake and the Pend Oreille River. A total of 175 goose nests were located in 2004.

The Boundary Creek WMA was not surveyed for Canada goose production in 2004, but production was evident. Two gang broods totaling 60-70 goslings fledged from the site. Production on the area is expected to increase as nesting patterns are established and more nesting structures are installed.

<u>Trapping and Transplanting</u>: No Canada geese were trapped or transplanted in the Panhandle Region in 2004.

<u>Management Studies</u>: No Canada goose-related management studies were conducted in the Panhandle Region in 2004.

<u>Management Implications</u>: Canada goose nesting has increased in the Panhandle Region due to the placement of man-made nest structures and transplanting goslings. On two WMAs where there were few nesting geese, populations are now established. The placement of nest structures will continue in areas of favorable habitat, primarily where flooding prevents successful ground nesting.

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.

From 1973 through 1996, Canada geese goslings were banded each summer at McArthur Lake WMA, as well as all goslings transplanted to the Coeur d'Alene River WMA. This program was terminated in 1997, as the Region's banding efforts are now concentrated on ducks.

Slightly over half (55%) of the band returns from hunter-harvested geese came from the five-county area of the Panhandle Region. Locally-produced geese winter primarily in eastern Washington and the Tri-cities area along the Columbia River, besides Pend Oreille and Coeur d'Alene Lakes in the Panhandle Region. The mean (unadjusted for non-reporting bias) direct recovery rate for Canada geese banded in the Panhandle Region for 23 years was 11.2%.

The number of active nests on the Coeur d'Alene River and Pend Oreille WMAs currently meets the Department's 1991-1995 WMP objective; active nests on the McArthur Lake WMA are below objective (Connelly and Wackenhut 1990).

## **Clearwater Region**

<u>Population Surveys</u>: An established flock of PP Canada geese nest in the Clearwater Region. These birds nest along the lower 22 miles of the Clearwater River, primarily from Lewiston upstream to Peck (Figure 2). Their nesting success has been enhanced in this area with manmade nest structures placed on islands in the 1980s. Numbers of active nests in this area have been counted consistently since 1981, with improvements in data quality beginning in 1985. Use of man-made nest structures was observed in ten (28%) of the 36 available structures. An estimated 55 goslings were produced from structures in 2004. The total number of nest structures has slowly declined, as those found unserviceable have been

removed. These structures were in proximity to Lewiston and will not be replaced. Natural ground nesting on the islands will be encouraged. The 25 active nests on the lower Clearwater River in 2004 were below the minimum 1991-1995 WMP objective; the previous three-year average was 30 active nests (Table 3). However, seven years of summer goose counts conducted in the Lewiston/Clarkston valley indicate a stable local goose population.

Additional areas were surveyed for nests beginning in 1992. These included farm ponds in the Region where nesting structures were issued to landowners, and Manns Lake, Middle Fork Clearwater River, Palouse River, Potlatch River, and Red River. Forty-two active nests were located in 2004 in these areas, a decrease of 11% from 2003 (Table 4). A lower return rate on data cards was observed this year, possibly affecting this number.

Consistent data collection of goose nest structure use in the Clearwater Region did not begin until 1988. The number of structures available to geese has increased dramatically since that time, due primarily to the influence of the Department's HIP program and cooperating landowners. Over 60 nest structures issued are still available for geese. Use of available structures was comparable from 2003 to 2004, with landowners reporting 56% use.

<u>Depredation</u>: The number of goose complaints has decreased over the reporting period. Only one call was taken involving Canada geese. This was a report of a large winter flock grazing in newly seeded winter wheat in North Lewiston. The lack of complaints reported around the Mann Lake area are likely a result of the Department's reduction in the size of the waterfowl hunting closure in 2001.

<u>Trapping and Transplanting</u>: No Canada geese were trapped or transplanted in the Clearwater Region in 2004.

<u>Management Studies</u>: Continued 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 the increasing Canada goose numbers in the Lewiston-Clarkston area, the Urban Goose Task Force continues working together to apply management options available to control local goose numbers. The managed goose hunts have helped with harvesting some locally raised geese and hazing geese out of these problem areas, while providing a unique hunting opportunity for sportsmen. Deterrent measures such as hazing and vegetation manipulation have been conducted by private businesses, state, and federal agencies in the area.

The Idaho Department of Parks and Recreation (IDPR) allowed a Special Permit goose hunt in the southern portion of Hell's Gate State Park during the regular 2003-2004 season. Access and permit issuance was administered by IDPR and hunting was limited to one party of six hunters per day. The hunt was allowed from November 25, 2003 to January 10, 2004. No harvest data was provided, but hunter participation and success was reported to be low.

During the 2003-2004 season, several managed goose hunts were initiated to target urban geese and areas of chronic crop damage. The Department administered 2 one-day supervised goose hunts in November and December along portions of the Clearwater and Snake rivers within Lewiston and Clarkston city limits. One hunt day was dedicated for youth waterfowl hunting. Approximately 160 geese were harvested within these areas traditionally closed to hunting. The hunting pressure resulted in additional goose harvest in other areas open to hunting in the valley.

The early September goose hunts that include all of Nez Perce County were discontinued in the Region in 2003.

#### Southwest (Nampa) Region

<u>Population Surveys</u>: The breeding pair survey for geese was flown in April 2004. The pair count was below the minimum goal of 900 pairs, with a decrease from the last several years. A total of 2,041 Canada geese and 842 breeding pairs were seen (Tables 3 and 4) in addition to large flocks of white front geese and several flocks of snow geese.

<u>Climatic Conditions</u>: Precipitation in the Southwest Region was below normal during the winter of 2003-2004.

<u>Trapping and Transplanting</u>: During summer 2004, local geese (goslings and adults) were moved out of the urban area of Boise to the Payette River near New Plymouth in attempts to minimize property damage complaints and prevent growth of the urban goose population. Forty-five adult geese and 56 goslings were banded and neck-collared. Surveys of the parks have been done to determine the rate of return on these geese.

<u>Management Implications</u>: The current three-year average (of highest counts) of indicated Canada goose breeding pairs, when combined for the Payette and Snake Rivers, exceeds minimum pair objectives identified in the 1991-1995 WMP (Connelly and Wackenhut 1990; Figure 2). Therefore, the Southwest Region will continue with liberalized seasons and limits.

#### **Southwest (McCall) Region**

<u>Population Surveys</u>: Widely fluctuating water levels and insufficient personnel in the McCall sub-region precluded conducting population surveys on Lake Cascade and the Snake River reservoirs (Brownlee, Oxbow, and Hells Canyon; Figure 2) during the reporting period. These radically fluctuating reservoir water levels and high watercraft use on the Snake River reservoirs during the spring breeding/nesting season may be causing some geese to abandon the reservoirs. The most recent three-year average of monitoring criteria for the Snake River is below minimum objectives listed in the 1991-1995 WMP (Connelly and Wackenhut 1990).

Nesting survey and nest structure use data were not collected during the reporting period (Tables 3 and 4). Distribution of existing goose nest structures is coordinated region-wide through HIP.

<u>Trapping and Transplanting</u>: No Canada geese were trapped or transplanted in the Southwest (McCall) Region in 2004.

<u>Management Implications</u>: The 1991-1995 WMP directs the Department to reduce the harvest when the three-year average falls below minimum objectives. Monitoring criteria for the McCall sub-region was developed for the plan without baseline data. Management objectives for these areas should be refined, using the available data, before recommendations are made to reduce the harvest. These refined objectives should be incorporated into any updates to the 1991-1995 WMP. Population survey data collection will be continued according to guidelines in the 1991-1995 WMP.

### **Magic Valley Region**

<u>Population Surveys</u>: A fixed-wing aerial survey of Canada goose breeding pairs was conducted on April 29, 2004. The number of indicated pairs of PP geese on the Camas Prairie (Survey Area 12; Figure 2) increased 58% from the 2003 level while the Snake River below U.S. Highway 93 (Survey Area 13; Figure 2) increased 10% (Tables 3 and 4). Total geese counted on the Camas Prairie and Snake River increased 24% over 2003 levels.

For the RMP geese between American Falls Dam and U.S. Highway 93 (Survey Areas 14 and 15; Figure 2) on the Snake River, indicated pairs decreased 5% while total geese increased 13% over 2003 levels.

Two of the four survey areas in the Magic Valley Region met both the minimum breeding pair and total geese objectives as outlined in the 1991-1995 WMP. The two reaches of the Snake River from State Highway 51 to U.S. 93 and U.S. 93 to the Minidoka Dam both met minimum objectives for pairs and total geese. The Camas Prairie survey area met the breeding pair objective but was below the total geese minimum objective. Data for the American Falls Dam to Minidoka Dam indicate both breeding pair and total geese objectives are not being met (Table 3).

Use of man-made nest structures by Canada geese is monitored during the annual breeding pair survey. During the April 2004 survey, geese were observed to be using 113 of 283 structures. The lack of use of man-made structures in 2004 may have been due to poor precipitation during the nesting period.

<u>Habitat Conditions</u>: Precipitation during the 2003-2004 winter and spring was below average in all major watersheds in the Magic Valley Region; however, early summer rains provided some needed moisture. Nesting conditions near ponds, reservoirs, and canals was poor as many of these areas soaked up the precipitation and did not provide much in the way of additional habitat. Snake River flows, as usual, were low during the nesting season.

<u>Depredation</u>: No goose depredation complaints were received in the Region during this reporting period.

<u>Trapping and Transplanting</u>: No Canada geese were trapped or transplanted in the Magic Valley Region in 2004.

Management Implications: Only two of four survey areas in the Region met both minimum breeding pair and total geese criteria in 2004. Increased bag limits in 1998, poor nesting conditions since 2001, and reduced availability of artificial nesting structures have contributed to the survey areas not meeting objective. Goose breeding pair and total geese objectives can be met in the Region if goose limits are reduced and goose nest structures are maintained. Many of the Region's structures were constructed in the late 1970s and are no longer functional or are located in areas that are no longer suitable. Current budget constraints and personnel shortages will negatively affect maintenance and monitoring of goose nest structures in the Region.

#### **Southeast Region**

<u>Population Surveys</u>: Spring aerial surveys (Figure 2) of RMP Canada geese found a 24% decrease from 2003 to 2004 in the number of breeding pairs counted (Tables 3 and 4). Current surveys appear to be down in both pairs and total counts to the averages from previous years (Table 3). Current three-year averages for breeding pair counts and total geese are generally below management objectives (Table 3).

Early September controlled hunts were held in 1996 and 1997 to address sandhill crane and goose depredation in areas around Chesterfield, Grays Lake, and Blackfoot Reservoir. Because the Blackfoot Reservoir sandhill crane permits were available, and goose numbers were generally below objectives, no early September hunts for geese have been offered since 1998.

<u>Trapping and Transplanting</u>: No Canada geese were trapped or transplanted in the Southeast Region in 2004.

<u>Management Implications</u>: Goose populations, as measured by breeding pair counts and total counts, are generally below the 1991-1995 WMP objectives (Connelly and Wackenhut 1990; Table 3). No formal depredation complaints were filed with the Department during this reporting period; however, Wildlife Services personnel normally deal with waterfowl depredations.

### **Upper Snake Region**

<u>Population Surveys</u>: Two surveys (counts of indicated pairs and total geese) are conducted annually on RMP Canada geese to estimate breeding population trends (Tables 3 and 4). Indicated pairs are below management plan objective for Market Lake WMA, Camas NWR, the Teton Basin, and the North Fork of the Snake River. Low indicated pairs at Market Lake WMA and Camas NWR are the result of drought conditions over the past five years. Residential development is impacting goose production in the Teton Basin.

Limited goose platform nest checks were conducted on Cartier WMA, Gem Lake off-site mitigation area, Warm Slough access area, the lower Henrys Fork BLM site, the Beaver Dick parcel of Deer Parks wildlife mitigation area, Island Park Reservoir, and the Teton Valley access areas. Overall, 108 platforms were checked and 79 were found to have successfully hatched a clutch of geese for a 73% success rate.

<u>Climatic Conditions</u>: Weekly showers starting in late May and continuing through early July resulted in good grass growth, but continued drought conditions left marshes dry or with very limited water conditions throughout the nesting season. The drought impacts were especially prominent at Market Lake WMA and Camas NWR. However, lower irrigation demand resulted in good brood-rearing conditions on Mud Lake WMA and the summer rains provided good brooding conditions along the lower Henrys Fork and the Teton Basin.

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

Habitat on the South Fork of the Snake River and lower Henrys Fork of the 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's 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 that flows between 8,000 and 16,000 cfs during the 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.

<u>Depredation</u>: The Region again received one chronic complaint of geese depredating on malt barley around Gem Lake in 2004. This complaint has no easy solution. Much of the damage to the barley occurs before the adult geese are flightless and the goslings are large enough to handle. Also, it is difficult to get a harvest on these geese because they use the greenbelt in Idaho Falls during the hunting season. To help understand the movements of geese involved with this depredation problem, the Department neck-collared geese captured and relocated from this area in early June 2003 and 2004. Local geese captured received collars with an AJ alpha code while adult geese collared received collars with an AX alpha code. The purpose of the marking was to help determine movements and harvest locations of both local and adult geese.

<u>Trapping and Transplanting</u>: One hundred twenty-eight geese (71 local and 57 adult) were captured and relocated from the Gem Lake area in June 2003 and 67 (51 local and 16 adult)

in June 2004. All geese were leg-banded and 87 (31 local and 56 adult) were neck-collared in 2003 and all were collared in 2004. The local geese were released at Mud Lake WMA and the adult geese at McTucker Slough three miles east of Sterling in Bingham County, Idaho.

By July 16, 2003, one of the adult collared geese had already returned to Gem Lake. On July 25, 2003, eight adult collared geese were observed at Gem Lake, and on July 29, 2003, one local collared goose was observed on Gem Lake. Eight collared geese were observed on the greenbelt on September 12, 2003. On October 16, 2003, 12 days after the goose season had opened, 16 collared geese were observed with 487 un-collared geese on the greenbelt. On August 5, 2004, 256 un-collared geese were observed on the greenbelt in Idaho Falls and by October 13, 2004, 11 days after the goose season opened, there were 725 geese (eleven 2003 adult collars and twelve 2004 adult collars) observed on the greenbelt. These observations suggest that this urban goose population is increasing and may result in increased depredation-nuisance problems in the future.

The Department also received one depredation complaint of geese on grain windrows in Madison County during 2004. The complaint was solved by giving the landowner a zon gun.

<u>Habitat Improvements</u>: Fifteen new goose nesting platforms were installed on the Main Marsh and 12 platforms were serviced on the East Springs Marsh at Market Lake WMA, and 35 platforms were serviced on Mud Lake WMA before the 2004 nesting season. Other areas in the Region where goose platforms were repaired and serviced included: 33 platforms on Cartier Slough WMA, one at Gem Lake mitigation area, three on Warm Slough access area, eight on the lower Henrys Fork BLM parcel, nine on the Beaver Dick Parcel of Deer Parks WMU, 57 on Island Park Reservoir, and five on Teton Valley access areas.

<u>Management Implications</u>: Goose pair counts were conducted on seven production areas in 2004 (Figure 2). Of the seven areas monitored for indicated breeding pairs, four were below 1991-1995 WMP objectives (Connelly and Wackenhut 1990; Table 3). Those that were below objective include Mud Lake WMA, Camas NWR, Teton Basin, and the North Fork of the Snake River above Ashton.

Canada goose production can be 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 a few years ago and most have fallen into disrepair. Annual maintenance of structures on other non-WMA areas of the Region is not being done as needed for goose nesting.

Geese produced around Gem Lake cause annual depredations on malt barley. Goose 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 and difficult to harvest and control numbers. The Department should pursue the possibility of obtaining goose forage agreements with private landowners in the area.

## **Salmon Region**

<u>Population Surveys</u>: The Salmon River (U.S. Highway 93 bridge at Challis to North Fork; Figure 2) was surveyed from the ground for indicated breeding pairs and total geese in mid-April to estimate breeding population trends of RMP Canada geese in 2004. A total of 292 indicated pairs and 820 total geese were counted (Tables 3 and 4). Total geese counted increased by 3% and indicated pairs counted increased by 29% from 2003, decreasing the three-year average.

<u>Trapping and Transplanting</u>: No Canada geese were trapped or transplanted in the Salmon Region in 2004.

#### 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 Greater Sandhill Cranes 1997). Management goals for RMP greater sandhill cranes are:

- 1. Maintain current sandhill crane breeding populations and their distribution.
- 2. Maintain current sandhill crane migrations through Idaho.
- 3. Meet the demand for non-consumptive uses.

The RMP sandhill crane populations 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. The description, season framework, and bag and possession limits can be found in Appendix A.

<u>Background and Management Philosophy</u>: RMP greater sandhill cranes have been damaging crops in eastern Idaho for decades. Early season crop damage occurs primarily in spring and summer, but the most significant sandhill crane crop damage occurs during the late summer and early fall when the sandhill cranes begin staging for fall migration. Fields damaged are those generally closest to night roosts and they are damaged repeatedly year after year.

In 1996, the Commission adopted rules that changed the classification of sandhill cranes from migratory non-game 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. The Council approved a 20-bird harvest allocation for Idaho and controlled hunts by "sportsmen only" using a random method of issuing permits. The Commission subsequently adopted rules establishing controlled hunts in three areas (Grays Lake Outlet area in Bonneville County, Blackfoot Reservoir area in Caribou County, and the Teton River area in Teton County) with a total of 30 permits.

In 1997, the Commission adopted rules establishing seven controlled hunts in the same hunt areas created in 1996 (Grays Lake Outlet, three hunts, 15 permits in each; Blackfoot Reservoir area, three hunts, 40 permits in each; Teton River, one hunt, 50 permits). The 215 permits were expected to harvest 148 sandhill cranes, the entire Idaho harvest allocation authorized by the Pacific Flyway and USFWS.

In 1998, the Commission adopted rules that abolished the hunt in the Grays Lake Outlet area, created seven hunts with 30 permits each in the Blackfoot Reservoir area and enlarged the area to include new damage complaints, and reauthorized the Teton County hunt with 50 permits. The 260 permits were expected to harvest 170 sandhill cranes, the entire allocation for Idaho.

In 1999, the Commission authorized seven hunts with 47 permits each in the Blackfoot Reservoir area and enlarged it again to include a portion of Bear Lake County (Hunt Area One). They also reauthorized the Teton County hunt with 75 permits (Hunt Area Two), and created one new hunt with 50 permits in a portion of Fremont County (Hunt Area Three). Of the 454 permits available to hunters in 1999, 121 permits were left after the drawing, and an unknown number of permits were purchased as leftovers.

In 2000, the Commission reauthorized seven hunts with 50 permits each in Hunt Area One, two hunts with 50 permits each in Hunt Area Two, and two hunts with 50 permits each in Hunt Area Three. There were 550 permits available in 2000; 299 permits were left after the drawing, and only 95 of those were purchased as leftovers.

In 2001, the Commission authorized five hunts in Hunt Area One including two hunts with 100 permits each and three hunts with 50 permits each. They also reauthorized two hunts with 50 permits each in Hunt Area Two and two hunts with 50 permits each in Hunt Area Three. Of the 550 permits available in 2001, 255 permits were left over. Due to the decline of hunters in 2000 and 2001, the Commission authorized the sale of leftover permits to include those who had already drawn a permit and raised the season limit per hunter from one crane to nine cranes with a limit of two per day. As a result, 215 of the 255 leftover permits were purchased in 2001.

In 2002, the Commission enlarged Hunt Area One to include all of Bear Lake County and authorized two hunts with 80 permits each, two hunts with 35 permits each, and one hunt with 33 permits. The Commission enlarged Hunt Area Two to include all of Teton County and authorized one hunt with 40 permits and one hunt with 35 permits. They also enlarged Hunt Area Three to include all of Fremont County and authorized one hunt with 40 permits and one hunt with 35 permits. Of the 413 permits available in 2002, 381 were purchased. The daily limit per hunter was two cranes with a season limit of nine cranes.

In 2003, the Commission authorized five hunts in Hunt Area One including one hunt with 65 permits, one hunt with 60 permits, one hunt with 35 permits, and two hunts with 25 permits each. They also authorized two hunts with 30 permits each in Hunt Area Two and two hunts with 30 permits each in Hunt Area Three. Of the 330 permits available in 2003, 265 were purchased. The limit remained two cranes per day per hunter with a season limit of nine cranes.

In 2004, the Commission authorized one hunt in Hunt Area One with 165 permits. They also authorized two hunts with 24 permits each in Hunt Area Two and two hunts with 24 permits each in Hunt Area Three. Of the 261 permits available in 2004, 214 were purchased. The limit remained two cranes per day per hunter with a season limit of nine cranes.

#### REGIONAL REPORTS

#### 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**

<u>Population Surveys</u>: A ground-based vehicle survey for RMP greater sandhill cranes was conducted on September 14, 2004 on the Camas Prairie, Silver Creek Valley, and Carey Lake areas in conjunction with the Idaho Falls Staging Survey coordinated by the USFWS. The number of cranes observed on the survey fluctuates widely from year to year. Two hundred forty cranes were observed in 2004, a 48% decrease from 2003 (Table 5).

### **Southeast Region**

<u>Population Surveys</u>: Greater sandhill cranes nest in several areas in the Southeast Region. Large concentrations of cranes are present in several areas in the eastern part of the Region prior to migration in the fall. Sandhill cranes are counted incidental to spring goose breeding pair surveys; however, the value of that data as an index to population is unknown (Table 6).

Department personnel in 1995-1997 began collecting data at Chesterfield, Blackfoot Reservoir, and Grays Lake to provide information on sandhill crane abundance, juvenile recruitment rates in fall pre-migration flocks, arrival dates of sub-adults and family groups into pre-migration areas, and whooping crane use periods. These same data were collected for the Bear River Valley between Soda Springs and Montpelier beginning in 1996 (Table 5). Beginning in 1996, USFWS personnel collected the sandhill crane information at Grays Lake NWR for the Department. Personnel for the USFWS and a private contractor collected aerial survey information to determine total sandhill crane abundance during September in selected areas of the Southeast Region; this survey was coordinated by the Pacific Flyway (Table 5).

<u>Harvest Characteristics</u>: Sandhill crane harvest within the Southeast Region was estimated at 91 birds by 106 hunters (86% success rate) in 218 hunter days (Table 7). Hunters have not been required to comply with a mandatory check requirement since 1998.

<u>Climatic Conditions</u>: Precipitation during winter and spring 2004 was near to above average. Summer and fall precipitation was significantly below normal.

<u>Management Implications</u>: 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 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. Future ground surveys may need to be conducted in some or all of these areas.

## **Upper Snake Region**

<u>Population Surveys</u>: No ground counts of sandhill crane were conducted in 2004 (Table 6). The combination fixed-wing and ground count of sandhill cranes in September was again conducted by the USFWS and cooperators.

One thousand three hundred thirty-seven sandhill cranes were counted in the Ashton-St. Anthony area and 1,626 were counted in the Teton Basin during the fixed-wing September RMP sandhill crane survey coordinated by the Pacific Flyway and the USFWS and paid for by the Department (Table 5).

Whooping Crane Use Periods: No whooping cranes were reported in the hunt areas in 2004.

<u>Harvest Characteristics</u>: 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. Non-responders were contacted by telephone in November. Two hunts with 24 permits each were available for both the Fremont County area and Teton County area. Each hunter was allowed to purchase up to nine permits for the season and the daily bag limit was two cranes. Thirty-eight permits were actually picked up by hunters for the two Fremont County hunts and 46 permits were picked up by hunters for the two Teton County hunts.

Controlled hunts in the Fremont County area had an estimated 38 hunters participate in the sandhill crane hunt with an estimated 45% success rate per permit issued (Table 7). The estimated harvest for the Fremont County area was 20 sandhill cranes. Adults made up 71% of the total known-age harvest (Table 8).

The Teton County area had an estimated 41 hunters participate in the sandhill crane hunt with an estimated 70% success rate per permit issued. The estimated harvest for the Teton County area was 32 sandhill cranes (Table 7). Adults made up 81% of the total known-age harvest (Table 8).

<u>Climatic Conditions</u>: Weekly showers starting in late May and continuing through early July resulted in good grass growth, but continued drought conditions left marshes and wetland areas dry or with very limited water conditions throughout the nesting season. The increased late spring-summer moisture improved production conditions locally over the past few years.

<u>Depredation</u>: The Region received no depredation complaints for sandhill cranes during 2004.

<u>Management Implications</u>: 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 County area and the Teton County area. Two controlled hunts with a total of 48 permits were authorized in the Teton County area in 2004, resulting in an estimated harvest of 32 sandhill cranes. Two controlled hunts with a total of 48 permits were also authorized for the Fremont County area in 2004, resulting in an estimated harvest of 20 sandhill cranes.

### **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 Non-game Species Plan; the Department's goals and objectives are the same as those of the Pacific Flyway. The 1991-1995 WMP contains no goals for this species. Data for trumpeter swans are included in this report for the historical record because the Department's annual non-game report does not include all available data.

#### REGIONAL REPORTS

## **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, the trumpeter swans have made no attempt to nest at that site or the attempt was brief and unsuccessful.

Successful nesting by trumpeter swans was also documented in 1995 and 1996 at the IDFG Highway 46 Pond near Fairfield in Camas County. During 2002, one adult trumpeter utilized this pond for the entire summer. Also in 2002, a pair of trumpeter swans successfully nested and reared three juveniles on a private pond approximately six miles southeast of the IDFG Highway 46 Pond.

In 2003 and 2004, no nesting attempts were observed in the Magic Valley Region.

### **Upper Snake Region**

Aerial surveys were conducted in the Upper Snake Region to monitor nesting trumpeter swans and wetlands. During 2004, there were 24 occupied nesting territories, but only 18 verified nesting pairs. At least 33 cygnets hatched from eight of the 18 nests. Twenty-three cygnets fledged in six broods. September surveys (USFWS) over southeast Idaho again counted fewer swans than the long-term average (September survey report not available at this time.)

#### **TUNDRA SWAN**

The Department's 1991-1995 WMP goals for the tundra swan are the same as those of the Pacific Flyway (Connelly and Wackenhut 1990). However, during the reporting period, this species received little management emphasis in Idaho. This is because the tundra swan is not classified by the state as a game bird and the species benefits indirectly from other wildlife management programs.

#### REGIONAL REPORTS

#### **Magic Valley Region**

Tundra swans migrate through the Region in spring and fall, and some winter on the Snake River, but none are known to nest in the Region. The Region does no monitoring of tundra swans.

## **Upper Snake Region**

Tundra swans migrate through the Region in spring and fall, and some winter on the North Fork of the Snake River and Teton River, but none are known to nest in the Region. The Region does no monitoring of tundra swans during the summer. Counts are made incidental to other waterfowl during the mid-winter waterfowl count and the mid-winter tri-state trumpeter swan survey; these counts are reported in the winter waterfowl progress report.

#### **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 an important game bird in Idaho and because it benefits indirectly from other wildlife management programs.

#### **COMMON SNIPE**

The Department's 1991-1995 WMP goals for the common snipe are to 1) maintain Idaho's common 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 common snipe is not an important game bird in Idaho and because it benefits indirectly from other wildlife management programs.

### LITERATURE CITED

- Connelly, J. and P. Wackenhut. 1990. Waterfowl Management Plan, 1991-1995. Unpublished Report, Idaho Department of Fish and Game, Boise, ID.
- Idaho Department of Fish and Game. 1996. Recommendations for reducing crop damage by greater sandhill cranes in eastern Idaho. Sandhill Crane Work Group. Unpublished Report, Idaho Department of Fish and Game, Boise, ID.
- Subcommittee on Rocky Mountain Greater Sandhill Cranes. 1997. Management plan of the Pacific and Central Flyways for the Rocky Mountain population of greater sandhill cranes. Joint subcommittee, Rocky Mountain population greater sandhill cranes Pacific Flyway study committee, Central Flyway technical committee, and central management unit technical committee, U.S. Fish and Wildlife Service Migratory Bird Management Office, Portland, OR.



Fig. 1. Distribution of Pacific and Rocky Mountain Canada geese populations within Idaho.

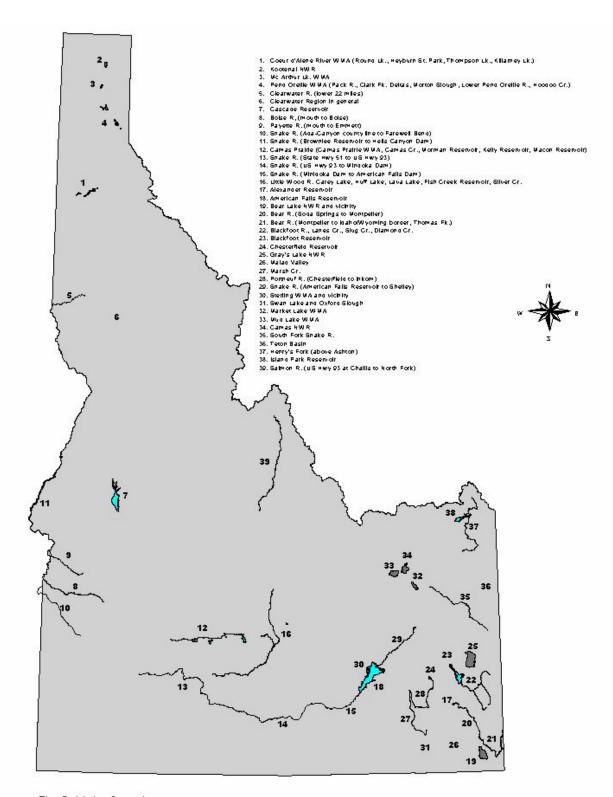


Fig. 2. Idaho Canada goose survey areas.

Table 1. Ducks banded in Idaho by IDFG and USFWS personnel, 2004.

				Magic		Upper		
Species	Panhandle	Clearwater	Southwest	Valley	Southeast	Snake	Salmon	Total
Mallard	1,992	0	596	0	0	0	0	2,588
Wood Duck	193	0	0	0	0	0	0	193
Ring-necked	1	0	0	0	0	0	0	1
Redhead	1	0	0	0	0	0	0	1
Pintail	1	0	0	0	0	0	0	1
Widgeon	0	0	0	0	0	0	0	0
Teal	27	0	0	0	0	0	0	27
Gadwall	0	0	0	0	0	0	0	0
Total	2,215	0	596	0	0	0	0	2,811

Table 2. Mallards banded in Idaho by IDFG and USFWS personnel, 1991-2004.

IDFG Region	1991-1999	2000	2001	2002	2003	2004	Total
Panhandle	5,206	187	294	809	2,043	1,992	10,531
Kootenai NWR	1,365	0	0	0	0	0	1,365
Clearwater	98	0	0	0	0	0	98
Southwest	2,156	0	192	0	0	0	2,348
Deer Flat NWR	2,725	181	161	254	0	596	3,917
Magic Valley	1,226	0	0	0	0	0	1,226
Minidoka NWR	822	0	0	0	0	0	822
Southeast	31	0	0	0	0	0	31
Grays Lake NWR	6,291	331	614	0	0	0	7,236
Bear Lake NWR	3,460	0	0	0	0	0	3,460
Upper Snake	1,257	0	0	0	0	0	1,257
Camas NWR	775	0	0	0	0	0	775
Tribal	1,554	0	0	0	0	0	1,554
Salmon	0	0	0	0	0	0	0
Total	26,966	699	1,261	1,063	2,043	2,588	34,620

Table 3. Idaho goose population survey areas (RMP in gray), 2004 counts, three-year averages, and management objectives.

	2004 Counts Average 2002-2004		2-2004	Objec	Objectives <sup>a</sup> (min.)				
Region/Survey Area <sup>b</sup>	Nests	Pairs		Nests		Total	Nests	Pairs	
Panhandle									
1 Coeur d'Alene River WMA	92	_	_	c100	_	_	35	_	_
2 Kootenai NWR	_	_	_	_	_	_	_	_	_
3 McArthur WMA	61	_	_	42	_	_	70	_	_
4 Pend Oreille WMA	175	_	_	138	_	_	85	_	_
Clearwater	1,0			100			0.0		
5 Clearwater River	25	_	_	30	_	_	70	_	_
6 Remainder of Region (farm ponds etc.)	42	_	_	54	_	_	50	_	_
Southwest				5.			20		
7 Cascade Reservoir	_	_	_	_	_	_	_	100	225
8 Boise River	_	_	_	_	_	_	_	100	
9 Payette River	_	182	454	_	182	410	_	200	450
10 Snake River South	_	660	1,587	_	844	1,845	_	700	1,800
11 Snake River North	_	000	1,507	_	077	1,043	_	50	100
Magic Valley	-	-	-	-	-	-	-	50	100
12 Camas Prairie		301	636	_	292	573	_	285	700
13 Snake River (Hwy 51 to Hwy 93)	-	266	566		195	409		175	350
14 Snake River (Hwy 93 to Minidoka)	_	87	161	-	77	149	-	60	120
15 Snake River (Minidoka to American Falls)		61	170		°51	°113		120	275
16 Little Wood River		01	170		31	113		120	213
	-	_	-	_	-	_	_	-	_
Southeast 17 Alexander Reservoir									
18 American Falls Reservoir		10	16		- 21	- 15			-
	-	10	16	_	21	45		-	1 400
19 Bear Lake NWR		177	320		304	623		640	1,400
20 Bear River(Soda Springs-Montpelier)		13	27		51	107			-
21 Bear River(Montpelier-ID/WY border)	-	32	58	-	48	100		4.50	-
22 Blackfoot Reservoir(upper)	-	78	181	-	81	196		150	375
23 Blackfoot Reservoir									
24 Chesterfield Reservoir	-	3	4	-	2	9		-	-
25 Grays Lake NWR	-	81	128	-	68	128	-	350	840
26 Malad Valley		4	41	-	8	25			-
27 Marsh Creek	-	80	207	-	69	204	-	190	380
28 Portneuf River(Chesterfield-Inkom)	_	63	159		35	84	-		-
29 Snake River(American Falls-Shelley)		84	146		63	112	-		-
30 Sterling WMA	-	20	39	-	18	36	-	-	-
31 Swan Lake and Oxford Slough	-	15	31	-	33	87	-	100	250
Upper Snake									
32 Market Lake WMA	-	60	128	-	71	119	-	85	-
33 Mud Lake WMA	-	107	166	-	105	196	-	95	-
34 Camas NWR	-	87	148	-	98	244	-	130	-
35 South Fork Snake River	-	19	66	-	18	47	-	-	-
36 Teton Basin	-	56	92	-	41	87	-	90	-
37 North Fork Snake River	_	6	28	_	11	30	_	15	-
38 Island Park Reservoir	_	175	358		167	741	_	60	_
Salmon									
39 Salmon River	_	292	820		284	825	_	175	_
3 G 11 1777 1 1 (1000)									

Connelly and Wackenhut (1990).
 See Figure 2.
 Two-year average.

Table 4. Active nests, indicated pairs, and total number of Canada geese (RMP in gray) in Idaho, 2000-2004.

Survey		2000			2001			2002			2003			2004	
Area	N	P	T	N	P	T	N	P	T	N	P	T	N	P	T
1	104	-	-	94	-	-	-	-	-	108	-	-	92	-	-
2	30	68	315	-	-	-	-	-	-	-	-	-	-	-	-
3	26	-	-	12	-	-	31	-	-	33	-	-	61	-	-
4	102	-	-	147	-	-	153	-	-	86	-	-	175	-	-
5	37	-	-	38	-	-	34	-	187	31	-	138	25	-	-
6	89	-	-	71	-	-	74	-	407	47	-	282	42	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	264	528	-	-	-	-	215	440	-	149	336	-	182	454
10	-	935	1,932	-	-	-	-	1,011	2,043	-	860	1,905	-	660	1,587
11	-	35	79	-	-	-	-	-	-	-	-	-	-	-	-
12	-	376	741	-	296	618	-	390	617	-	185	465		292	573
13	-	132	375	-	152	448	-	141	336	-	177	326		195	409
14	-	47	129	-	63	126	-	63	148	-	135	232		77	149
15	-	27	143	-	51	95	-	38	76	-	-	-		51	113
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	28	47	-	37	79	-	14	32	-	40	87	-	10	16
19	-	534	789	-	475	1,011	-	377	797	-	359	751	-	177	320
20	-	117	198	-	55	127	-	56	120	-	84	175	-	13	27
21	-	128	206	-	75	188	-	86	191	-	27	50	-	32	58
22	-	179	462	-	194	605	-	97	254	-	67	152	-	78	181
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	23	41	-	-	-	-	1	8	-	3	16	-	3	4
25		254	411	-	125	299	-	78	164	-	46	92	-	81	128
26		20	51	-	7	62	-	9	18	-	11	17	-	4	41
27	-	52	94	-	22	97	-	0	0	-	58	200	-	80	207
28	-	28	67	-	24	79	-	1	2	-	41	90	-	63	159
29	-	95	202	-	19	47	-	54	108	-	52	83	-	84	146
30	-	27	48	-	12	24	-	16	36	-	18	32	-	20	39
31	-	34	75	-	17	75	-	27	54	-	58	175	-	15	31
32	-	95	169	-	71	122	-	86	129	-	67	99	-	60	128
33	-	82	164	-	127	214	-	94	167	-	114	255	-	107	166
34	-	109	273	-	207	355	-	104	355	-	104	230	-	87	148
35	-	66	122	-	33	87	-	16	31	-	20	43	-	19	66
36	-	65	161	-	27	40	-	34	73	-	32	95	-	56	92
37	-	10	27	-	7	24	-	17	29	-	11	34	-	6	28
38	-	120	252	-	197	1,125	-	160	791	-		1,073	-	175	358
39	-	346	909	-	379 D	824	1' 4	333	857	- 1 // 0	227	799	-	292	820

<sup>&</sup>lt;sup>a</sup> See Figure 2. N = # of active nests; P = # of indicated pairs; T = total # of geese.

Table 5. September aerial counts of RMP greater sandhill cranes in eastern Idaho, 1997-2004.

Region/Area	1997	1998	1999	2000	2001	2002	2003	2004
Magic Valley								
Camas Prairie	-	-	25	17	137	0	0	0
Carey Lake	-	-	8	0	6	2	0	0
Silver Creek	-	-	115	524	385	327	466	240
Southeast								
American Falls Reservoir	-	44	74	97	104	66	168	96
Bear Lake Valley	403	416	439	444	217	253	401	312
Bear River Valley	668	760	734	823	598	790	1,188	634
Blackfoot Reservoir	1,232	1,626	1,188	1,168	698	441	773	228
Chesterfield Reservoir	273	218	355	149	170	86	38	7
Grays Lake	747	1,156	1,144	1,529	1,734	1,467	1,430	1,728
Marsh Valley	172	244	324	284	192	277	202	120
Oxford Slough	316	52	418	94	143	242	93	220
Upper Snake								
Ashton-St. Anthony	1,844	987	1,516	1,405	1,485	1,876	1,180	1,337
Camas NWR	418	268	192	429	257	331	347	381
Henry's Lake Flats	539	532	695	436	31	102	21	58
Island Park Reservoir	4	5	2	0	0	13	2	0
Kilgore	17	2	0	0	0	0	-	-
Market Lake WMA	0	0	0	2	2	2	0	1
Mud Lake WMA	50	130	62	105	94	172	371	164
Teton Basin	1,036	1,048	1,470	1,831	907	1,504	1,543	1,626
Total	7,719	7,488	8,761	9,337	7,160	7,951	8,223	7,152

Table 6. Sandhill cranes counted during ground-based surveys in eastern Idaho, 1997-2004.

Area	1997	1998	1999	2000	2001	2002	2003	2004
Ashton								
Pre-season	-	-	425	504	570	149	-	-
Mid-season	-	-	-	-	-	-	-	-
Post-season	-	-	542	1,128	531	126	-	-
Teton Basin								
Pre-season	-	-	177	317	528	117	-	-
Mid-season	-	-	-	-	-	-	-	-
Post-season	-	-	728	1,477	1,972	828	-	-
Blackfoot Reservoir Vicinity								
Pre-season	247	344	409	-	-	-	0	0
Mid-season	541	506	-	-	-	-	0	0
Post-season	423	318	968	1,168	-	-	0	0

Table 7. Sandhill crane permit levels, estimated hunter participation and harvest based on mail and telephone surveys, 2000-2004.

Hunt Area	2000	2001	2002	2003	2004
Bear Lake-Caribou County					
Permits Available	350	350	263	210	165
Permits Issued	239	323	231	152	124
Total Hunters	186	246	124	107	106
Days Hunted	281	369	247	169	218
% Success	61	63	47	69	86
Harvest	114	156	109	74	91
Fremont County					
Permits Available	100	100	75	60	48
Permits Issued	38	91	75	57	44
Total Hunters	37	65	<sup>a</sup> 47	53	38
Days Hunted	57	115	85	93	76
% Success	95	73	64	63	45
Harvest	35	66	48	36	20
Teton County					
Permits Available	100	100	75	60	48
Permits Issued	69	96	75	56	46
Total Hunters	61	80	<sup>a</sup> 44	47	41
Days Hunted	101	149	94	63	60
% Success	72	58	49	64	70
Harvest	44	56	37	36	32

<sup>&</sup>lt;sup>a</sup> Known minimum number of hunters; not extrapolated for non-respondents.

Table 8. Age composition of sandhill crane harvest based on mail and telephone surveys, 2000-2004.

Hunt Area	2000	2001	2002	2003	2004
Bear Lake-Caribou County					
Juvenile	15	34	25	0	16
Adult	99	122	84	0	75
Unknown	0	0	0	74	91
Fremont County					
Juvenile	5	11	5	7	5
Adult	30	55	43	29	15
Unknown	0	0	$^{\mathrm{a}}0$	$0^{d}$	<sup>b</sup> 1
Teton County					
Juvenile	5	13	7	3	6
Adult	38	43	30	33	26
Unknown	1	0	$^{\mathrm{a}}$ O	$0^{d}$	$0^{d}$

a All harvested birds were categorized as juveniles or adults based on rates reported in mail and telephone surveys.
b Birds not classified as adult were assumed to be juvenile.

## APPENDIX A

IDAHO

2003-2004 SEASON

WATERFOWL RULES

# 2003 Waterfowl Seasons & Rules



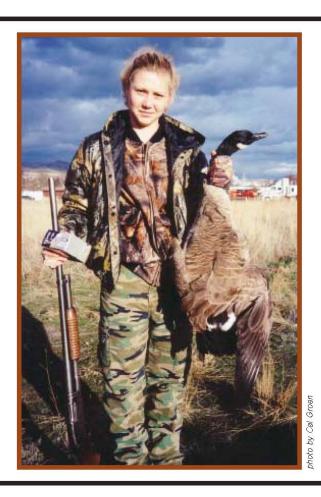


REGULATIONS 2003-2004

Waterfowl Seasons

### Including: COMMON SNIPE AND AMERICAN COOT

- Federal Migratory Game Bird Harvest Information Program Validation— REQUIRED
- Nontoxic Shot—
   REQUIRED
- Federal Migratory Bird Stamp—REQUIRED (All hunters 16 or older)



### GOOSE SEASONS AND HUNT AREA DESCRIPTIONS

(Including: DARK GEESE — Canada and White-fronted; LIGHT GEESE — Ross' and Snow)

### AREA 1

Area 1 includes all parts of the state NOT included in Areas 2 and 3 EXCEPT Fremont and Teton counties are CLOSED to the taking of light geese.

OPEN SEASON: OCTOBER 4, 2003 THROUGH JANUARY 16, 2004

### - AREA 2 -

### Area 2 includes the following counties or portions of counties:

Ada; Boise; Canyon; Elmore west and north of State Highway 20 and west of State Highway 51; Gem; Owyhee west of State Highway 51; Payette; and Washington counties.

OPEN SEASON: OCTOBER 11, 2003 THROUGH JANUARY 23, 2004

### AREA 3\_

### Area 3 includes the following counties or portions of counties:

Blaine; Camas; Cassia; Elmore east and south of State Highway 20 and east of State Highway 51; Gooding; Jerome; Lincoln; Minidoka; Owyhee east of Highway 51; Power west of State Highway 37 and State Highway 39; and Twin Falls counties.

OPEN SEASON: OCTOBER 11, 2003 THROUGH JANUARY 23, 2004

### SPECIAL YOUTH WATERFOWL HUNTING DAYS

- Duck (including merganser and pintails), goose, and coot hunting open for two days only, on September 27 and 28, 2003, to hunters 15 and younger.
- Hunting license REQUIRED.
- Federal migratory game bird harvest information program validation **REQUIRED**.
- Federal migratory bird stamp NOT REQUIRED.
- Daily duck (including merganser), goose, and coot bag limits: Same limits statewide that are in effect during regular seasons.
- At least one adult 18 years of age or older having a valid hunting license, must accompany each
  youth hunting party into the field at all times. ADULTS ARE NOT AUTHORIZED TO HUNT.
- All other state rules and federal regulations pertaining to the taking of migratory game birds are in
  effect for this hunt.

# HELP PRESERVE THE TRADITION — TAKE A KID WATERFOWL HUNTING!

### **GOOSE LIMITS AND HUNT AREAS**

### - AREAS 1 AND 2 -

Daily Bag Limit: 4 of any kind (only 3 light geese or 2 white-fronted geese).

**Possession Limit After First Day of Season:** 8 of any kind (only 6 light geese or 4 white-fronted geese).

### AREA 3

Daily Bag Limit: 3 of any kind (only 2 white-fronted geese).

Possession Limit After First Day of Season: 6 of any kind (only 4 white-fronted geese).



### STATEWIDE DUCK (Including merganser), COMMON SNIPE AND AMERICAN COOT SEASONS AND LIMITS

### CANVASBACK SEASON IS 60 DAYS ONLY-PINTAIL SEASON IS 60 DAYS ONLY

### AREA1

Area 1 includes all parts of the state NOT included in Area 2.

### REGULAR SEASON: OCTOBER 4, 2003 THROUGH JANUARY 16, 2004

PINTAIL AND CANVASBACK SEASON: OCTOBER 4, 2003 THROUGH DECEMBER 2, 2003

### AREA 2

### Area 2 includes the following counties or portions of counties:

Ada; Boise; Canyon; Cassia EXCEPT the Minidoka National Wildlife Refuge; Elmore; Gem; Gooding; Lincoln; Minidoka; Owyhee; Payette; Power west of State Highway 37 and State Highway 39 EXCEPT the Minidoka National Wildlife Refuge: Twin Falls; and Washington Counties.

OPEN SEASON: OCTOBER 11, 2003 THROUGH JANUARY 23, 2004

PINTAIL AND CANVASBACK SEASON: OCTOBER 11, 2003 THROUGH DECEMBER 9, 2003



YOUTH WATERFOWL SEASON see page 11.

### **DUCKS (INCLUDING MERGANSERS)**

### Daily Bag Limit:

7 of any kind.

### Shall not include more than the following:

- 1 canvasback
- 2 female mallards
- 1 pintail
- 2 redheads
- 4 scaup (lesser or greater in the aggregate)

### **Possession Limit**

### After First Day of Season:

14 of any kind.

### Shall not include more than the following:

- 2 canvasbacks
- 4 female mallards
- 2 pintails
- 4 redheads
- 8 scaup (lesser or greater in the aggregate)

### COOTS

Daily Bag Limit: 25

**Possession Limit** 

After First Day of Season: 25

### COMMON SNIPE

Daily Bag Limit: 8
Possession Limit

After First Day of Season: 16

### SANDHILL CRANE SEASONS, LIMITS AND PERMITS

HUNT AREA	HUNT NO.	SEASON	PERMITS
1	9501	September 1-15	165
2	9502	September 1-7	24
2	9503	September 8-15	24
3	9504	September 1-7	24
3	9505	September 8-15	24

On August 30, 2004, any controlled hunt permits that remain unsold after the controlled hunt drawing may be sold on a first-come, first-serve basis. In 2004, hunters may purchase as many as 9 permits and tags to hunt cranes. Each additional permit to harvest a crane will cost \$14.50.

The purpose of these hunts is to help reduce crop damage by sandhill cranes. Check with local landowners or Department offices for information on crane use areas and remember: always—
"Ask First to Hunt on Private Property."

# Applications can be submitted electronically at any IDFG license vendor. Applications can be made using your credit card by calling 1-800-554-8685 or on the Fish and Game website under "What's New" (www.fishandgame.idaho.gov). Controlled hunt worksheets can be mailed with proper fees to: IDFG License Section, PO. Des Section, PO. Des Section, PO. Des Section, PO. Des Saynor. Use this worksheet to speed up the application process. Fill in the blanks with your hunting license and controlled hunt numbers before you apply. Group Applicants: Two hunters may apply on the same application. HOW MANY HUNTERS ARE APPLYING? (Single application for dear, alk, antelope, bear, moose, goat, sheep, Canada goose, sandhill crane or turkey) NAME #1 Date of birth LICENSE NUMBER (Group application for deer, elk, antelope, bear, moose, goat, sheep, Canada goose, sandhill crane or turkey) NAME #2 Date of birth LICENSE NUMBER

# **IDAHO 2004**

SANDHILL CRANE Controlled Hunt Season and Application Information



Crane hunters must have a \$1.50 Federal Migratory Game Bird Harvest Information Program (HIP) validation on their licenses. This validation is available at any license vendor.

### CONTROLLED CRANE HUNTS

Permit Requirements: No person shall hunt sandhill cranes without having in possession the appropriate hunting license, controlled hunt permit, sandhill crane tag and federal IIIP validation.

\$6.50 (non refundable) \$6.50 \$1.50 \$1.50
\$6.50
\$1.50
\$1.50

Note: Only the Application Fee is required during the application process. Successful applicants must then purchase permit, tag and federal HIP validation. The HIP validation is required with the first permit only.



Application Dates: June 15, 2004 to July 15, 2004. Applications may be submitted electronically at any Fish & Game license vendor, by telephone (1-800-554-8685), by mail or on the Fish and Game website under "What's New" (www.fishandgame.idaho.gov). Mail applications must be received at IDFG Headquarters Office and postmarked no later than the last day of the application period. Applications will be taken no earlier than the first day of the application period. Applications must comply with the following requirements:

- Only one application form per person or group will be accepted. Additional application forms will result in all applicants being declared ineligible.
- Each applicant for controlled hunts must submit a \$6.50 nonrefundable application fee with their
  application. One dollar of this fee may be designated for the Citizens Against Poaching program.
- · A single payment (either cashier's check, money order, certified check or personal check) may be submitted to cover fees for all applications in the same envelope. If a check or money order is insufficient to cover the fees, all applications will be voided.
- · Visa, MasterCard and Discover cards may be used to make telephone or internet applications. Those using the credit card system will pay the \$6.50 fee in addition to a service charge for completing and processing the computerized application and delivering it to Fish and Game. Charges will be explained upon request. To apply by credit card, dial 1-800-554-8685, 24 hours a day. Or look under "What's New" on the IDFG Website.

Group Application is defined as two hunters applying for the same controlled hunt on the same application. Second Choice Drawing: Single or group applications which are not drawn for the first choice hunt will automatically be entered into a second choice drawing provided the second choice hunt applied for has not

Notification: It is your responsibility to find out if you were successful in drawing a controlled hunt permit. Applicants can check drawing results under "What's New?" on the Fish and Game website, www.fishandgame.idaho.gov by August 10. Successful applicants will be sent a postcard by August 10 informing them of their success. These applicants may go to any vendor and purchase a controlled hunt permit. Controlled hunt permits may also be purchased on the Internet.

Nonresident Permit Limitations: On 2004 controlled hunts, not more than 10 percent of the permits may

Information in this brochure summarizes the rules and is the official proclamation of the Idaho Fish and Game Commission for the hunting of sandhill cranes in calendar year 2004. Further explanation is available in the current Upland Game Seasons brochure. The official rules are available from the Division of Statewide Administrative Rules, Department of Administration, Statehouse Mail. Boise, ID



### Ask First-For Permission to Hunt on Private Property

the basis of race, color, national origin, age, sex, or handkeap. If you feel you have been discriminated against in any program, activity, or facility of IDFG, or If you destire further information, please write to: Idaho Department of Fish and Game, P.O. Bax 25, Boiss, ID 83707; OR The in Resources, U.S. Fish and Wildlife Service, Department of the Interior, Washington, DC 30240.

Costs associated with this publication are available from IDFG in accordance with section 60-202, Idaho Code. 6-04/2500/41918

### Sandhill Crane Controlled Hunt Areas include the following:

Area 1 — Includes all of Bear Lake County and all of Caribou County EXCEPT that portion downstream from the dam at Alexander Reservoir south of U.S. Highway 30, and that portion lying within the Grays Lake Basin.

Area 2 - Includes all of Teton County.

Area 3 — Includes all of Fremont County.

No mandatory check required for cranes in 2004.





Appendix Table A-1. Idaho waterfowl management, season structure, and limits, 1990-2004.

		Duck			Goose	
_	Management	Season	Daily	Management	Season	Daily
Year	Areas	Length (days)	Limit	Areas	Length (days)	Limit <sup>a</sup>
1990/1991	2	59	4	5	93	3
1991/1992	3	59	4	5	93	3
1992/1993	3	59	4	5	93	3
1993/1994	3	59	4	5	93	4 (3)
1994/1995	3	59	4	5	93	4 (3)
1995/1996	3	93	6	5	100	4 (3)
1996/1997	3	107	7	5	100	4 (3)
1997/1998	2	107	7	5	100	4 (3)
1998/1999	2	107	7	3	100	4 (3)
1999/2000	2	107	7	3	100	4 (3)
2000/2001	2	107	7	3	100	4 (3)
2001/2002	2	107	7	3	100	4 (3)
2002/2003	2	107	7	4	100	4 (3)
2003/2004	2	107	7	3	107	4 (3)

<sup>&</sup>lt;sup>a</sup> Numbers in parenthesis indicate management areas had different daily limits. See Appendix A.

Subr	nitted	bv:

Jim Hayden	Jay Crenshaw	Jon Rachael
Regional Wildlife Manager	Regional Wildlife Manager	Regional Wildlife Manager
Jeff Rohlman Regional Wildlife Manager	Randy Smith Regional Wildlife Manager	Carl Anderson Regional Wildlife Manager
Daryl Meints Regional Wildlife Manager	<b>7om Keegan</b> Regional Wildlife Manager	
Approved by: IDAHO DEPA	RTMENT OF FISH AND GAME	
Dale E. Toweill Wildlife Program Coordinator	James W. Unsv Bureau of Wild	

Federal Aid Coordinator

# 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 licensegenerated funds.