Nevada Department of Wildlife

2010

Upland and Migratory Game Bird, Rabbit and Furbearing Mammals

Harvest Data and Population Status Reports

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This program receives Federal Aid in Wildlife Restoration Grant W-48-R-40, Sub-grant III, Upland Game Management; Sub-grant IV, Migratory Bird Management; and Sub-grant V, Furbearer Management

ON THE COVER: Ruffed grouse captured in the Bull Run Range of Elko County (September 2009) for translocation to the Toiyabe Range in central Nevada.

DIRECTOR'S MESSAGE

Kenneth E. Mayer, Director
Nevada Department of Wildlife

Dear Fellow Sportsmen:

The 2010 Upland and Migratory Game Bird, Rabbit and Furbearer status book represents the culmination of almost 6 months worth of work from the time that questionnaires are sent out in early March to biologist analysis and report writing that occurs during August. This is a document that the Nevada Department of Wildlife (NDOW) has produced since the 1950s and provides a good reference for both managers and small game enthusiasts alike.

Several things continue to concern biologists and upper level management within NDOW and across most western states wildlife agencies with regard to hunting and the sustainability of many wildlife species. One of the most disturbing aspects of wildlife management today is the declining interest in hunting. As you look through this booklet, notice the graphs that depict hunter harvest and number of hunters. For most species, these graphs show a declining trend in both from the 1960s through today. As revenue streams decrease from reduced hunting license sales, services that you have come to expect from your wildlife agency will also decrease. Another cause of great concern for most western wildlife agencies is the continued loss and degradation of sagebrush habitats. These habitats are not only important, if not critical to many of our upland game and furbearer species, but also important to many big game species as well. Past wildfires have diminished the sagebrush landscape and the future includes additional development in the sagebrush community that include transmission lines, pipelines, roads and energy development. Your favorite hunting areas may not look quite the same 10-20 years from now.

The status of a popular game bird and a sagebrush icon changed this year when the U.S. Fish and Wildlife Service determined that the Greater Sage-grouse was warranted for listing under the Endangered Species Act, but precluded by other species that have a higher listing priority ranking. This is a somber finding in that NDOW, other agencies and local working groups have worked very hard to complete conservation plans for the species and implement projects to improve habitat conditions. However, for some of the reasons mentioned above, expansion of invasive species, lack of adequate funding to build capacity (personnel) and conduct projects at a significant scale, we have not been able to demonstrate enough measurable positive effects to the species. Nevada and other states have some time to do just this, but the clock is ticking and the future of hunting for the species is in jeopardy.

On the brighter side, chukar hunters should be relatively excited about this upcoming season. Although it will not be as good as the banner years of 2005 and 2006, it should be a better season that last year. Data collected during aerial chukar density surveys conducted in mid-August show that estimated birds per square mile was up in 9 of 13 long-term study plots. Additionally, California quail populations seem to have also done well this year. Late production is the likely cause for this and sportsmen should encounter the popular game bird in more areas this season.

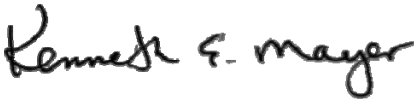
Duck and goose hunters should experience improved conditions this year and a little better hunting if weather conditions allow. Late season freezes that did not subside last year negatively affected hunting opportunities. This year, water levels should be adequate to hold ducks at our wildlife management areas and although many areas continue to remain dry, some wetlands will be at 75%+ capacity. From a continental perspective, biologists estimated this spring's breeding duck population at 40.9 million birds which represents a 2.4% decrease compared to the 2009 estimate. However, this number could have been influenced by a 35% increase over the long-term average in observed ponds within the prairie regions of the United States and Canada. The total duck spring breeding population estimate is 21% above the long-term average from 1955-2008. Most impressive to managers was the continued increase in pintails, a species which is heavily dependent upon prairie potholes.

Trapping enthusiasts should also expect a better season this year. Because of last year's shortened bobcat season, harvest was down 51%. Kitten production, however, increased approximately 217%. The increase in production should translate to an increased harvest for trappers this year. It is thought that other furbearing species also experienced better production in 2009 and 2010. With increased fur prices experienced last season, we expect there to be more trappers in the field. Even so, if prices continue to hold it should prove to be a good trapping season.

For those of you who did not draw a big game tag, upland game and waterfowl hunting is your opportunity to get out and experience Nevada's tremendous landscape. For some of you that have that valued tag and have either hunted or scouted, you may already have that secret chukar spot picked out and are ahead of the game. Regardless, hunting is an age old experience with family and friends where memories last a lifetime. In fact, I would encourage all you veteran hunters out there to participate in our mentor program. Find someone you think might like to hunt and sign them up as an apprentice hunter and you as their mentor. The apprentice hunting license is good for one year and it is free except for the appropriate stamps. A hunter safety certificate is not required. This is a great way to recruit new hunters and for you to pass on your knowledge and experience.

Hunting promotes a healthy lifestyle where you can get out, hike around and enjoy the fresh air and get the juices flowing again when that flock approaches the decoys or that first covey rises on opening day. On behalf of the Nevada Department of Wildlife, thank you for your continued support in buying a hunting or fishing license and we encourage you to enjoy Nevada's great outdoors.

Sincerely,



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2010-11 Hunting Seasons & Bag Limit Regulations

CR 07-07

Dates are for the 2010-2011 season, unless otherwise noted.
Adopted on June 26, 2010 with Amendments #1, #2, #3, #4, #5 and #6

UPLAND GAME

(Units referenced are Game Management Units)

YOUTH CHUKAR AND HUNGARIAN PARTRIDGE HUNT	
OPEN AREAS:	Statewide
SPECIES ALLOWED:	Chukar and Hungarian partridge.
SEASON DATES:	September 25 – 26, 2010
LIMITS:	Daily bag limit 6. Possession limit 12.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate. Open to hunters 15 years of age or younger only. Youth must be accompanied by an adult who is at least 18 years old.

YOUTH CALIFORNIA, GAMBEL'S AND SCALED QUAIL HUNT	
OPEN AREAS:	Statewide
SPECIES ALLOWED:	California, Gambel's and scaled quail
SEASON DATES:	September 25 – 26, 2010
LIMITS:	Daily bag limit 10. Possession Limit 20.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate. Open to hunters 15 years of age or younger only. Youth must be accompanied by an adult who is at least 18 years old.

RABBIT YOUTH HUNT	
OPEN AREAS:	Statewide
SPECIES ALLOWED:	Cottontail, pygmy and white-jackrabbits
SEASON DATES:	September 25 – 26, 2010
LIMITS:	Daily bag limit 10. Possession Limit 20.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate. Open to hunters 15 years of age or younger only. Youth must be accompanied by an adult who is at least 18 years old.

SAGE-GROUSE	
OPEN AREAS:	Unit 184 of Churchill and Lander Counties
SEASON DATES:	October 2-3, 2010
LIMITS:	Daily bag limit 2. Possession limit 4.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	**Closed to nonresidents.**
OPEN AREAS:	Elko County, except Units 079, 091 and 106 Eureka County Humboldt County, except Units 032, 033, 035, 042, 044, 046 and 151 Lander County, except Units 151, 183 and 184 Nye County except Units 132, 133, 181, 251 and 252 Washoe County, except Units 021, 022, 033, 194 and 196 White Pine County, except Unit 114, 115 and 132
SEASON DATES:	September 25 – October 9, 2010
LIMITS:	Daily bag limit 2. Possession limit 4.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	**Closed to nonresidents.**
OPEN AREAS:	Unit 033 of Washoe and Humboldt Counties (Sheldon National Wildlife Refuge) excluding the Little Sheldon and other areas as posted.
HUNT PERIOD #1	
SEASON DATES:	September 18-19, 2010
HUNT PERIOD #2	
SEASON DATES:	September 25-26, 2010
LIMITS:	Daily bag limit 2. Possession limit 4.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	**Open to nonresidents.** Limited to 75 reservations per hunt period, awarded through random draw. Unless his privilege is limited or revoked pursuant to law, any resident or nonresident is eligible to apply once for the Sheldon Special Sage-grouse Hunt in a year. Up to 4 applicants may apply as a party. Parties may be comprised of a combination of residents and nonresidents. Applications for reservations for the Sheldon Special Sage-grouse Hunt must be received by the Nevada Department of Wildlife, Game Division, 1100 Valley Road, Reno NV 89512 by 5:00 p.m. on the first Friday in August. Successful applicants will be notified by mail.

BLUE AND RUFFED GROUSE	
OPEN AREAS:	**Statewide***
SEASON DATES:	September 1 – December 31, 2010
LIMITS:	Daily bag limit 3. Possession limit 6.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate. Per NAC 503.185, the head or one fully feathered wing must be attached to all blue and ruffed grouse until the carcass reaches the possessor's residence or a commercial facility for its preservation. Persons harvesting blue grouse are requested to deposit one wing from each bird harvested at any Nevada Department of Wildlife office, check station, or with Department employees who contact you in the field. Persons harvesting ruffed grouse in Humboldt County are requested to report harvest to the Department of Wildlife - Winnemucca sub-office: 815 East Fourth St., Winnemucca, NV 89445; phone- (775) 623-6565

SNOWCOCK	
OPEN AREAS:	Elko - Management Units 101,102, and 103, and that portion of White Pine County in Unit 103.
SEASON DATES:	September 1 - November 30, 2010
LIMITS:	Daily bag limit 2. Possession limit 2.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate. Prior to hunting snowcock persons must obtain a snowcock hunting free-use permit from any Nevada Department of Wildlife office. Permits may be faxed to persons planning to hunt snowcock once appropriate information has been collected from the hunter.

CHUKAR AND HUNGARIAN PARTRIDGE	
OPEN AREAS:	Statewide
SEASON DATES:	October 9, 2010 – February 6, 2011
LIMITS:	Daily bag limit 6. Possession limit 18.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate.

CALIFORNIA, GAMBEL'S, SCALED AND MOUNTAIN QUAIL	
OPEN AREAS:	Statewide
SEASON DATES:	October 9, 2010 – February 6, 2011
LIMITS:	Daily bag limit 10. Possession limit 20.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate **except for mountain quail** where limits may not include more than **2 daily and 4 in possession**. Persons who harvest mountain quail are requested to report their harvest to the Nevada Department of Wildlife, 1100 Valley Road, Reno, NV 89512, phone (775) 688-1500.

PHEASANT	
OPEN AREAS:	Statewide
SEASON DATES:	November 1 – November 30, 2010
LIMITS:	Daily bag limit 2. Possession limit 4.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Cocks only

COTTONTAIL, PYGMY AND WHITE-TAILED RABBITS	
OPEN AREAS:	Statewide
SEASON DATES:	October 9, 2010 – February 28, 2011
LIMITS:	Daily bag limit 10. Possession limit 20.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate.

WILD TURKEY

WILD TURKEY 2011 SPRING – LIMITED ENTRY – HUNTS 0131 & 0132	
PHYSICAL CHARACTERISTICS:	Bearded Wild Turkey
LIMIT:	1 by tag only
SHOOTING HOURS:	One half hour before sunrise to 4:00 p.m. daily
SPECIAL REGULATIONS:	**Application Deadline 5:00 p.m. on the third Tuesday in February. Release date on the first Friday in March.**

UNIT 091 of ELKO COUNTY

	Seasons	Tag Quota	
		Resident Hunt 0131	**Nonresident Hunt 0132**
Hunt Periods:	March 25 – May 5	5	-

UNIT 101 of ELKO COUNTY*

	Seasons	Tag Quota	
		Resident Hunt 0131	**Nonresident Hunt 0132**
Hunt Periods:	March 25 – May 5	5	-

UNITS 102 & 065 of ELKO COUNTY*

	Seasons	Tag Quota	
		Resident Hunt 0131	**Nonresident Hunt 0132**
Hunt Periods:	March 25 – May 5	15	2

UNITS 151 and 152 of LANDER COUNTIES

	Seasons	Tag Quota	
		Resident Hunt 0131	**Nonresident Hunt 0132**
Hunt Periods:	March 25 – May 5	3	-

UNITS 223, 231, 241, 242, 243 and 271 of LINCOLN COUNTY**

	Seasons	Tag Quota	
		Resident Hunt 0131	**Nonresident Hunt 0132**
Hunt Periods:	March 25 – April 3	10	1
	April 4 –April 13	10	1
	April 24 – May 3	10	1

MASON VALLEY WILDLIFE MANAGEMENT AREA ONLY OF UNIT 203			
	Season	**Tag Quota**	
		Resident Hunt 0131	**Nonresident Hunt 0132**
Hunt Periods:	March 25 – April 8	5	-
	April 9 –April 23	5	-
	April 24 – May 8	5	-

MOAPA VALLEY PORTION OF UNITS 243, 244, 268, 271, & 272 IN CLARK COUNTY*			
	Season	**Tag Quota**	
		Resident Hunt 0131	**Nonresident Hunt 0132**
Hunt Periods:	March 25 – April 3	3	-
	April 4 –April 13	3	-
	April 14 – April 23	3	-

PERSHING COUNTY*			
	Season	**Tag Quota**	
		Resident Hunt 0131	**Nonresident Hunt 0132**
Hunt Periods:	March 25 – April 13	5	-
	April 14 – May 3	5	-

UNIT 115 of WHITE PINE COUNTY***			
Hunt Periods:	March 25 – May 5	14	1

Applicants are advised that a significant portion of the turkey population occurs on private lands and permission should be obtained from a landowner before applying for this hunt.
****Applicants are advised that a portion of the turkey population occurs on private lands.***
*****Applicants are advised that a significant portion of the turkey population occurs on Great Basin National Park lands. Hunting is not permitted within park boundaries.***

JUNIOR WILD TURKEY 2011 GENERAL SPRING HUNTS – 0138		
PHYSICAL CHARACTERISTICS:	Bearded Wild Turkey	
LIMIT:	1 by tag only.	
SHOOTING HOURS:	One half hour before sunrise to 4:00 p.m. daily	
SPECIAL REGULATIONS:	Youth must be 12 prior to the opening of the hunt season indicated and not attain their 17th birthday until after the last day of the hunt season indicated, pursuant to NAC 502.063. Application Deadline is 5:00 p.m. on the third Tuesday in February. Applications for these tags will only be accepted during this period. Results will be available by the first Friday in March. Closed to nonresidents.	
OPEN AREAS:	Season Dates	Quota
Units 223, 231, 241, 242, 243 and 271 of Lincoln County	April 14-23	Open**
***** Applicants are advised that a portion of the turkey population occurs on private lands.***		

Turkey continued on next page

(Wild Turkey continued)

WILD TURKEY 2011 SPRING HUNTS - 0135 & 0137 PARADISE VALLEY OF HUMBOLDT COUNTY		
PHYSICAL CHARACTERISTICS:	Bearded Wild Turkey	
LIMIT:	1 by tag only.	
SHOOTING HOURS:	One half hour before sunrise to 4:00 p.m. daily.	
SEASON DATES:	March 25 – May 5	
QUOTAS:	**Resident Hunt 0135**	**Nonresident Hunt 0137**
	Open	Open

SPECIAL REGULATIONS:

PARADISE VALLEY OF HUMBOLDT COUNTY APPLICATION REGULATIONS:
A Paradise Valley of Humboldt County Application Form is required. Hunters can obtain these forms from the participating landowners. A landowner must sign the application form. The form must be submitted through the mail or over the counter during business hours, M-F, 8 a.m. to 5 p.m. at Wildlife Administrative Services, PO Box 1345, Fallon, NV 89407-1345. Tags will be available until the close of the season. Internet applications for the Paradise Valley of Humboldt County hunt will not be available.

Unless his privilege is limited or revoked pursuant to law, an eligible person may apply once for a type of hunt for Wild Turkey during a draw period.

Only one person may apply on an application.

Only one Wild Turkey tag per calendar year.

Turkey continued on next page

WILD TURKEY 2011 – 2012 SPRING HUNTS - 0135 & 0137
Units 202, 203, 204 and 291 of Lyon County
(except the Mason Valley Wildlife Management Area)*

PHYSICAL CHARACTERISTICS:	Bearded Wild Turkey	
LIMIT:	1 by tag only.	
SHOOTING HOURS:	One half hour before sunrise to 4:00 p.m. daily.	
SEASON DATES:	March 25 – May 5	
QUOTAS:	**Resident Hunt 0135**	**Nonresident Hunt 0137**
	Open	Open

SPECIAL REGULATIONS:

UNIT 202, 203, 204 and 291 OF LYON COUNTY (except the Mason Valley Wildlife Management Area)* APPLICATION REGULATIONS:

A Lyon County Application Form is required. Hunters can obtain these forms from the participating landowners. A landowner must sign the application form. The form must be submitted through the mail or over the counter during business hours, M-F, 8 a.m. to 5 p.m. at Wildlife Administrative Services, PO Box 1345, Fallon, NV 89407-1345. Tags will be available until the close of the season. Internet applications for the Lyon County hunt will not be available.

Unless his privilege is limited or revoked pursuant to law, an eligible person may apply once for a type of hunt for Wild Turkey during a draw period.

Only one person may apply on an application.

Only one Wild Turkey tag per calendar year.

Turkey continued on next page

(Wild turkey continued)

WILD TURKEY 2011 – 2012 SPRING HUNTS - 0135 & 0137 Units 181 & 182 of Churchill County		
PHYSICAL CHARACTERISTICS:	Bearded Wild Turkey	
LIMIT:	1 by tag only.	
SHOOTING HOURS:	One half hour before sunrise to 4:00 p.m. daily.	
SEASON DATES:	March 25 – May 5	
QUOTAS:	**Resident Hunt 0135**	**Nonresident Hunt 0137**
	Open	Open

SPECIAL REGULATIONS:

UNIT 181 AND 182 OF CHURCHILL COUNTY APPLICATION REGULATIONS:

A Churchill County Application Form is required. Hunters can obtain these forms from the participating landowners. A landowner must sign the application form. The form must be submitted through the mail or over the counter during business hours, M-F, 8 a.m. to 5 p.m. at Wildlife Administrative Services, PO Box 1345, Fallon, NV 89407-1345. Tags will be available until the close of the season. Internet applications for the Churchill County hunt will not be available.

Unless his privilege is limited or revoked pursuant to law, an eligible person may apply once for a type of hunt for Wild Turkey during a draw period.

Only one person may apply on an application.

Only one Wild Turkey tag per calendar year.

2011 Application Procedures For Resident and Nonresident Hunts:

Unless his privilege is limited or revoked pursuant to law, an eligible person may apply once for a type of hunt for Wild Turkey during a draw period.

Only one person may apply on an application.

Applications must be mailed to the address specified on the application through a postal service or submitted online through the Internet at www.ndow.org. Applications will be accepted until 5:00 p.m. on the date specified in the regulation. Hand delivered applications will not be accepted.

Except for the Junior Wild Turkey Hunts, any remaining tags will be available on a first come first serve basis through the Internet at www.ndow.org, by mail or over the counter during business hours, M – F, 8 a.m. to 5 p.m. at Wildlife Administrative Services, 185 N. Maine St, Fallon, Nevada 89407 until the close of the season.

Only one Wild Turkey tag can be awarded to an individual within a calendar year.

FALCONRY SEASONS FOR UPLAND GAME BIRDS & RABBITS	
OPEN AREAS:	**Statewide***
SEASON DATES:	September 1 – last day in February
LIMITS:	Daily bag limit 2. Possession limit 8.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	All resident upland game birds except turkey and sharp-tailed grouse. Cottontail, pygmy, and White-tailed jackrabbits. The taking of sage-grouse by falconry is only allowed in those units where there is an established open season. The daily and possession limit for sage-grouse is 2 and 4. **Limits singly or in the aggregate.**

MIGRATORY UPLAND GAME BIRDS

AMERICAN CROW	
OPEN AREAS:	Statewide
FALL SEASON:	September 1 – November 17
SPRING SEASON:	March 1 – April 15, 2009
LIMITS:	Daily bag limit 10
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS: **FOOTNOTE:** ***Season closed on ravens***	Shotguns only. All crows must be retrieved and removed from the field.

Note: pursuant to 50 CFR 20.133 the maximum number of days a state can allow crow hunting is 124 in a calendar year.

MOURNING & WHITE-WINGED DOVE	
OPEN AREAS:	Statewide
SEASON:	September 1 – 30
LIMITS:	Daily bag limit 10. Possession limit 20.
SHOOTING HOURS:	One half hour before sunrise to sunset daily.
SPECIAL REGULATIONS:	White-wing dove season is closed in all counties except Clark and Nye counties. Limits for mourning dove and white-wing dove are singly or in aggregate in Clark and Nye Counties.

Note: Federal Framework for dove hunting seasons is published in July each year. Identified dates and season length are subject to change. Should the federal framework require alteration of Commission-approved seasons, then an amendment to CR07-07 shall be submitted for Commission action at their August meeting.

FURBEARING ANIMALS

BEAVER, MINK AND MUSKRAT	
OPEN AREAS:	Statewide
SEASON DATES:	October 1 – March 31

OTTER	
OPEN AREAS:	Elko, Eureka, Humboldt, Lander and Pershing Counties
SEASON DATES:	October 1 – March 31
SPECIAL REGULATIONS:	Carson City, Churchill, Clark, Douglas, Esmeralda, Lincoln, Lyon, Mineral, Nye, Storey, Washoe and White Pine counties are closed to otter trapping. If an otter is accidentally trapped or killed in those counties which are closed, the person trapping or killing it shall report the trapping or killing within 48 hours to a representative of the Department of Wildlife. The animal must be disposed of in accordance with the instructions of the representative.

KIT AND RED FOX	
OPEN AREAS:	Statewide
SEASON DATES:	October 1 - Last Day of February

BOBCAT SEASON	
OPEN AREAS:	Statewide
SEASON DATES:	December 1 - February 19
SPECIAL REGULATIONS:	Closed to Nonresidents.

GRAY FOX SEASON	
OPEN AREAS:	Statewide
SEASON DATES:	November 1 - Last Day of February
SPECIAL REGULATIONS:	Closed to Nonresidents.

BOBCAT PELT SEALING DATES

Pelt sealing will be done only during normal business hours (8:00 a.m. - 5:00 p.m.) on the dates specified, unless otherwise noted. Sealing locations will be at Department offices unless otherwise noted.

BOBCAT PELT SEALING DATES FOR THE 2008-2012 SEASON			
City	**Date**	**Time**	**Location**
Elko	Third Tuesday in January.	8 a.m.–5 p.m.	NDOW Elko Office
	First Wednesday in March		
Ely	Friday following January sealing date in Elko.	8 a.m.–2 p.m.	NDOW Ely Office
	Last Wednesday in February.	8 a.m.–2 p.m.	NDOW Ely Office
Eureka	Thursday following January sealing date in Elko.	12 p.m.–5 p.m.	NDOW Eureka Office
	Last Tuesday in February.		
Fallon	Fourth Monday in January.	10 a.m.–3 p.m.	NDOW Fallon Office
	Annually scheduled to coincide with the Friday, Saturday and Sunday mornings of the NTA Sale.		
	First Wednesday in March	7 a.m.–11 a.m.	Nevada Trappers Association Fallon Fur Sale
		10 a.m.–3 p.m.	NDOW Fallon Office
Las Vegas	Third Tuesday in February.	8 a.m.– 5 p.m	NDOW Las Vegas Office
	First Wednesday in March	1 p.m.– 5 p.m.	
Panaca	Last Tuesday in February.	8 a.m.– 5 p.m.	Nevada State Parks - NDOW Office, Panaca
	First Wednesday in March	1 p.m.– 5 p.m.	
Tonopah	Last Tuesday in February.	8 a.m.– 5 p.m.	NDOW Tonopah Office
	First Wednesday in March	1 p.m.– 5 p.m.	
Winnemucca	Fourth Tuesday in January.	8 a.m.– 2 p.m.	NDOW Winnemucca Office

MIGRATORY WATERFOWL

CR 10-03

2010-2011

Adopted on August 14, 2010

SEASONS, BAG LIMITS, AND SPECIAL REGULATIONS FOR MIGATORY WATERFOWL

Note regarding Zone designations:
NORTHERN ZONE: Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Nye, Pershing, Storey, Washoe & White Pine Counties
SOUTHERN ZONE: Lincoln & Clark Counties

SPECIAL YOUTH WATERFOWL HUNT	
OPEN AREAS:	**NORTHERN ZONE**
2011 SEASON:	October 2, 2010
OPEN AREAS:	**SOUTHERN ZONE**
2011 SEASON:	February 5 & 6, 2011
LIMITS:	Daily bag limit is the same as that for the general season for ducks, mergansers, geese, coots and moorhens. Limits singly or in the aggregate for Canada and white-fronted geese. Limits singly or in the aggregate for Snow and Ross' geese. Snow and Ross' geese are closed in Ruby Valley within Elko and White Pine Counties.
SHOOTING HOURS:	½ hour before sunrise to sunset
SPECIAL REGULATIONS:	Open to hunters 15 years of age or younger. Youth must be accompanied by an adult who is at least 18 years old. Adults are not allowed to hunt during this season. Open to Nonresidents.

DUCKS AND MERGANSERS	
OPEN AREAS:	**NORTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 29, 2011
OPEN AREAS:	**SOUTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 28, 2011
OPEN AREAS:	**Moapa Valley portion of the Overton Wildlife Management Area.**
2010-11 SEASON:	November 6, 2010 – January 28, 2011
LIMITS (daily / possession)	
General Duck Limits:	7 / 14
Pintail:	2 / 4
Mallard (total/female):	Included within the general duck limit, but not to include more than 2 hen mallards daily and 4 in possession.
Redhead:	2 / 4
Canvasback:	1 / 2
SCAUP (Lesser and Greater)	
OPEN AREAS:	**NORTHERN ZONE**
2010-11 SEASON:	November 6, 2010 – January 29, 2011
OPEN AREAS:	**SOUTHERN ZONE**
2010-11 SEASON:	November 6, 2010 – January 28, 2011
OPEN AREAS:	**Moapa Valley portion of the Overton Wildlife Management Area.**
2010-11 SEASON:	November 6, 2010 – January 28, 2011
LIMITS (daily/possession):	3 / 6, included within the general duck limit
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents

COOTS AND COMMON MOORHENS (Common Gallinules)	
OPEN AREAS:	**NORTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 29, 2011
OPEN AREAS:	**SOUTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 28, 2011
OPEN AREAS:	**Moapa Valley portion of the Overton Wildlife Management Area.**
2010-11 SEASON:	November 6, 2010 – January 28, 2011
LIMITS (daily/possession):	25 / 25
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents

COMMON SNIPE	
OPEN AREAS:	**NORTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 29, 2011
OPEN AREAS:	**SOUTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 28, 2011
OPEN AREAS:	**Moapa Valley portion of the Overton Wildlife Management Area.**
2010-11 SEASON:	November 6, 2010 – January 28, 2011
LIMITS (daily/possession):	8 / 16
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents

CANADA AND WHITE-FRONTED GEESE	
OPEN AREAS:	**NORTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 29, 2011
OPEN AREAS:	**SOUTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 28, 2011
OPEN AREAS:	**Moapa Valley portion of the Overton Wildlife Management Area.**
2010-11 SEASON:	November 6, 2010 – January 28, 2011
Limits (daily/possession)	3 / 6
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents

SNOW AND ROSS' GEESE	
OPEN AREAS:	**NORTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 29, 2011
OPEN AREAS:	**SOUTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 28, 2011
OPEN AREAS:	**Moapa Valley portion of the Overton Wildlife Management Area.**
2010-11 SEASON:	November 6, 2010 – January 28, 2011
Limits (daily/possession)	10 / 20
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents CLOSED: Ruby Valley within Elko and White Pine Counties

FALCONRY SEASONS FOR MIGRATORY GAME BIRDS	
OPEN AREAS:	**NORTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 29, 2011
OPEN AREAS:	**SOUTHERN ZONE**
2010-11 SEASON:	October 16, 2010 – January 28, 2011
OPEN AREAS:	**Moapa Valley portion of the Overton Wildlife Management Area.**
2010-11 SEASON:	November 6, 2010 – January 28, 2011
Limits (daily/possession)	3 / 6
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Migratory birds allowed for take include: geese, ducks, mergansers, coots, common moorhens and common snipe. Limits for all permitted migratory birds are singly or in the aggregate. Open to Nonresidents.

SWAN	
OPEN AREAS:	Churchill, Lyon and Pershing counties
2010-11 Season:	October 16, 2010 - January 2, 2011
LIMITS:	One swan per swan hunt permit Maximum two swan hunt permits per season One swan per day
SHOOTING HOURS:	½ hour before sunrise to sunset
SPECIAL REGULATIONS:	Persons may apply for one of the 650 swan hunt permits. Applications must be mailed through a postal service to the address listed on the application or submitted online through the Internet at www.ndow.org. Permits are to be awarded through an initial drawing. Deadline: Applications must be received by 5:00 p.m. by Friday September 17, 2010. No hand delivered applications for the drawing. Results of the initial drawing will be provided by Friday, October 1st, 2010. Any remaining swan hunt permits will be available on a first come, first served basis through the mail or over the counter during normal business hours (M-F 8:00 am – 5:00 pm) at the Wildlife Administrative Services Office, 185 North Main Street, Fallon, Nevada Beginning on Monday, October 4, 2010. Applications are available at all Department of Wildlife offices and select license agents. Persons may apply for a second swan permit beginning on Monday, October 4, 2010. Applicants can submit one application per draw period. Applicants that did not apply for the initial drawing period may submit two applications during the first come, first served draw period. Successful swan hunters are required to validate their permit pursuant to NAC 502.380, and then present at least the head and neck of their swan to an NDOW agent at selected sites for species verification within five (5) days of harvest. Mandatory inspection sites and requirements will be provided with the swan hunt permits. If a total harvest of five (5) trumpeter swans is reached, the swan season is closed for the remainder of the season. Persons must possess a valid annual Nevada hunting license and both a current Federal Migratory Game Bird Hunting Stamp and a current Nevada Duck Stamp, when required, to hunt swan in Nevada. Open to Nonresidents who have a valid annual Nevada hunting license or a Nonresident Short-Term Permit to hunt Upland game & Waterfowl and required waterfowl stamps.

WEATHER AND HABITAT

CLIMATE REPORT

Northwestern Nevada

Most water basins in northwestern Nevada experienced snowfall and precipitation totals that were below average for the winter of 2009-10. As an example, Cedarville, California reported this past February to be the driest on record. Drought conditions have been a recurrent theme over the last four years in most of the counties in northwestern Nevada while portions of northern Humboldt County have received below average precipitation during 7 of the past 10 years.

For the second consecutive year, northern Nevada received a short reprieve from the dry conditions when numerous moisture laden low pressure systems moved through the state during May and June, providing much needed moisture. This moisture came at an opportune time for upland game populations as it provided for a flush of new growth during nesting and brood rearing periods. Information collected from recent chukar density surveys suggest that upland birds benefitted from this moisture. However, dry conditions returned for the remainder of the summer and very little moisture has been received into early fall. Although, near-record rainfall received during May and June helped in the short-term to alleviate some of the effects of the drought, much more moisture is needed to reverse the cumulative impacts from consecutive years of below average precipitation.

Central Nevada

Data published by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) indicate that central Nevada experienced average to above average moisture receipts during most months from June 2009 to May 2010. Favorable moisture and temperature patterns through the summer and fall of 2009 greatly benefited habitat conditions and improved the body condition of wildlife species that had suffered in 2006, 2007, and parts of 2008. These were some of the worst conditions seen in central Nevada for some time. Moisture during late summer and fall is critical for providing a boost to the nutrient content of forage, which allows wildlife species to enter the winter in good condition.

Deeper snow accumulations and colder temperatures during the 2009-10 winter likely resulted in somewhat higher over-winter mortality in some populations than has been the case in the previous few winters. Despite this fact, the increased productivity of surviving animals, as well as the improved habitat conditions resulting from the increased moisture, should far outweigh these relatively minor losses.

The spring and early summer of 2010 saw continuing favorable precipitation patterns, and also cooler than normal temperatures, which resulted in a lush, long lasting spring green up period. The timing of precipitation and cold periods appear to have missed the peak of the hatch for most upland game bird species, which has allowed for good chick survival in most areas of central Nevada.

Although wildlife populations in central Nevada are currently reaping the benefits of improved climatic conditions, the cumulative impacts of drought experienced regularly over the past few years will take some time to overcome. These favorable conditions will need to continue into the foreseeable future in order to see any significant increases in central Nevada game populations. At this time, data provided

by the National Weather Service indicates there is a good possibility that drought conditions may intensify in portions of central Nevada at least over the short-term.

Northeastern Nevada

Precipitation received in Elko from October of 2009 to August of 2010 has been 81% of normal (NOAA online weather data). Precipitation levels, documented by the NRCS SNOWTEL for northern Nevada basins, range from a low of 65% of average (Lower Humboldt River drainage) to a high of 95% of average (Upper Humboldt River drainage). The fall and winter months, with the exception of December, were below average. However above average precipitation was received in March of 2010 and well above average precipitation was received in April. The late spring and summer months have been dry.

Precipitation received in Ely from October of 2009 to August of 2010 has been 82% of normal (NOAA online weather data). Snowtel data showed the Eastern Nevada snowpack at 117% of normal for the 2009-2010 water year. Eastern Nevada received well above average precipitation in December and January. May of 2010 also was well above average. Summer precipitation in eastern Nevada has been slightly below average with most coming in July. No major temperature extremes were experienced in northeastern Nevada during the past year.

Southeastern Nevada

According to DOE – CEMP, southeastern Nevada has received approximately 110% of average annual precipitation thus far in 2010. This amount was obtained by averaging the precipitation totals from Pioche, Alamo, Caliente, Ely, and Mesquite. In looking at these areas separately, Mesquite has received approximately 169% of average annual precipitation, while Ely appears to have received only 65% of average annual precipitation. Pioche, Caliente, and Alamo are all near 100% of average annual precipitation. The resulting range conditions in these areas generally correspond to the amount of precipitation received. Ranges such as the Mormon, Meadow Valley, and Delamar mountains all appear to have good range conditions, which means good habitat conditions for upland game birds. The timing of the precipitation was not directly beneficial to upland game birds as much of the precipitation was received in January, February, and August. Generally, if good precipitation comes in March, April, and May, it results in highly beneficial nesting and brood-rearing conditions for upland game birds. In 2010, although range and habitat conditions are beneficial, the timing of the precipitation did not favor upland game birds across broad expanses of southeastern Nevada. As such, hunters should expect to find slightly higher densities of upland game birds in general, with a few specific areas having better production than others.

Southern Nevada (Mojave Desert)

Early in 2010, environmental conditions in the Mojave Desert region in southern Nevada were greatly improved relative to 2009. Based on rain gauge data collected by Clark County Regional Flood Control District in cooperation with United States Geological Survey and National Weather Service, Las Vegas and outlying areas in Clark County experienced several fall and winter storm systems over nearly a four-month period from December 2009 through early March 2010.

However, subsequent late spring and summer months have been marked by below normal precipitation receipts. Overall, summer monsoon activity failed to produce measurable moisture. Thus, abnormally dry conditions prevail in the Mojave Desert region. Upland game and furbearer species have coped with limited forage resources and reduced water availability. In general, upland game and furbearer population contractions are anticipated in 2010.

TABLE 1. Water basin climate data from SNOTEL monitoring stations throughout Nevada, southern Idaho and the Sierra Nevada Mountains for total precipitation received from October 1, 2008 through August 27, 2010 in inches (Natural Resources Conservation Service). Averages are based on data from 1971 – 2000. Data is considered provisional and subject to revision.

BASIN	Precip. % of Avg.
NORTHERN GREAT BASIN	86
TRUCKEE RIVER	95
LAKE TAHOE	95
CARSON RIVER	98
WALKER RIVER	102
SNAKE RIVER / BRUNEAU BASIN	92
OWYHEE BASIN	93
UPPER HUMBOLDT RIVER	95
LOWER HUMBOLDT RIVER	65
CLOVER VALLEY	92
EASTERN NEVADA	116

WETLAND HABITAT CONDITION REPORT

The Natural Resources Conservation Service (NRCS) produces monthly water supply outlook reports[1] that describe measured indicators of precipitation throughout the state. This report examines data drawn from the May 2009 report for that is a period of the year that is important in determining predicted rates of flow to important wetlands, particularly in western Nevada. Other considerations such as reservoir storage and irrigation district delivery schedules are also discussed as both play an important role in those marshes that are terminal wetlands.

Readers are encouraged to peruse the wetland habitat condition reports placed on the NDOW website two weeks before the hunting season opener and again in the mid-season for summarized details about the status of specific marshes.

Western Nevada

Cooler wetter weather in April delayed melt off that effected May run-off in the drainages that provided water for the terminal wetlands in Lahontan and Lovelock Valleys. Poor spring run-off affected these valleys for the fourth consecutive year.

Lahontan Valley: In May, instruments measured an overall snowpack for the Carson Range at 125% of average. This was an improvement over last year's 78% and meant that the depleted Lahontan Reservoir could at least expect some river flow to bring its storage capacity up, but certainly not to capacity based upon runoff from the Carson River alone. The Truckee River also provides water to Lahontan Reservoir through the Truckee-Carson Irrigation District's (TCID) Truckee Canal. But due to the disastrous channel breach in January 2008, diverted flows through this canal are not allowed at their former rates. In their August 27th report[2], The TCID reports that Lahontan Reservoir storage was measured at 103,560 acre-feet. Typical annual trends would suggest that the storage will drop dramatically during the September and October

At Carson Lake water has been directed to the Sprig and Big Water units. As of late August, Sprig is 95% and filling. Water is shallow (1.4 on depth gauge) and cover is good. Big water is shallow (0.9 on depth gauge) and filling. The later water deliveries should stimulate some emergent growth and will result in a quick flourish of invertebrates to feed waterfowl and other birds. The Sump, York and Rice Units are dry. Food production was fair this year; however, grazing inside the Rice unit reduced the amount of available food for waterfall.

The Stillwater National Wildlife Refuge (SNWR) currently has 4,600 acres receiving water and has a lush growth of submergent vegetation established in the following wetlands: Goose Lake, Swan Check, Tule Lakes, West Marsh & Willow Lake. Additional water deliveries are scheduled for later this fall, flooding some excellent stands of annual plants and initiating a bloom of invertebrates for early fall migrants. A couple of the units in the refuge produced very good food crops this summer which should help hold birds in the area for a prolonged period this fall.

Lovelock Valley: At or below average precipitation recorded for most of the mountain ranges contributing to the Humboldt River system has resulted in flows into the Humboldt Wildlife Management Area that were nearly non-existent. At press time, the Toulon Unit is dry with no visible in flows, as are the Upper and Lower Humboldt. Further upstream, Rye Patch increased in volume but was not at

1 http://www.nv.nrcs.usda.gov/snow
2 http://www.tcid.org/cgi-bin/csvread.pl

capacity. Decent marsh habitat can be found at the northeast end of Rye Patch where the river enters and should support fair hunting this year.

Mason Valley Wildlife Management Area (MVWMA): Water flows were adequate during the summer of 2010 to allow managers at the MVWMA to be able to manipulate water in a variety of ways to benefit nesting and migrating waterfowl. Many of the ponds are, as of late August, running between 45% to full capacity. Several more are being managed under a moist soil regime – an approach that keeps vegetation growing in anticipation of flooding just before the season. Some ponds that were less than 50% could be dry by the time the season commences, while others are slated for late summer water deliveries.

As for other wetlands in Western Nevada, Alkali Lake WMA continues to remain dry and any precipitation occurring between the publication date of this report and this hunting season would have to be substantial to offer any hope of providing loafing habitat for migrating ducks and geese. The Fernley WMA is nearly dry and continues to accept marginal flows from the Fernley water treatment plant, which in turn provides limited hunter opportunities. The Scripps WMA and the remainder of Washoe Lake are about 35-40% of normal. Water is receding and some ponds are isolated with dry shoreline between water and cover. There is a good amount of sago for forage of migrating waterfowl. The mitigation wetlands continue to suffer the ill-effects of drought, as one, very inefficient irrigation well continues attempts to keep up with evaporative losses in one pond. With decreasing lake levels, these wetlands become ever increasingly hard to fill and/or manage. The mitigation wetlands at the south end of the lake are at 20% of normal.

Eastern and Southern Nevada

Wayne Kirch Wildlife Management Area (WKWMA): Water levels were maintained at prescribed levels consistent with the WKWMA water management plan and remained stable throughout the nesting season. As of late August, Adams-McGill reservoir is at 75% of capacity and should remain flooded going into the season. Old Place is dry and seeded with millet, grain sorghum and smartweed. It will be partially filled prior to the opener. Dacey Slough is currently at 75% but will be low by the opening of the waterfowl season. Haymeadow and Cold springs reservoirs are at full capacity with ducks concentrated in the shallows.

Tule Reservoir which is currently (August 2010) at 70%, saw excellent duck use in the spring and early summer but is expected to decrease as water levels go down due to evaporation. Most of the Canada goose production was on Adams-McGill reservoir, Upper Dacey reservoir and Upper Cold Springs reservoir.

Key Pitman Wildlife Management Area (KPWMA): Frenchy Lake as of Late August is at 80% capacity at should have good hunting going into the season. Nesbitt Lake is at 70% capacity. The north ponds on the Nesbitt Unit will be mowed and are in great shape with abundant feed.

Ducks and geese have utilized the food plots throughout the spring and summer. The fields at KPWMA will be seeded with a 3-way mix or annual rye and irrigated just prior to the waterfowl opener. The fields should start to green up in mid October and will provide a very attractive food source for the migrating waterfowl. Nesbitt Lake is full of sago pond weed and will provide abundant forage for the waterfowl this fall.

Steptoe Valley Wildlife Management Area (SVWMA): Comins Lake is at 80% capacity as of August 30, 2010 and is holding good numbers of dabblers on the south end with divers found throughout the lake. Comins should be productive from the start of season until freeze-up.

The NAWCA wetlands are, as of August, at 75% capacity and has good numbers of waterfowl found throughout the wetland area. Hunting should be good though the freeze-up and the 3 springs should keep some open water all season.

Pahranagat National Wildlife Refuge (PNWR): As of August of 2010 the North Marsh is at 60% capacity and the Upper Lake is at 40% capacity. Both of these units are closed to hunting. Middle Marsh is at 70% capacity with good habitat conditions and is expected to receive more water at the beginning of October. The October water should stimulate fresh vegetation growth in the Unit attracting good waterfowl numbers. Lower lake is also at 70% and is mostly open water.

Ash Meadows National Wildlife Refuge (AMNWR): As of August of 2010 Crystal Reservoir is at 85% of Capacity and Lower Crystal Marsh is at 80% of capacity. Both of these units have been drawn down for shorebird breeding and stopover habitat and exotic fish management. Both will be filling throughout the fall. Horseshoe Marsh is at full capacity. The cattails are heavy so burning has been prescribed throughout the season to increase open water. Peterson reservoir is at 75% capacity and it too suffers from heavy cattails and other shoreline vegetation. Peterson Reservoir is expected to stay at below capacity levels throughout the season. Habitat manipulation and other management activities will continue throughout the season and may cause some disturbance.

Ruby Valley: Presently the Ruby Lake NWR marsh is 55 percent flooded. The South Marsh is flooded but the water elevation is reduced from last year creating enhanced habitat for dabblers in the hunt zone (north end of unit). Within the hunt zone, approximately 20 percent located in the northeast quadrant, is dry or very shallow. More favorable habitat for divers is available in the South Marsh outside of the hunt zone. Franklin Lake WMA is dry.

Continent[3]

Habitat conditions during the 2010 Waterfowl Breeding Population and Habitat Survey were characterized by average to below-average moisture and a mild winter and early spring across the entire traditional (including the northern locations) and eastern survey areas. The total pond estimate (Prairie Canada and U.S. combined) was 6.7 ± 0.2 million. This was similar to the 2009 estimate and 34% above the long-term average of 5.0 ± 0.03 million ponds.

Conditions across the Canadian prairies were similar to 2009. Portions of southern Alberta, Saskatchewan and Manitoba improved but a large area along the Alberta and Saskatchewan border remained dry, and moisture levels in portions of Manitoba declined from last year. The 2010 estimate of ponds in Prairie Canada was 3.7 ± 0.2 million. This was similar to last year's estimate (3.6 ± 0.1 million) and to the 1955-2009 average (3.4 ± 0.03 million). Residual water remains in the Parklands and these were classified as fair to good. Most of the Prairie-Parkland region of Canada received abundant to historically high levels of precipitation during and after the survey, which while possibly flooding some nests, will produce excellent brood-rearing habitat for the successful nesters and lessen the summer drawdown. This is expected to lead to beneficial wetland conditions next spring.

Wetland numbers and conditions remained fair to good in the eastern U.S. prairies, but habitat conditions declined through the western Dakotas and Montana. The 2010 pond estimate for the north-central U.S. was 2.9 ± 0.1 million, equaling last year's estimate and 87% above the long-term average (1.6 ± 0.02 million). Fall and winter precipitation in the eastern Dakotas generally improved good

[3] Direct text from: Zimpfer, et.al. 2010. Trends in Duck Breeding Populations, 1955-2010. U.S. Fish & Wildlife Service, Laurel, Maryland, USA.

habitat conditions already present. However, wetlands in the western Dakotas and Montana were recharged, resulting in a deterioration of conditions from 2009, at the time the survey was conducted.

In the bush regions of the traditional survey area (Alaska, Yukon, Northwest Territories, northern Manitoba, northern Saskatchewan, and western Ontario), spring breakup was early. Unlike in 2009, the majority of habitats were ice-free for arriving waterfowl. Habitat of most of the bush region, with the exception of Alaska and the Northwest Territories, was classified as fair due to below-average moisture, but the early spring should benefit waterfowl across the entire area.

The boreal forest and Canadian Maritimes of the eastern survey area experienced an early spring as well. Much of southern Quebec and Ontario were classified as poor to fair due to dry conditions, with the exception of an area of adequate moisture in west-central Ontario. More northern boreal forest locations benefited from near-normal precipitation and early ice-free conditions. Although winter precipitation from southwestern Ontario along the St. Lawrence River Valley and into Maine was below average, waterfowl habitat was classified as good to excellent, as in 2009. The James and Hudson Bay Lowlands of Ontario (strata 57-59) were not surveyed in 2010, but reports indicated an early spring in these locations as well.

STATEWIDE SUMMARIES FOR UPLAND GAME SPECIES

Report by: Shawn Espinosa, Upland Game Staff Specialist

Sampling Methods

The Nevada Department of Wildlife began transitioning away from the antiquated FG08 system previously used to determine small game harvest in 2006. This system was based on sampling a proportion of all hunting license holders in order to achieve a 10% sample from which expansion factors for each species were derived. Since 2006, we have strived to obtain a significant sample size from those hunters who actually purchased an Upland Game Stamp. A sample pool was recognized from those hunters who purchased the Upland Game Stamp privilege online as records of names and addresses were stored electronically. Data obtained from questionnaires sent to these individuals likely allows for more accurate sampling and derivation of harvest. Expansion factors are now based on the total number of hunters reporting that they hunted for a certain species against the total number of upland game stamps purchased (whether online or physical). This also is thought to be more accurate than the previous sampling scheme.

In addition to these changes in methodology, the Upland Game and Waterfowl Questionnaire has been modified over this time frame (2005-2009) to more accurately account for lightly hunted species, or those species that we wished to gain more information. These include species such as mountain quail, ruffed grouse, pygmy rabbit and white-tailed jackrabbit. Low sample sizes through lack of hunter effort and participation as well as hunter misidentification continue to make it difficult to determine reasonable harvest estimates for these species. However, consistency in methodology will likely lead to some insight regarding population trends. Also, many questions were reworded to be clear and less confusing.

GREATER SAGE-GROUSE

Season Structure and Limits

The season structure and limits were standardized across Nevada during the 2009-10 hunting season, with the exception of two hunt units. The 2009 sage-grouse season was 15 days long extending from September 25 through October 9, 2009. Bag limits remained at 2 per day and 4 in possession. A separate season was held in unit 184 in Churchill County. This season was two days long lasting from October 3rd through 4th. For over a decade, a separate, special sage-grouse hunt has been held within the Sheldon National Wildlife Refuge. Two separate seasons were held with 75 permits awarded during both hunt periods. The first hunt period was held September 19-20 and the second was held September 26-27. The daily and possession limit for all hunts was 2 and 4 respectively.

Harvest and Effort

The estimated statewide sage-grouse harvest for the 2009-10 hunting season was 8,944 birds. This represented a 55% increase from the 2008-09 season (n=5,775) and a 100% increase over the 10-year average (n=4,478). A factor that likely led to this increase in harvest was the elevated hunter participation with 4,461 hunters taking to the field and spending a combined 9,767 days in pursuit of the species. All figures are the highest estimates for sage-grouse hunting since 1992 and represent an

increase of ≥80% over the 10-year average. Each hunter averaged 2.2 days in the field and took approximately 2 birds during their outing. Overall, sage-grouse harvest and hunter numbers have declined from an average estimated harvest of about 14,000 sage-grouse and 6,000 hunters during the 1960's to 4,000 sage-grouse and 2,300 hunters during the current decade (Figure 1).

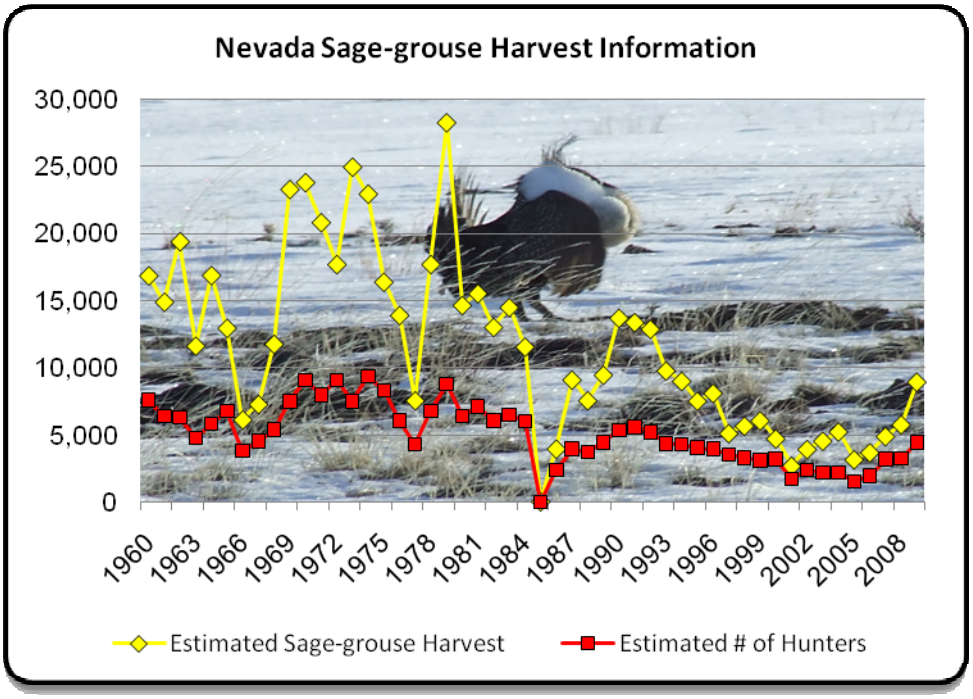


Figure 1. Estimated sage-grouse harvest and number of hunters from 1960-2009.

Population Status

Sage-grouse lek counts continue to provide the most reliable trend data for sage-grouse population performance. A number of leks throughout Nevada are monitored multiple times throughout the breeding season (March-May). These leks are known as "trend" leks and peak attendance for these leks is used for annual comparisons. Average male attendance per active lek is also a method used to make comparisons and estimate rates of change, but is less reliable than trend lek average attendance. Another important available dataset are annual wing classification data. These data allow for an estimation of production and nest success from year to year.

Lek counts from 2008 and 2009 show that populations have stabilized after three consecutive years of decreasing trends. During 2009, precipitation patterns and habitat conditions improved and yielded an average of 2.1 chicks per hen which represented a 28% improvement over the 10-year average production value of 1.6 chicks per hen (Figure 2). Additionally, estimated nest success has improved over the last two years (42.5% in 2008 and 57.6% in 2009) from the all time low of 30.8% recorded in 2006. These factors, coupled with improved production in 2008 will likely lead to a slight population increase in 2010.

Habitat conditions across the state are considered fair to good. Large scale wildfires have not occurred at the levels experienced from 1999-2007. Some areas are recovering from these fires, especially in areas where re-seeding took place after these fires. Many portions of the state continue to be subject to potential changes in terms of energy or infrastructure development. These developments, whether they

be transmission lines, geothermal developments or wind facilities have the potential to negatively affect sage-grouse populations.

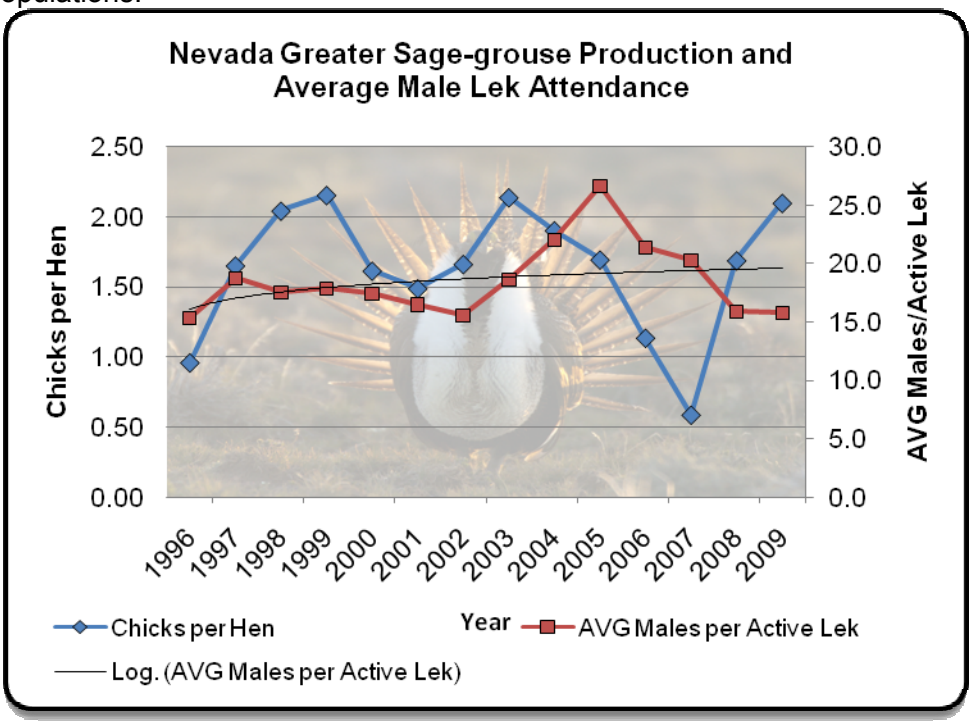


Figure 2. Sage-grouse production values in relation to lek count averages from 1996-2009.

The projection for the 2010-11 season is for a stable to slightly elevated population based on recruitment and carry over from 2009. The outlook for sage-grouse production in 2010 is not expected to be as good as that experienced in 2009 based on available brood count data from the early summer of 2010. These data also provide mixed results with some areas experiencing better production than others. One important factor to note, especially in eastern Nevada, is the localized effects that raven predation seems to be having on sage-grouse nests. During the nesting season, ravens key in on sage-grouse nests and will deplete the nest completely of eggs. Also, biologists are noting an increased presence of ravens at sage-grouse lek sites. Ravens may follow hens to nesting areas and key in on those sites later during incubation.

FOREST GROUSE

(Blue and Ruffed Grouse)

Season Structure and Limits

The 2009 forest grouse season, which included blue (Dusky and Sooty grouse) and ruffed grouse, was once again 122 days long extending from September 1st through December 31st. The season was open statewide with no discrepancies between regions or Counties. Daily limits were set at 3 birds and possession limits were twice the daily bag. Limits were for single species or in the aggregate.

Blue Grouse

Harvest and Effort

The total estimated statewide blue grouse harvest was 2,807 birds. Approximately 1,878 hunters spent 4,908 days in the field which represented increases of 12.5% and 23.6% respectively over the 2008 season. The 2009 harvest was 45% more than that of 2008 and 80.5% greater than the 1999-2008 ten-year average. It was estimated that each hunter took an average of 1.5 birds. It is estimated that 76% of the blue grouse harvest comes from the Eastern Region, predominately Elko and White Pine Counties. Blue grouse harvest since 1960 is seemingly on an increasing trend (Figure 3). Population cycles are frequently experienced, as suggested by the harvest data. However, hunter participation has been steadily increasing, especially within the last decade.

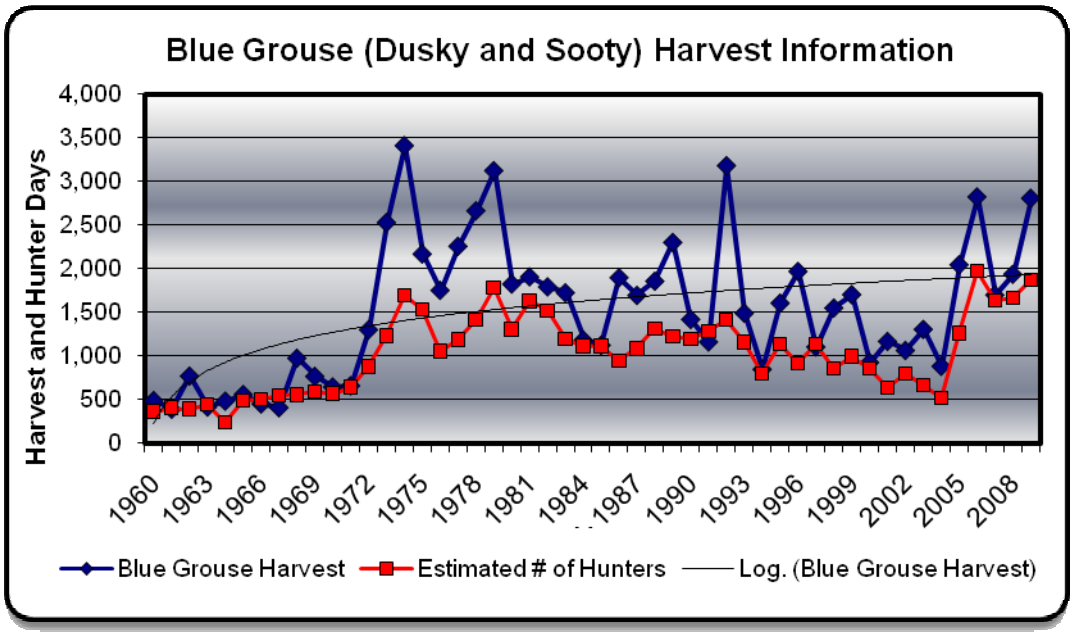


Figure 3. Estimated blue grouse harvest and number of hunters from 1960-2009.

Population Status

Unlike sage-grouse, sampling for blue grouse is extremely difficult because of their secretive nature. Brood surveys, conducted in early to mid-summer, can provide an indication of production within certain geographic areas, but are not applicable to the entire state and these surveys have been largely discontinued. Point counts in the spring can be effective for Sooty Grouse residing in the western portion of Nevada because of the auditory range of their call or "hooting". However, the same cannot be said of Dusky Grouse in central and eastern Nevada.

The Nevada Department of Wildlife began requesting wings from hunters in 2007 to classify for age and sex and to monitor harvest locations. In 2009, 59 wings were collected from hunters after collecting a fairly substantial 90 wings in 2008. Production was estimated at 2.0 chicks per hen in 2009. Even though wing collection has proven somewhat difficult, NDOW biologists and staff feel that the information gained from these wings is important and that, over time, hunters will be more willing to

deposit wings in wing barrels or at regional offices. Establishing a long term dataset (expanding upon Figure 4 below) can assist biologist with future management decisions.

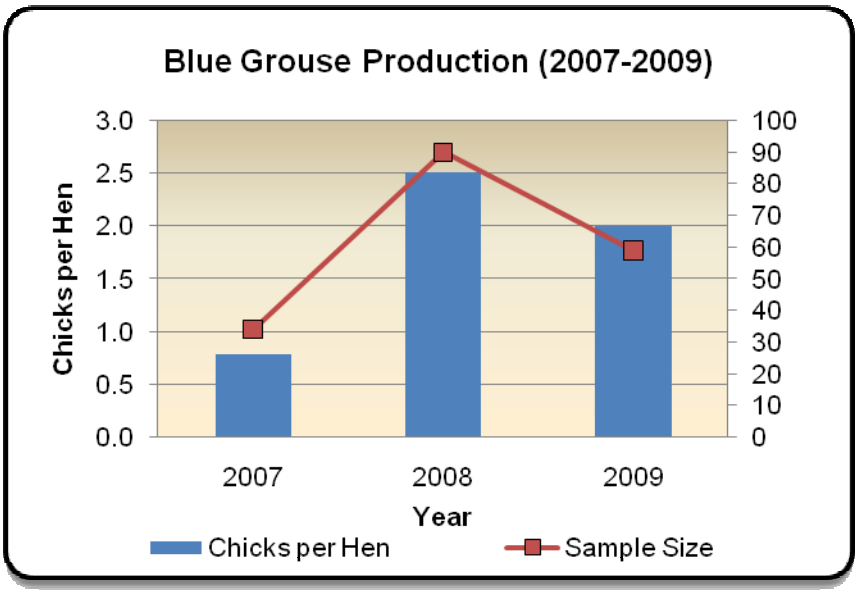


Figure 4. Blue grouse production estimates and sample size of hunter harvested wings from 2007-2009.

Ruffed Grouse

Harvest and Effort

The estimated ruffed grouse harvest for the 2009 season was 760 birds, which represented a 146% increase over the 2008 harvest of 309 birds. An estimated 523 hunters spent 1563 days in the field hunting ruffed grouse compared to 309 individuals spending 670 days hunting the species during the 2008 season. With expanding populations in northeastern Nevada, ruffed grouse hunting has appeared to gain interest over the last few years. An issue that continues to render ruffed grouse harvest data suspect is the misidentification of grouse species. In certain areas, blue grouse are often mistaken for ruffed grouse and vice-versa.

Population Status

Populations of ruffed grouse are firmly established in both Elko and Humboldt Counties and appear to be doing well as suggested by the elevated harvest levels. Historically, only two counties in Nevada, Elko and Humboldt, had viable ruffed grouse populations. However, a 2009 release of 26 ruffed grouse into the Toiyabe Range of Lander County is expected to be successful and provide recreational opportunity in the future. Meanwhile, populations of ruffed grouse in the northeastern portion of the state continue do well, especially within the Independence and Bull Run Ranges continuing through the Bruneau River drainage to the east. A variety of habitat types are available for ruffed grouse in these areas, including necessary aspen stands with quality understory.

CHUKAR PARTRIDGE

Season Structure and Limits

The 2009-10 chukar season was open statewide from October 10, 2009 through February 7, 2010 with a total season length of 121 days. Daily and possession limits for chukar remained the same as the previous season at 6 and 18 respectively. Limits applied as a single species or in the aggregate with Gray (Hungarian) Partridge. In addition to the general season, a youth season was held for one weekend from September 26-27, 2009. Daily and possession limits for this hunt were 6 and 12 respectively.

Harvest and Effort

During the 2009-10 hunting season, an estimated 76,581 chukar were harvested by 14,197 hunters. These figures represent improvements of 25% for harvest and 21% for hunter participation over the previous season. This represents the third year in a row of improved harvest after a relatively poor 2007 season. One interesting aspect reflected in the harvest data was that last season's harvest was down approximately 6% from the 1999-2008 10-year average, but hunter numbers were 25% greater than their 10-year average. The improved production in 2009 likely led to additional hunters taking to the field last season.

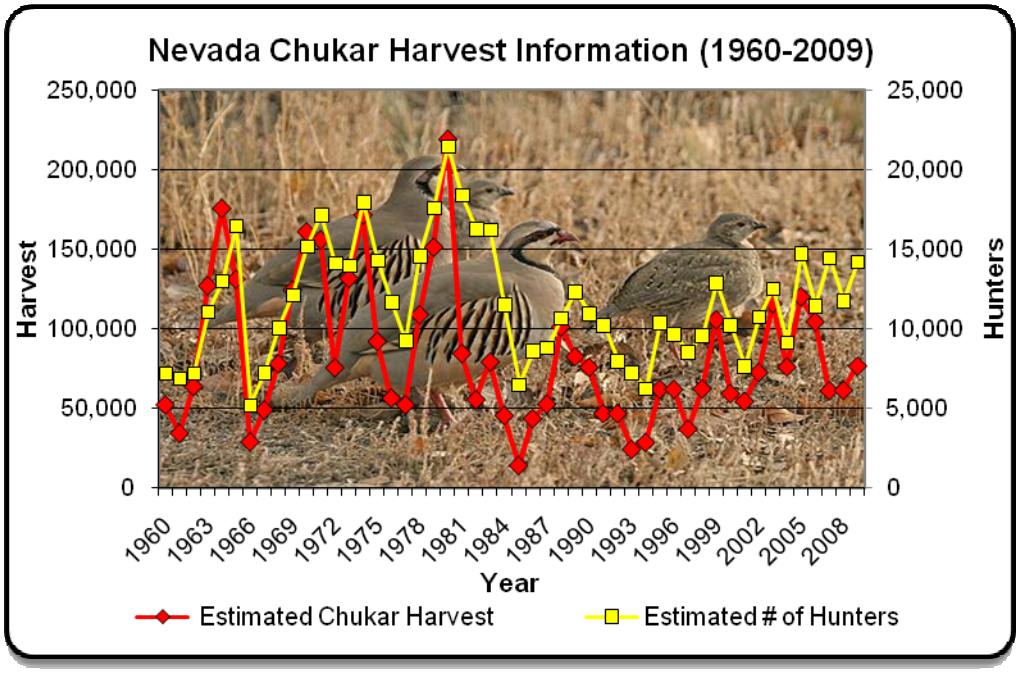


Figure 4. Estimate chukar harvest and number of hunters from 1960-2009.

Birds taken per hunter (n=5.4) and birds taken per hunter day (n=1.4) were both up from the previous season by 3% and 11% respectively, but still below the 1999-2008 10-year average of 7.2 birds/hunter and 1.7 birds/hunter day.

Compared to previous decades, the average annual harvest of 80,160 birds during the 2000's was better than the average harvest during the 1990's (n=55,098) and 1980's (n=77,759) and similar to the 1960's (n=86,443). The "banner" decade for chukar appears to be the 1970's when approximately 116,000 chukar partridge were harvested annually.

Population Status

Chukar populations are experiencing recovery from relatively low levels observed in 2007. This conclusion is based on improving harvest estimates, aerial density surveys (re-instituted in 2008 after a six year hiatus) that indicate population increases, and intermittent brood surveys that, overall, show improved production levels.

The 2009 chukar harvest of 76,581 birds is approaching the long-term average (1960-2008) of 83,147 birds (-8%). Chukar production was better in 2009 than that recorded in 2007 or 2008. Based on increasing base populations, indications are that the 2010 production will be average (4-5 chicks/hen) for much of the state and above average (7-8 chicks/hen) in many areas. The prediction for the 2010-11 is good and harvest is expected to be greater than that of the last three seasons.

CALIFORNIA QUAIL

Season Structure and Limits

The 2009-10 hunting season for California, Gambel's, Scaled and Mountain quail extended from October 10, 2009 through February 7, 2010 for a total season length of 121 days. Hunting seasons were open statewide for these species, allowing hunters to pursue them wherever they occurred across the state. Limits for quail remained at 10 per day and 20 in possession with the exception of mountain quail where no more than 2 per day or 4 in possession were allowed. In addition to the general season, a youth season was held for one weekend from September 26-27, 2009. Daily and possession limits for this hunt were 10 and 20 respectively. This hunt was open to hunters 15 years of age or younger only and hunters had to be accompanied by an adult who was at least 18 years old at the time of the hunt.

Harvest and Effort

The estimated harvest of California quail during the 2009-10 season was 33,139 birds. This reflected a 10% decline in harvest from the previous year and a 34% increase over the 10-year average of 24,719. In terms of hunter participation and effort, an estimated 4,426 hunter hunted California quail in 2009 spending approximately 17,502 days in the field. The total number of hunters declined by 12% from the previous year but showed a 37% increase over the 10-year average. Hunters averaged approximately 7.5 birds over the course of the season and 1.9 birds per day.

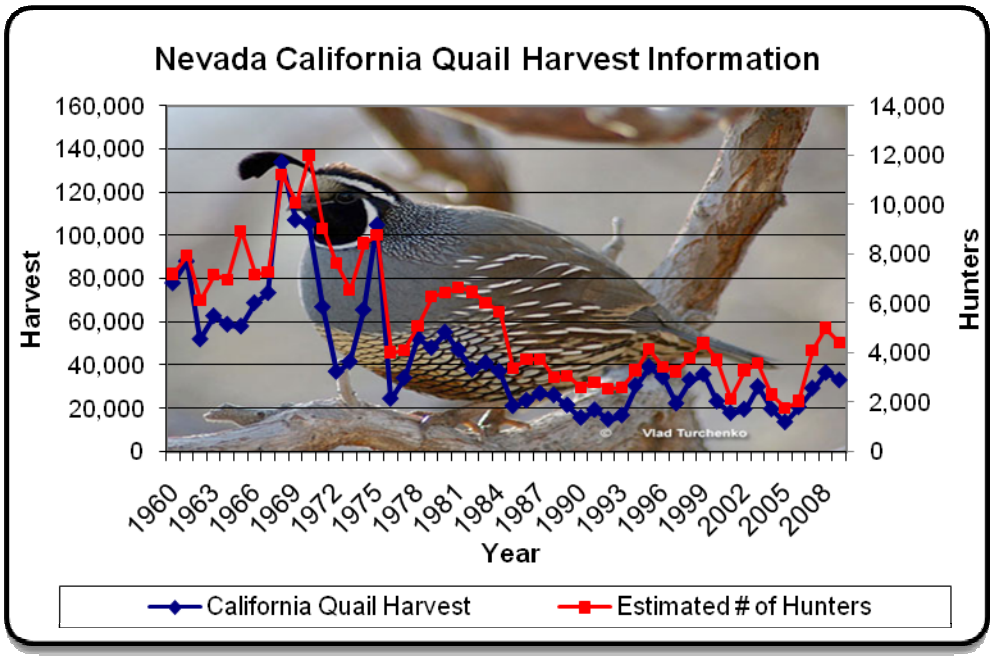


Figure 5. Estimated harvest of California Quail and number of hunters from 1960-2009.

Population Status

Long-term harvest data provides the only standard for which to gauge California quail populations. Recent figures suggest that California quail populations are expanding in both population size and area. California quail harvest is reported in counties that historically did not have populations, or had very small populations. A factor that may be responsible for the increased harvest and hunter participation are California quail populations living on the periphery of larger urbanized areas such as Reno and Carson City. Urban settings often provide quail with adequate thermal cover and forage during the winter and their association with edges of population centers often provides hunters with easy access. This translates to the fact that, in many cases, hunters don't have to drive far to be able to hunt quail. Additionally, the Nevada Department of Wildlife has been actively relocating California quail from urban and suburban areas to remote locations with suitable habitat throughout the state. These efforts have both augmented and expanded populations with apparent success.

GAMBEL'S QUAIL

Season Structure and Limits

The 2009-10 hunting season for California, Gambel's, Scaled and Mountain quail extended from October 10, 2009 through February 7, 2010 for a total season length of 121 days. Hunting seasons were open statewide for these species, allowing hunters to pursue them wherever they occurred across the state. Limits for quail remained at 10 per day and 20 in possession with the exception of mountain quail (2 daily and 4 in possession). In addition to the general season, a youth season was held for one weekend from September 26-27, 2009. Daily and possession limits for this hunt were 10 and 20 respectively.

Harvest and Effort

Gambel's quail harvest was estimated at 20,640 birds during the 2009-10 hunting season. This estimate was 25% greater than the previous year's harvest of 16,516 and 29% greater than the 1999-2008 10-year average. A steady increase in harvest has been experienced since 2007. Last season, an estimated 3,288 persons hunted for Gambel's quail, which was almost equal to the previous season's hunter numbers (n=3,258). Birds per hunter and birds per hunter day have also increased steadily since 2007 with an estimated 6.3 birds per hunter and 1.5 birds harvested per day. Over the past 30 years, Gambel's quail harvest has declined by as much as 50%. During the 1980's, the average annual harvest was approximately 33,000 birds, as opposed to the current decade's annual average harvest of 16,000 birds. Within these same decades, hunter numbers and hunter days have also shown 45% and 38% declines respectively.

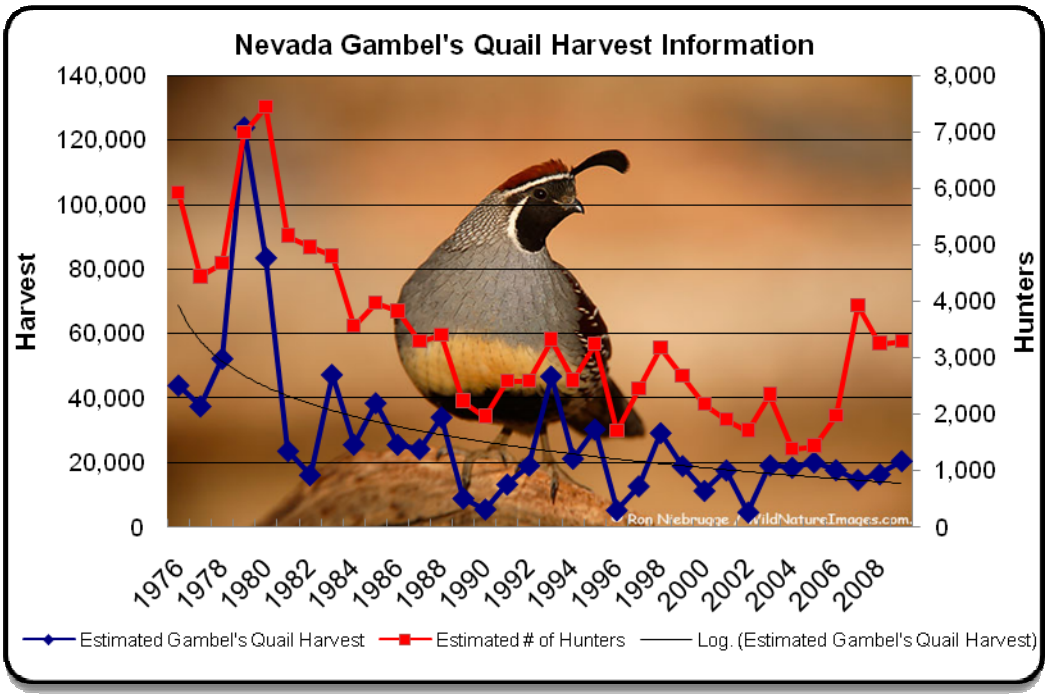


Figure 6. Gambel's quail harvest and hunter participation from 1960 through 2009.

Population Status

The "boom or bust" cycle of Gambel's quail has been noted for decades; however, recent changes in weather patterns (drought) and anthropogenic influences could result in diminished "booms" and larger "busts". The long-term average annual harvest for the 30-year period from 1979-2008 was approximately 26,500 birds, placing the 2009 harvest of 20,640 at 22% below this average. This is the eleventh year of below average harvest for Gambel's quail and the prognosis does not suggest a positive change. In extreme southern Nevada (Clark County) the fall and winter of 2009 provided favorable moisture patterns that led biologists to believe that improved production was on the horizon; however, in March of 2010, precipitation all but ceased and habitat conditions steadily declined from that point forward. Gambel's quail production is only expected to be average at best for Clark County and hunters can expect a "fair" season. This coupled with the fact that much of the traditional Gambel's quail habitat in Clark County has been developed causes some concern for the long-term sustainability of this species. A more positive outlook is evident for Lincoln County as additional moisture led to

improved habitat conditions. The forecast for Gambel's quail hunting in Lincoln County is for a relatively good season.

RABBIT

Season Structure and Limits

The rabbit season for 2009-10 extended from October 10, 2009 through February 28, 2010. Rabbit species that are included under this season include cottontail, pygmy, and white-tailed jackrabbit. Black-tailed jackrabbit are not considered a protected species. Limits for these species remained and 10 per day and 20 in possession and could consist of a single species, or an aggregate of species not exceeding those limits.

Harvest and Effort

During the 2009-10 hunting season, a total of 17,553 rabbits were taken by an estimated 3,468 hunters. The estimated harvest and number of hunters was 10.5% and 29% greater than the previous year's figures respectively. The 2009-10 harvest was also 12% greater than the 10-year average harvest of 15,700. Hunter days were also up 26% over the previous year estimate at 17,175 days. Even though these factors showed increases, the number of rabbits per hunter and number of rabbits per hunter day were both down from previous year estimates by 14% and 12% respectively. Questionnaires are designed to track white-tailed jackrabbit and pygmy rabbit harvest separately; however, raw return data suggests that hunters commonly misidentify rabbit species. The estimated harvest for white-tailed jackrabbit was 514 with an estimated 175 hunters pursuing the species.

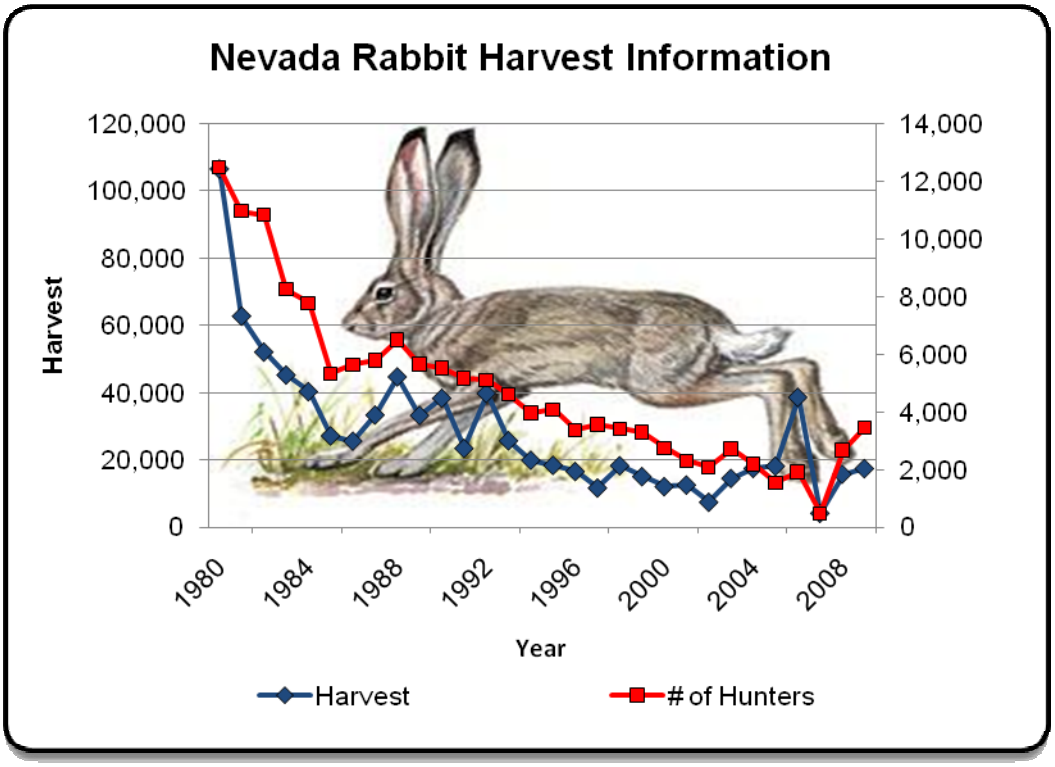


Figure 7. Rabbit harvest and hunter participation from 1980-2009.

Population Status

The long-term average for rabbit harvest from 1960-2008 is 39,284. Last season's harvest was 124% below that average. Hunter numbers have also declined from that same long-term average by 79%. These data suggest that rabbit populations have likely declined from historic levels, but to what degree, is unknown. Anecdotal observations are somewhat divergent from the previous statement and biologists feel that cottontail numbers are still plentiful; however, concern remains over species such as white-tailed jackrabbit and pygmy rabbit. Hunter harvest is very minimal for these two species, thus sport hunting is not considered a threat to these populations. Rather, loss of habitat and degradation of existing habitat (sagebrush biome) are thought to be the leading factors influencing population size and distribution.

STATEWIDE SUMMARY OF MIGRATORY GAME BIRDS

WATERFOWL

Harvest

Pursuant to the guidelines of Adaptive Harvest Management (AHM), the frameworks established by the United States Fish & Wildlife Service (FWS) for the 2009-10 duck hunting season allowed for a liberal season length and general bag limit, with specific bag limit restrictions for duck species that continue to remain below continental objectives. The Nevada Board of Wildlife Commissioners (Commission) adopted the full number of days (107) for Nevada allowed under the framework. Since 1997 'liberal' regulation frameworks have been allowed under AHM, which modifies season length and bag limit prescriptions appropriate to observed changes in waterfowl abundance and expected productivity in North America.

Nevada's 2009-10 duck hunting season began on October 17th for the entire state and extended to Saturday, January 30th, 2010 in Northern Nevada and Friday January 29th, 2010 in Southern Nevada. These closures accommodated days set aside for youth waterfowl hunting, which was a single day in the Northern Zone (October 3, 2009) and two days in the Southern Zone (February 13 - 14, 2009). The Commission adopted a later opening date (October 31, 2009) for the Moapa Valley portion of the Overton Wildlife Management Area.

Species restrictions were in place two years ago with hunters allowed to take no more than two hen mallards, two redheads of either sex and two pintail of either sex and 1 canvasback of either sex. Scaup limits remained at three daily for the fifth consecutive year, but the dates that this species could be taken were reduced to remain compliant with the harvest strategy for this species. Hunters were permitted to take scaup within the bag beginning on Saturday, November 7th to the end of the general season.

Data obtained through the NDOW's Post-season Questionnaire is reported in table 1 and within the Appendix of this report. Within table 1, NDOW's findings are compared to the results of the FWS's *Harvest Information Program* (HIP) survey as published within its preliminary findings publication in July[4]. This survey is a mandatory reporting process that requires hunters to indicate their harvest and hunter efforts via telephone or online poll.

Table 1. Comparisons between HIP and Nevada Post-season Questionnaire estimates.

Year	Estimated Duck Hunters			Estimated Total Duck Harvest		
	HIP(1)	NV Questionnaire(2)	% Diff.	HIP	NV Questionnaire	% Diff.
2003	4,200	4,298	-2%	50,200	44,022	+12%
2004	3,500	3,572	-2%	37,100	38,305	-3%
2005	3,600	3,960	-10%	49,600	56,428	-14%
2006	4,000	4,525	-13%	55,402	69,893	-26%
2007	2,900	4,039	-39%	43,800	45,459	-4%
2008	2,600	3,212	+24%	29,900	42,915	-44%
2009	**3,500**	**4,542**	**+30%**	**41,000**	**51,696**	**-26%**

(1) Expressed as "Active Adult Hunters" within the HIP survey. (2) Figures from 2005 are individual hunters – see explanation in next section.

[4] Raftovich, R.V., et.al. 2010. Migratory bird hunting activity and harvest during the 2008and 2009 hunting seasons: Preliminary Estimates. U.S. Fish and Wildlife Service. Laurel, Maryland. USA

Both processes are expressions of median values and each is accompanied with a range of figures (standard errors), which are not depicted, that are broad or narrow depending upon the statistical power of the collected data. Biases in both survey methods have been detected and both agencies are working toward correcting these.

DUCKS & MERGANSERS

The general limit was seven ducks per day with the species restrictions previously described. Table 2 describes harvest and effort statistics compiled trough Nevada's post-season questionnaire.

Table 2. Statewide duck & merganser harvest - from post-season questionnaire.

	STATEWIDE TOTALS:			Percent Change	
	2008	2009	10-Yr Avg.	Prev. yr.	vs. Avg.
No. of Ducks & Mergs.	42,916	51,834	50,790	20.5%	2.1%
No. of Hunters*	4,898	4,984	4,904	1.8%	1.6%
No. of Days	26,021	27,939	27,173	7.8%	2.8%
Birds / Hunter	8.76	10.40	10.23	14.0%	1.6%
Birds/Hunter Day	1.65	1.86	1.84	9.2%	0.6%
Individual Hunters*	3,212	4,273	--	33.0%	--

* see explanation below

Under current post-season questionnaire analysis protocols, biologists can make calculations of both unique individual hunters and combined, or cumulative, total hunters. In the table above, the number of hunters in the second row represents the sum of all hunters hunting in all counties. Cumulative hunters are represented for each county within all rows of the questionnaire tables for waterfowl and migratory birds (see page Q-1). The totals at the bottom of the columns for 2008 & 2009 represents the estimated total of all *individual* hunters, based upon the reported sales of electronic duck stamp privileges and a proportion of all paper duck stamps sold. It is the proportion of paper stamp sales that represents the largest bias in calculating hunter numbers, a key factor in computing the expansion factors that produce all the estimated figures within all of the questionnaire tables. NDOW continues to investigate opportunities to reduce or eliminate this bias.

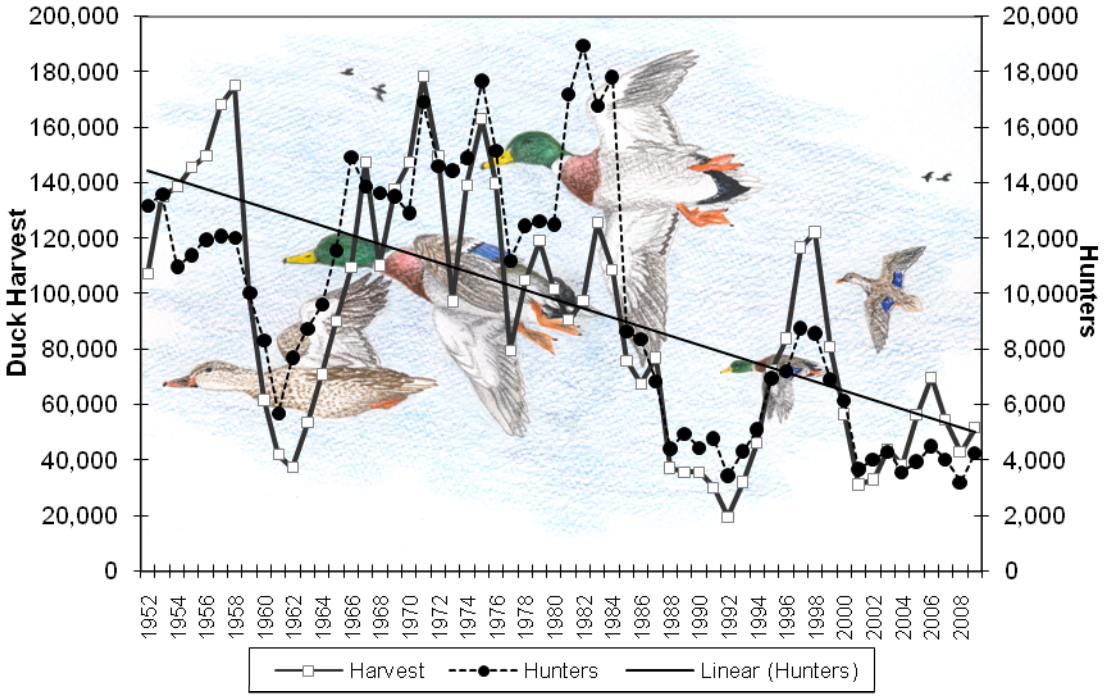
The estimated 'individual hunters' figures are better indicators of what changes in participation have occurred between sample years. There were statistically more hunters during the 2009-10 season than in the previous year. Because individual hunter data has only been collected from the past four years' questionnaires, one cannot make a long-term comparison. Based upon an examination of a sample of the active waterfowl hunting respondents, approximately 30% indicated they hunted ducks in more than one county in 2009-10. Many respondents hunted for ducks in excess of three counties.

Figure 1 below describes the trends for duck harvest and hunter numbers in Nevada based upon NDOW's post season questionnaire data. The decline in harvest numbers during the mid-1980's correlates with declines in continental breeding habitat. Similar habitat trends affected Nevada, though the state did have very good precipitation in the late 1980's – a time when Nevada's deer population had its last major eruption. Marshes benefited from the same precipitation that helped terrestrial species flourish. However, without the migration from northerly breeding grounds, hunters had lots of water to set up a blind, but not much to shoot at. Since 1990, Nevada has seen two peaks in harvest and hunter participation. Both are principally attributed to short term, precipitation-driven habitat reprieves, but again Nevada's habitat is not linked to continental duck numbers.

Another factor that probably contributes to the misalignment of Nevada's hunter and harvest statistics with continental breeding numbers is the overall attrition of duck hunters. Despite recoveries of continental duck abundance, and occasional short-term resurrection of Nevada's marsh habitat, the hunter numbers that the state used to support aren't being revived.

Across the continent, state and federal waterfowl managers of three countries are contemplating a revision to the North American Waterfowl Management Plan (NAWMP). This revision will attempt to define management coherence between duck population data, habitat conditions and hunter perceptions in an attempt to establish the future directions for habitat and population management.

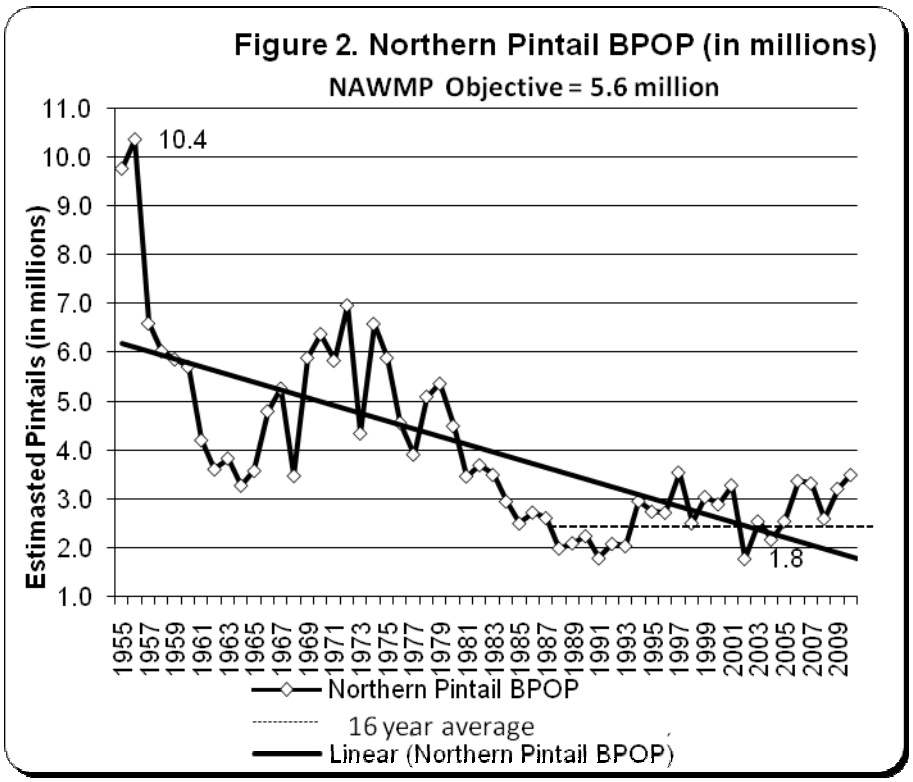
Figure 1. Nevada Duck Hunting Statistics 1952-2009
Source: Nevada Post-season Questionnaire



The performance of specific duck populations such as pintail, canvasback and scaup will be a key consideration in these deliberations. Harvest strategies for these species are constrained by Breeding Populations (BPOP) objectives established in the original NAWMP in the mid-1980s. Those goals were established at a time when duck numbers were on the decline following peaks observed in the 1970s. The harvest strategies attempt to conserve numbers by restraining harvest. Invoking smaller bag limits and shorter seasons are prescriptions to achieve lower mortality attributed to the gun. Some managers have expressed concerns that the complex regulations needed to control harvest on these populations have affected hunter retention and recruitment. Accordingly, this will be a key analytical element in the revision.

It is not yet determined if the revision will address modifications to the BPOP objectives. The pintail population seems to have remained static at a lower population level (see figure 2) over the past 16

years. If this represents a shift in carrying capacity within breeding habitat, then this could possibly stimulate a revision of the pintail objective and thus affect a relaxation of the harvest constraint. Then regulatory impediments may be lessened. Managers in Nevada predict that a return to higher pintail limits could stimulate greater participation of duck hunters in western Nevada at the very least.



GEESE

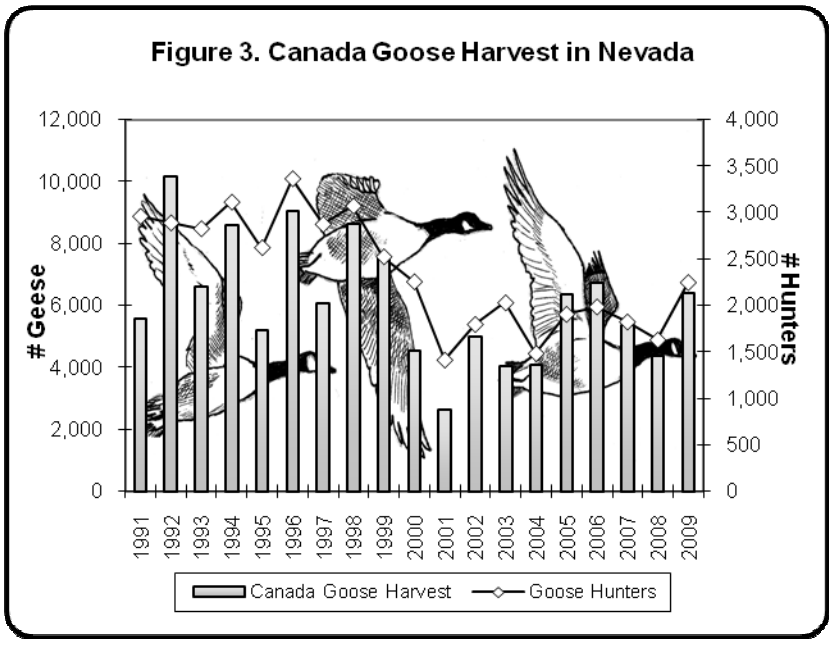
Nevada's 2009-10 goose hunting season began on October 17th for the entire state and extended to Saturday, January 30th, 2010 in Northern Nevada and Friday January 29th, 2010 in Southern Nevada. These closures accommodated days set aside for youth waterfowl hunting, which was a single day in the Northern Zone (October 3, 2009) and two days in the Southern Zone (February 13 - 14, 2009). Limits for the Canada and white-fronted geese were three daily, species singly or in the aggregate. Frameworks for white geese allowed for expanded limits thus the white geese (snow and Ross's geese) limits were ten daily, seasons running concurrent with the dark goose seasons.

Table 3. Statewide dark and white goose harvest - from Post-season Questionnaire.

	STATEWIDE TOTALS:			Percent Change	
	2008	2009	10 Yr. Avg.	Prev. Yr.	vs. Avg.
Dark Geese Harvest	4,384	6,400	5,065	46%	26.4%
No. of Hunters	1,624	2,243	1,880	38.1%	19.3%
Light Geese Harvest	325	718	532	94.7%	34.8%
No. of Hunters	448	580	793	28.3%	-26.9%
TOTAL GEESE:	4,709	7,118	6,076	51.2%	17.1%

Within the Pacific Flyway, the two populations of large-bodied Canada geese (*Branta canadensis moffiti*) have greatly expanded. Migrating geese that originate from both the relatively sedentary Pacific

Population and the more widespread and migratory Rocky Mountain Population comprise the majority of the hunter's bag in Nevada. There are locally produced geese hatching within Nevada's wetlands and translocated nuisance adult geese and goslings that contribute to the harvest totals, but these latter sources pale compared to numerical tide of migratory geese that bred and hatched elsewhere. Most of Nevada's Canada geese harvest occurs in western Nevada within those counties with large amounts of cultivated fields or pasture support the greatest abundance of geese. Again, Churchill County leads all counties in percent of harvest. In this county, geese are taken both incidental to duck hunting in wetlands like Stillwater NWR and Carson Lake and out of decoy spreads set out in agricultural fields. Douglas County remains high in kill per hunter and kill per hunter day statistics.



In the Pacific Flyway, white goose numbers are monitored through population indices measured in December at locations where the birds concentrate, such as the Skagit-Fraser delta near Vancouver and in the Central Valley of California. White geese do not concentrate in great numbers away from the coastal states. In 2007, the index exceeded one million birds, the highest on record. Last December's count remained close to a million birds. Lesser sized flocks of white geese commonly move through the Pacific Flyway interior states, including Nevada, during the spring return migration. Therefore frameworks have been liberalized to allow short spring seasons with 10 bird daily bag limits. Nevada has not investigated the consistency of these return migrations both in terms of numbers and duration. This would be necessary to recommend a spring season in Churchill County. White goose harvest in Nevada continues to be mostly incidental to other waterfowl hunting activities.

TUNDRA SWAN

Last year's swan season commenced on October 17th and concluded on January 3rd, 2010. Permits were available during an initial draw period which had an application deadline of September 18th, 2009. Only 183 applications for the 650 permits (28%) were posted for the initial draw. Remaining permits were available online, over the counter or through the mail after October 5th through the last Friday of the hunting season. An additional 289 permits were sold after the initial draw bringing the total permit sales to 472. This total included 61 second permits, thus there were 411 total permitees last year. Total sales for the 2009-10 season were slightly lower than the previous year. Sales after the initial draw slowed because of freeze-out conditions that eliminated open water hence stopovers by swans were all but eliminated. As swan numbers all but disappeared once open water was frozen hunting and therefore harvest all but stopped. As noted in the duck discussion, the habitat was not fully available and the forage, sago in particular for swans, was not abundant enough to cause swans to linger. Accordingly, hunters were not stimulated to pick up the remaining permits. Continuing a flyway commitment to detect trumpeter swan harvest, NDOW required all successful hunters to have their swan and permit validated within five days of the harvest date. Agency personnel inspected swans at

specific NDOW offices where they could examine the birds' bills and feather coloration. This scrutiny is necessary to detect occurrence of protected trumpeter swans. In this manner, incidental take can be documented and its impact to the latter species can be assessed.

Table 4. Past ten years of Nevada swan harvest.

Year	Tags / Permits Purchased	Percent Participating	Reported Harvest	Expanded Hunter Days
2000	493	63%	71	1,242
2001	308	78%	58	1,171
2002	273	69%	40	886
2003	298	74%	71	802
2004	330	67%	77	892
2005	370	73%	92	934
2006	605	73%	147	2,014
2007	650	77%	200	1,996
2008	535	75%	124	1,597
2009	472	60%	56	1,424
'00-'08 Avg.	429	72%	98	1,282

Last year juveniles made up only 17% of the total swan harvest (n=22), a figure that is well below the average of 33%. No trumpeter swans were taken in the 2009-10 season. Only 71% of permitees hunted last year, lower than the 73% average and probably a result of diminished swan numbers. Hunters reported taking 56% of swans at Stillwater NWR, lower than the LTA of 62%.

Nonresidents accounted for 8% of all individual swan permitees last year. Sixty-five percent of those were California residents.

Population Status

Each year the FWS conducts a continental assessment of the status of waterfowl[5]. The FWS follows established survey protocols to evaluate bird abundance and habitat conditions within traditional survey areas in the central and northwest portions of North America, known as the Prairie Pothole Region and the Canadian Parkland Region, and in Northwest Canada and Alaska. Service statisticians then incorporate these data into annual or multi-year population models.

Biologists estimated this spring's breeding duck population (BPOP) within the traditional survey area at 40.9 million birds. This total represents a minimal (2.4%) decrease compared to the 2009 estimate. BPOP numbers were primarily influenced by a 35% increase over the long term average in observed ponds within prairie United States and Canada (n=6.7 million vs. LTA n=5.0 million). The total duck BPOP estimate is 21% above the LTA, which is based upon surveys dating back to 1955 (see figure 2). Breeding population estimates are depicted below.

Almost all species showed little to no change in estimated numbers compared to the previous year, but, many are still above the long term average. Most impressive to managers was the continued increase in pintails, a species which is heavily dependent upon prairie potholes. Many of the potholes are amidst intensely cultivated land. Other ponds existed in areas that had been devastated by drought. Thus the dense upland cover sought by nesting hens was not apparent and the pilot/biologists'

[5] U. S. Fish and Wildlife Service. 2009. *Waterfowl population status, 2010*. U.S Dept. of the Interior, Washington, D.C. USA. 75pp.

observations may have only caught a snapshot of birds that were likely to move on. Regardless, pintail numbers still remain below the LTA but are higher than the 16-year average (see figure 2).

Table 5. Five-year Duck BPOP estimates (in thousands) for 10 species within the traditional survey area.

							% change	
Species	**2006**	**2007**	**2008**	**2009**	**2010**	**LTA**	**v.2009**	**v LTA**
Mallard	7276.5	8307.3	7723.8	8512.4	8430	**7529**	-1.0%	12%
Gadwall	3386.4	3335.3	2612.8	3053.5	2977	**1787**	-2.5%	66.6%
Pintail	3386.4	3335.3	2612.8	3225	3509	**4041**	8.8%	-13.2%
BW Teal	5859.6	6707.6	6640.1	7383.8	6329	**4657**	-14.3%	35.9%
GW Teal	2587.2	2890.3	2979.7	3443.6	3476	**1948**	1.0%	78.4%
Wigeon	2171.2	2806.8	2486.6	2468.6	2425	**2607**	-1.7%	-7.0%
Shoveler	3680.2	4552.8	3507.8	4376.3	4057	**2312**	-7.3%	75.5%
Scaup	3246.7	3452.2	3738.3	4172.1	4244	**5073**	1.7%	-16.3%
Redhead	916.3	1009	1056	1044.1	1064	**652**	1.9%	63.2%
Canvasback	691	864.9	488.7	662.1	585	**570**	-11.6%	2.6%

Redheads again exceeded the million bird mark for the fourth consecutive year while canvasback numbers continue to be above the long term average. Hunters will want to be in Nevada's marshes when waves of these migrating species pass through.

NDOW biologists observed a total of 58,277 waterfowl in Nevada's portion of the Mid-winter Waterfowl Survey (MWS) last January (see appendix). This represents a significant decline of 25% compared to the previous year's results. Again, this is likely attributable to forage scarcity. The observed total is 13% below the LTA. The mid-winter survey is a coordinated effort to inventory the Pacific Flyway's migrating waterfowl. States conduct the survey simultaneously in early January to avoid double counts between proximal geographic areas. Canada goose numbers remained fairly consistent as this species is can forage upon terrestrial vegetation rather than aquatic vegetation exclusively. The swan count was well below both short and long-term averages. It can be surmised that sago depletion is to blame.

Productivity Potential

The Pacific Flyway Council (PFC) and the FWS recently implemented a western mallard AHM strategy. Under this strategy harvest regulations frameworks would be based upon the status of mallard stocks derived from breeding grounds in the western continent. The status of breeding populations would be determined by established surveys, both within the traditional survey area and with the use of survey findings in western states and British Columbia. Managers recently adopted the western mallard model to establish the estimates required to denote the dynamics of this population. This approach prompted many states in the Pacific Flyway to modify their waterfowl breeding population surveys so that their survey estimates could be factored into the model and thus contribute to harvest decisions. Although Nevada has traditionally conducted an annual census of waterfowl since 1959, the protocols used during this survey did not meet the FWS requirements for inclusion in their breeding population estimates.

Therefore in 2009 NDOW designed a survey that allowed for a stratified sampling approach that encompassed all potential waterfowl breeding habitat in Nevada[6]. This action was instituted in order to make Nevada's BPOP survey estimates contributory to the western mallard model process. Appropriate protocols had already been in place in California and Oregon. Washington is redesigning their protocols as well. Other western states may follow.

While planning for this adjustment in survey methodology, biologists considered appropriating the funding and effort in running simultaneous surveys using the old protocols. The purpose would be to attempt to establish a conversion factor that could be applied to past year's surveys so that the modifications of past data could be used for comparison. This is the same approach now being investigated by Washington, but the process requires at least three years of dual surveys in an attempt to mitigate individual year biases. However, the effort would have been very costly in terms of flight time and manpower, so the comparison flights have been shelved for now. NDOW will continue to refine its survey methodology.

Under the above circumstantiates this report only provides this year's data. Because of the sampling regime BPOP estimates are calculated using an expansion factor against the observations made within segments of four survey strata identified for Nevada: river, marsh, agricultural, and lake/reservoir. These findings are provided below:

Table 6. Breeding population estimates of waterfowl by species and stratum surveyed in Nevada in 2010. (standard errors are in parentheses)

Species	Stratum									
	Agriculture		Lake/Reservoir		Marsh		River		TOTALS:	
Mallard	2,855	(1,251)	285	(735)	4,765	(903)	973	(1,189)	8,878	(520)
Gadwall	1,273	(1,047)	561	(615)	5,000	(755)	350	(994)	7,183	(435)
Cinnamon Teal	3,249	(1,930)	941	(751)	3,923	(1,162)	1,193	(1,277)	9,307	(674)
Redhead	771	(3,972)	95	(2,334)	13,477	(2,865)	0	(3,773)	14,344	(1,652)
Northern Pintail	227	(77)	33	(45)	109	(56)	44	(73)	413	(32)
Ruddy Duck	1,959	(2,084)	1,045	(1,029)	7,949	(1,377)	801	(1,669)	11,754	(794)
Canvasback	86	(5,744	202	(3,374)	10,900	(4,143)	0	(5,456)	11,188	(2,389)
Lesser Scaup	12	(1,100)	300	(646)	2,062	(793)	0	(1,045)	2,374	(458)
Ring-necked Duck	7	(79)	7	(44)	147	(56)	9	(71)	171	(32)
American Wigeon	25	(90)	80	(43)	121	(59)	15	(70)	242	(34)
Northern Shoveler	145	(125)	0	(73)	240	(90)	3	(119)	388	(52)
Bufflehead	117	(1,006)	29	(591)	1,677	(726)	8	(956)	1,832	(418)
Common Merganser	36	(93)	278	(54)	0	(67)	251	(88)	564	(39)
Wood Duck	0	(52)	0	(30)	0	(37)	144	(49)	144	(22)
Common Goldeneye	23	(49)	95	(29)	0	(35)	0	(46)	119	(20)
TOTALS:	10,786		3,952		50,371		3,792		68,901	

6 Nicolai, C.A., et.al. 2009. *Redesign of the Nevada waterfowl breeding survey.* Nevada Department of Wildlife. Unpubl. 28pp.

Table 7. Comparison of species proportions within survey findings.

Species	2009 Revised	2010 Revised	1959-2008 avg. Traditional
Mallard	12.0%	12.9%	7.4%
Gadwall	24.5%	10.4%	17.1%
Cinnamon Teal	30.4%	13.5%	26.4%
Redhead	5.4%	20.8%	27.3%
Pintail	2.3%	0.6%	3.4%
Ruddy Duck	10.8%	17.1%	8.5%
Canvasback	3.0%	16.2%	1.7%
Scaup (spp)	3.5%	3.4%	4.2% (misc ducks)
Ring-necked Duck	1.4%	0.2%	
Wigeon	2.1%	0.4%	
Shoveler	1.4%	0.6%	1.7%
Bufflehead	0.1%	2.7%	
Common Merg.	1.6%	0.8%	
Wood Duck	0.6%	0.2%	
GW Teal	0.9%		

In the contemporary survey, NDOW observers record all species seen. Past surveys generally did not look closely at river and agricultural strata, but under the new protocols, NDOW observers were able to detect certain species like wood ducks and common mergansers. Some species such as mallard and gadwall are very adaptable in their nest site selection. They were observed on small irrigation ditches and farm ponds fairly readily. Accordingly, their proportions increased. The proportion of cinnamon teal seen in both surveys is fairly static. This species and redheads have typically been the two most common breeders in Nevada in the recent past.

In past surveys, scaup were considered late migrants and were not counted as breeding birds within Nevada. Although summer observations of scaup on some of the state's WMA's confirms that at least some scaup do produce broods in Nevada, NDOW has not undertaken the effort to compare survey findings with these subsequent ground observations in order to establish an index to calculate breeding pairs of scaup. Within the new survey method, observers are directed to make notations of scaup spatial distribution to attempt to discern migrating flocks from dispersed pairs. The observations suggest that many of the scaup were expressing breeding behavior.

As was the case last year, ruddy duck numbers were high. The explanation for this is elusive. This species often has unexplained highs and lows and managers speculate that their May abundance is probably correlated with the progression of their migration, rather than a response to habitat conditions.

As of this writing, there have been no confirmed major outbreaks of botulism, a natural mortality factor that affects all age classes.

Readers are encouraged to obtain additional information about the status of migratory birds by visiting the United States Fish & Wildlife Service, Division of Migratory Bird Management's website at: migratorybirds.fws.gov/reports/reports.html

MOURNING AND WHITE-WINGED DOVE

Harvest

Nevada's traditional dove season comprised the 30 days of September 2009. The bag and possession limits were 10 and 20, respectively. White-wing dove hunting was limited to Nye and Clark counties only.

The United States Fish & Wildlife Service (FWS) conducts harvest surveys through its *Harvest Information Program* (HIP) survey. The same protocols used to estimate waterfowl harvest are applied to the dove findings collected through this survey. NDOW has been refining its questionnaire by attempting to poll a larger proportion of the hunting public. This year's response depicted more individual dove hunters than any previous survey, giving biologists a fairly robust data set from which to make its extrapolations. Table 1 describes the findings of the two survey approaches:

Table 1. Comparisons Between Estimated Dove Harvest Statistics for Nevada.

Year	Estd. Hunter Numbers			Estimated Hunter Days			Estimated Dove Harvest		
	HIP[1]	NV Q	% Diff	HIP	NV Q	% Diff	HIP	NV Q	% Diff
2002	5,200	5,355	-3%	17,800	15,112	+15%	71,300	62,977	+12%
2003	4,700	4,074	+13%	10,800	10,177	+6%	42,100	37,750	+10%
2004	3,800	3,434	+10%	8,800	9,619	-9%	36,500	34,650	+5%
2005	4,100	4,110[2]	--	10,000	14,580	-46%	47,700	50,364	-6%
2006	4,100	4,325[2]	-5%	9,400	13,650	-45%	38,900	53,850	-38%
2007	2,800	3,214[2]	-15%	9,600	14,135	-47%	38,500	48,629	-26%
2008	4,900	4,215[2]	-14%	12,200	14,840	-24%	45,000	51,785	-15%
2009	4,600	3,864[2]	-16%	11,600	13,652	18%	41,500	45,954	11%

(1) Expressed as "Active Adult Hunters" within the HIP survey.
(2) Figures in 2005 - 2009 are *individual* hunters

Hunter numbers estimated through Both the HIP process and NDOW's survey describes a slight decline in hunter numbers, harvest and hunter days for 2009. Dove harvest data obtained through the *2008-09 Nevada Post-season Harvest Questionnaire* are as follows:

Table 2. Nevada mourning dove harvest - from Post-season Questionnaire.

	STATE TOTALS:			Percent Change	
	2008	2009	99-08 avg.	Prev. yr.	vs. avg.
No. of Birds	51,786	45,954	45,877	-11.3%	0.2%
No. of Hunters[3]	4,493	4,184	4,232	-0.7%	-1.1%
No. of Days	14,839	13,652	12,627	-8.0%	8.1%
Birds / Hunter	11.53	10.98	10.76	-0.11%	0.02%
Birds/Hunter Day	3.49	3.37	3.63	-0.04%	-0.07%

(3) Figures in the row represent cumulative hunters.

NDOW's revised questionnaire allows managers to analyze individual hunters – the estimated number of license holders that hunted doves, as well as cumulative hunters – the total of all the estimated number of persons that hunted in each of the state's 17 counties. Since past analysis incorporated the cumulative value, it is used here for comparison to short and long-term averages. It is obvious that

some dove hunters actively hunt in more than one county. Individual hunter total calculations are only estimated for the past three seasons.

Table 3. Mourning dove harvest by region - from Post-season Questionnaire.

	WESTERN			EASTERN			SOUTHERN		
	2008	2009	AVG.*	2008	2009	AVG.	2008	2009	AVG.
No. of Birds	37,183	30,312	25,293	3,029	3,610	5,046	11,574	12,031	15,673
No. of Hunters	2,849	2,589	2,286	429	466	642	1,215	1,129	1,379
No. of Days	10,125	8,873	6,580	1,176	1,169	1,549	3,538	3,610	4,469
Birds / Hunter	13.05	11.71	10.9	7.06	7.75	7.7	9.53	10.66	11.4
Birds/Hunter Day	3.67	3.42	3.8	2.58	3.09	3.3	3.27	3.33	3.6

*average is 1997-2006

Overall, the state's dove harvest has recovered from record lows set in the earlier part of this decade. Hunter's season totals and their average daily harvest have increased in the past four years, perhaps indicative of an aging, knowledgeable and effective hunter cadre. These values are fairly similar to their respective previous year and the 10-year averages; however, when compared to previous decades, the recent statistics are insubstantial (table 4). This is particularly evident when comparing harvest and days.

Figure 1. Nevada dove harvest & hunter data.

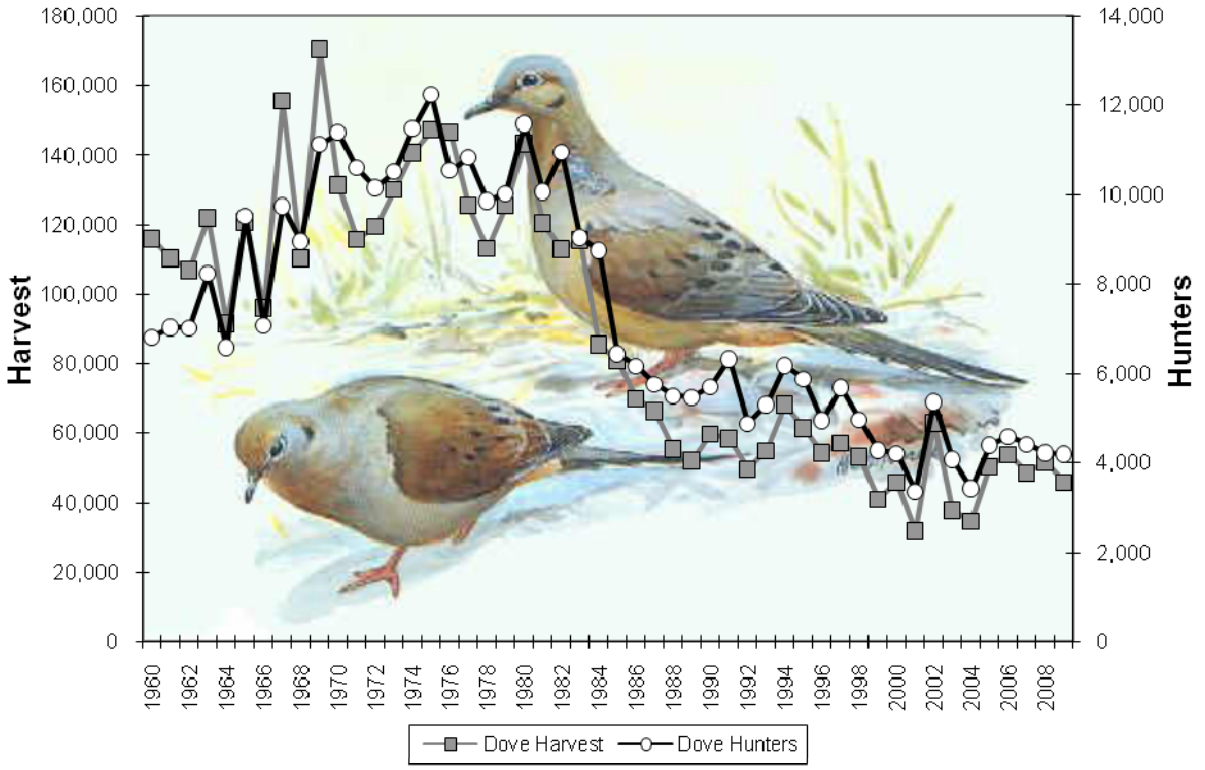


Table 4. Statewide dove harvest by decades - from Post-season Questionnaire.

	1960's	1970's	1980's	1990's	2000's
No. of Birds	119,945	129,489	90,248	55,843	46,366
No. of Hunters	8,208	10,765	7,968	5,410	4,222
No. of Days	26,590	34,388	23,333	15,600	12,691
Birds / Hunter	14.61	12.03	11.33	10.32	10.90
Birds/Hunter Day	4.51	3.77	3.87	3.58	3.65

White-winged Dove – This year 1,616 individual questionnaire respondents indicated that they hunted migratory game birds other than waterfowl during the 2009-10 hunting season. Of these, 28 indicated that they hunted white-winged dove in Clark and Nye counties during the 2009 hunting season. This data was sufficient to perform an extrapolation of harvest. Those harvest figures are depicted on page Q-6. NDOW cannot do any comparisons between years because the white-winged dove data has been very sporadic. Suffice it to say that this species is not abundant in Nevada and will continue to be somewhat of a novelty among southern Nevada hunters.

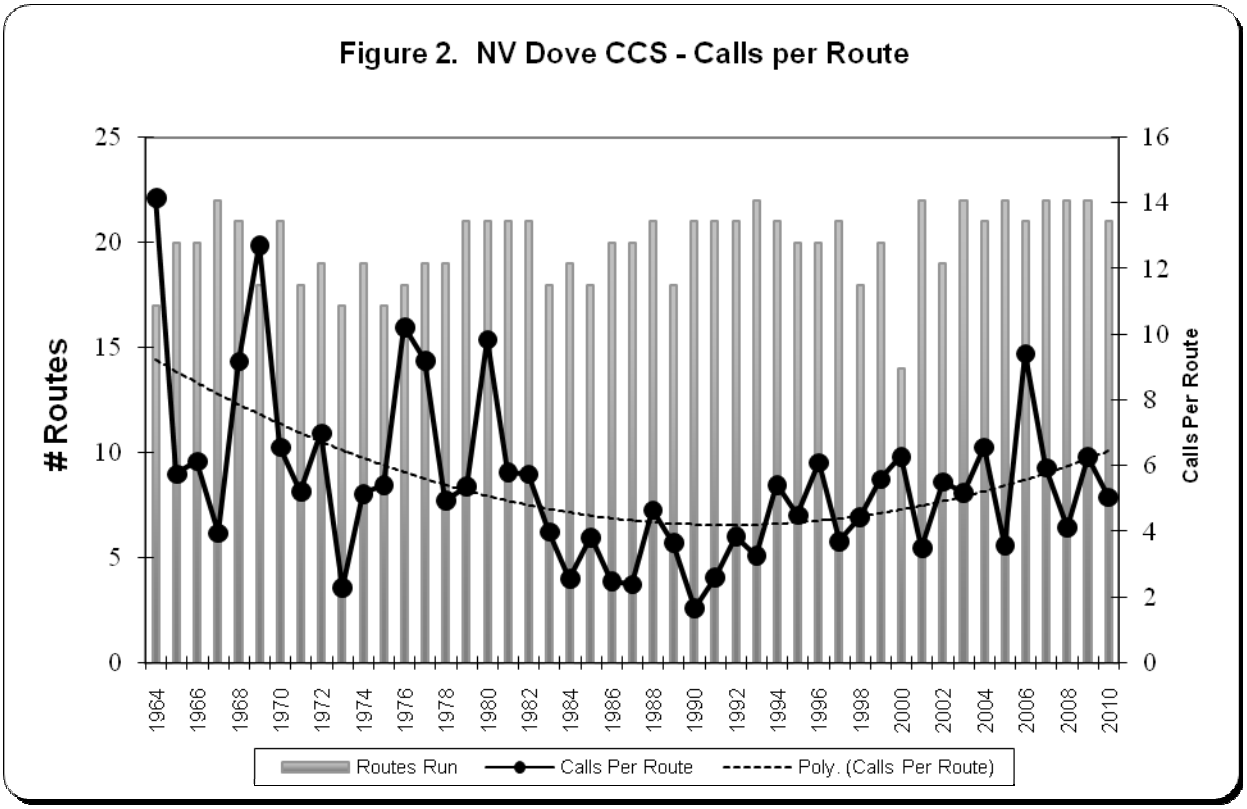
Eurasian Collared Dove –NDOW asked questionnaire recipients to indicate whether or not they shot Eurasian Collared Doves (ECD) in 2009-10. This is a bird that is expanding its distribution and abundance throughout the nation and in Nevada. Four hundred eighty individual questionnaire respondents indicated ECD harvest in all but two of Nevada's 17 counties. Those numbers are up from 90 hunters harvesting in all but three counties in 2008. The data supports an estimated statewide harvest of 3,938 in 2009 compared to 1,907 birds in 2008. The species is unprotected and the questionnaire did not ask which month the birds were shot in. However, it is suspected that most were taken incidental to mourning dove hunting. Managers continue to attempt to gain an understanding of the bird's ecological role.

Population Status

The FWS coordinates the Mourning Dove Call-count Survey for the entire nation. This comprehensive effort includes more than 1,000 randomly selected routes distributed within physiographic regions. These migratory game birds are managed within three zones – the Eastern, Central and Western Management Units (MU). Populations within these MUs are considered to be largely independent of one another. Nevada is one of seven of the contiguous western states within the WMU. There are 22 call-count routes in Nevada, most of which have been run since 1964.

State and federal biologists in Nevada conducted 21 of the established survey routes this spring. This year route-runners observed 53 birds compared to 121 last year and considerably less than the LTA of 171. Documented calls amounted to 106, compared to 138 in 2009 and the LTA of 110. Of course these data are subject to a number of biases and the rules for establishing or moving established routes are very strict. Managers have been somewhat critical of the inclusion of this data into models that will affect adaptive harvest management of doves in the near future. Like duck season frameworks, frameworks for season length and bag limit will be established by the FWS following a consultation process, but the status of MU populations will be determined through modeling. Presently, a nationwide banding effort is underway in an effort to quantify distribution, abundance and vital rates of these birds in order to achieve better precision in the models.

Last summer, biologists captured and banded a total of 531 dove at eleven sites in the state. The recovery and report of these bands, mostly by hunters, will help estimate dove abundance and distribution patterns.



BAND-TAILED PIGEON

No survey and inventory activities were conducted for this job during this report period.

AMERICAN CROW

Harvest

Crow hunting was open statewide with two hunt periods. The fall hunt was September 1st to November 17th, 2009 and the spring hunt extended from March 1st to April 15th, 2010. The limit was 10 daily and 10 in possession. Hunters were required to retrieve their crows and remove them from the field.

NDOW modified its harvest questionnaire to attempt to document crow harvest beginning in 2003, with specific questions incorporated within the 2006 questionnaire. Initially, data was too insignificant to merit any analysis but as the agency increased its distribution to a larger base of small game hunters, enough responses came in to affect an estimated harvest (see page Q-8). This year, 85 of 1,896 (4.5%) individual respondents that hunted migratory bird also reported harvesting crows. Table 1

depicts harvest data recorded since 2003, with a separation of figures after 2006 to differentiate between raw data collected for four years and estimates modeled for the past two years. Managers speculate that the majority of crow harvest occurs in the fall hunt.

Table 1. – Reported American crow harvest in Nevada.

	CC	CH	DO	HU	LY	MN	PE	ST	WA	EL	EU	LA	WP	CL	ES	LN	NY
2003	4	5	5	--	--	--	--	--	--	2	17	--	--	1	--	1	--
2004	--	6	2	36	124	--	4	--	--	--	32	13	--	42	--	--	18
2005	3	1	--	4	49	41	2	--	1	54	1	51	5	--	--	2	10
2006	--	0	--	9	3	3	15	--	1	16	--	11	--	--	6	16	1
2007	--	262	363	68	233	2	77	--	198	72	--	--	--	363	0	98	30
2008	--	93	--	42	291	19	--	32	16	19	--	109	32	80	--	67	--
2009	--	136	50	311	91	5	50	--	10	69	17	31	7	165	--	--	53

Since the sample size is still relatively small, some variation in data can be quite significant between years. This is particularly evident for Humboldt County where the estimated harvest greatly increased. The 2009-10 harvest estimates are based upon data provided by information provided by a total of 85 questionnaire respondents. Last year, there were 31 respondents that indicated they hunted crows. Only a greater distribution of questionnaires among theoretical small game hunters, in other words a higher sampling rate, will achieve more statistically reliable estimates.

Population Status

Crows are not classified as migratory *game* birds under federal rule thus the FWS does not regulate the take of American Crows. Accordingly, there are no coordinated efforts within the flyways to determine their population status. NDOW does not conduct any population analysis other than an analysis of harvest data. The species is ubiquitous and since it is lightly hunted within a broad statewide distribution, managers feel that the harvest data is not indicative of crow population trends. The extent of the effects of West Nile Virus is not known, although it is recognized that corvids are particularly susceptible to the disease.

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REGIONAL SPECIES SUMMARIES

SAGE-GROUSE

WESTERN REGION

Harvest

During the 2009 general season in Humboldt and Washoe Counties, a 15-day standardized season was held for sage-grouse from September 25th through October 9th. In Humboldt and Washoe Counties, areas 1, 3, and 5 were open for harvest excluding certain units. Closed areas included units 033, 035, 042, 044, 046, and 151 in Humboldt County and 021, 022, 033, 194, and 196 in Washoe County. Unit 184 of Churchill and Lander Counties was open with a two day season on October 3rd and 4th. Bag limits remained the same as the previous year's season with two daily and four in possession limits. Unit 033, on the Sheldon National Wildlife Refuge, had two special two-day hunts offered during September. These two weekends were September 19th-20th and September 26th-27th. Participation was limited to 75 permits per hunt period, awarded by lottery. The daily bag and possession limits for these special hunts were two and four, respectively. Table 1 describes the combined hunting season results of the open counties within the Western Region.

Table 1. WESTERN REGION SAGE-GROUSE HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	10-Yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	1,974	4,317	1,938	118.7%	122.8%
No. of Hunters	1,366	2,023	984	48.1%	105.6%
No. of Days	2,651	4,310	2,008	62.6%	114.7%
Birds / Hunter	1.45	2.13	2.0	47.7%	4.7%
Birds/Hunter Day	.74	1.0	1.0	34.5%	.4%

Questionnaire data was acquired using a sample of those individuals that purchased an upland game stamp. This method is being used to capture information from those individuals that specifically hunted upland game birds during the 2009 season. Regional harvest statistics for the 2009-10 season showed a significant increase in both the number of birds harvested and the number of participating hunters over both short and long term trends.

Population Status

Factors influencing sage-grouse populations in the Western Region include urbanization, improper grazing management, mining, pinyon and juniper encroachment, energy development and wildland fires that have changed vegetation type. Currently, the Ruby Pipeline project is planned to go through some of the most undisturbed areas within Humboldt and Washoe Counties. Significant disturbance and fragmentation of existing sage-grouse habitat will occur during the construction of this pipeline. Future monitoring will determine what effect these disturbances have on existing populations.

Department biologists continue to monitor sage-grouse population trends throughout the region. Spring lek counts and brood surveys are conducted annually in most PMU's within the Western Region. Lek counts were conducted from both the ground and from the air. Lek counts and brood survey data are used to establish population estimates for most sage-grouse populations. The Western Association of Fish and Wildlife Agencies (WAFWA) guidelines suggest that populations with less than 300 breeding birds should not be hunted and, within hunted populations, harvest rates should not exceed 10% of the estimated fall population. All hunted areas either met or exceed WAFWA guidelines.

During November 2009, a total of 1,492 hunter-harvested wings were analyzed by Department biologists in the Western Region. Table 2 summarizes this information.

Table 2. Western Region Wing Data by Area

Hunt Area	Adults		Juveniles		Total Harvest	Young/ Hen
	Males	Females	Males	Females		
Sheldon NWR	9	38	35	58	140	2.45
Buffalo/Skedaddle	13	13	20	25	71	3.46
Total Massacre PMU	36	57	47	76	216	2.16
Unit 012	8	10	10	10	38	2.00
Unit 013	19	31	26	50	126	2.45
Unit 014	9	16	11	16	52	1.69
Vya PMU	9	6	7	8	30	2.5
Other Washoe	3	6	17	12	38	4.83
Total WA Co.	70	120	126	179	495	2.54
Santa Rosa PMU	22	82	46	66	216	1.37
Lone Willow PMU	93	133	177	213	616	2.93
Pine Forest PMU	0	9	11	15	35	2.89
Black Rock PMU	5	4	11	9	29	5.00
Total HU Co.	120	228	245	303	896	2.40
Desatoya	10	39	27	25	101	1.33
Total Churchill	10	39	27	25	101	1.33
Total Western Region	200	387	398	507	1,492	2.34

Production is measured by the number of young per female which can be obtained from hunter harvested wings. Overall production rates remained the same as what was measured in 2008. Production values ranged from 3.46 young per female in Washoe County to 1.33 young per female in Churchill County. Overall, production in the Western Region is showing a slight upward trend. Sage-grouse like many other species are very cyclic in population highs and lows. The last two years have shown an increasing trend in production.

Biologists observed over 1,860 sage-grouse during lek counts conducted in 2010 compared to 2,900 in 2009. The average number of birds observed per lek was 13.2. Radio-marking studies continue throughout the region to monitor both movement patterns as well as use areas. These projects have provided information to assist with the management of this species.

Productivity Potential

Information gathered from hunter harvested birds in 2009, lek counts and brood surveys in 2010 indicate sage-grouse populations are stable. Production numbers for this past summer range from fair to good in most sage-grouse areas. Late spring rains, wind and cold temperatures may have delayed nesting activity.

Fall Prediction

Despite below average winter precipitation, late spring and early summer rains provided for improved range conditions. Production rates are expected to be near average and hunters can expect to see bird numbers similar to last year. Currently, range conditions are beginning to dry out and baring a significant moisture event during September, hunters can expect to see birds closely associated with water sources during the opening portion of sage-grouse season. Hunters can also expect dry and dusty conditions for the beginning of the hunting season.

EASTERN REGION

Harvest

The Eastern Region (Elko, Eureka, Lander and White Pine) sage-grouse season was increased from 9 days to 15 days in 2007. The season was set for several years so the 2009 season ran from September 25 through October 9, 2009. Bag limits were not changed and remained at 2 daily and 4 in possession. Since 2003 Game Management Unit 151 in Lander County has been closed to sage-grouse hunting based on low population levels of sage-grouse in the Battle Mountain and Fish Creek Population Management Units (PMU's). Since 2005, Units 079 and 106 in Elko County and Unit 132 in White Pine County have been closed to sage-grouse hunting. Due to management area boundary changes, Unit 091 was also added to those areas closed to sage-grouse hunting in Elko County in 2007. Units 114 and 115 were both closed to sage-grouse hunting in White Pine County in 2008 also due to low population levels.

Table 3. EASTERN REGION SAGE-GROUSE HARVEST BY COUNTY
Post-season Questionnaire Data

	COUNTY TOTALS:			Percent Change	
	2008	2009	Avg.	Prev. yr.	vs. Avg.
Elko	1,861	2,505	1,404	35%	78%
Eureka	671	553	365	-18%	51%
Lander	430	700	299	63%	134%
White Pine	492	537	287	9%	87%
Eastern Region	3,454	4,295	2,354	24%	82%

Table 4. EASTERN REGION SAGE-GROUSE HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	Avg.	Prev. yr.	vs. Avg.
No. of Birds	3,454	4,295	2,354	24%	82%
No. of Hunters	1,722	2,231	1,360	30%	64%
No. of Days	4,002	5,010	2,857	25%	75%
Birds / Hunter	2.0	1.9	1.8	-4%	9%
Birds/Hunter Day	0.9	0.9	0.8	0%	4%

The 2009 sage-grouse harvest increased in 3 of 4 Eastern Region counties and was only down in Eureka County (-18%). Although harvest decreased slightly in Eureka County, it was 51% above the previous 10-year-average. Sage-grouse harvest increased 24% overall in the Eastern Region and was 82% above the previous 10-year-average. The number of birds per hunter was down slightly in 2009 while the birds per day was unchanged compared to 2008. Both were above the previous ten-year-average.

Population Status

Summer brood survey sample sizes in 2009 remained low for the Eastern Region (Table 5) because the effort to collect samples has been reduced. The largest sample was obtained in White Pine County (68% of the Eastern Region's sample) followed by Elko County (28%). Lander County had provided the largest sample of sage-grouse between 2004 and 2007. A total Regional sample of 128 sage-grouse was classified with an average brood size of 3.1, a young/hen ratio of 2.81 and a young/adult ratio of 1.83. The Region's sample size in 2008 was 234 sage-grouse with an average brood size of 3.7, a young/hen ratio of 2.38 and a young/adult ratio of 1.50. Both the adult/young and young/hen ratios increased from 2008 to 2009. Brood sizes increased in White Pine County and decreased in Elko and Lander Counties between 2008 and 2009.

Table 5. SAGE-GROUSE PRODUCTION SUMMARY - EASTERN REGION 2009

County	Bird Totals					Ratios		Total Complete Broods	Tot. Yng. in Complete Broods	Avg. Brood Size
	Observed	Classified	Adults	Hens	Young	Young/ Ad	Young /Hen			
Elko	34	34	11	7	23	2.09	3.28	7	23	3.3
Eureka	0	0	0	0	0	0.00	0.00	0	0	0
Lander	12	12	4	4	8	2.00	2.00	4	8	2.0
White Pine	96	82	25	15	42	1.68	2.80	3	13	4.3
Reg. Total:	142	128	40	26	73	1.83	2.81	14	44	3.1

Wings collected from hunters in 2009 were assessed to determine male/female ratios and production. Wing data for the Eastern Region are summarized in Table 6.

Table 6. EASTERN REGION SAGE-GROUSE WING DATA - 2009

County	Total Wings	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Ratios	
						Juv./ Ad Hen	Juv./ Adult
Elko	591	60	183	169	179	1.90	1.43
Eureka	186	22	50	43	71	2.28	1.58
Lander	141	19	48	34	40	1.54	1.10
White Pine	82	11	24	25	22	1.96	1.34
Reg. Total:	1000	112	305	271	312	1.91	1.39

The majority of wings were obtained from hunters through strategically placed wing collection depositories (*wing barrels*). Wing analysis indicated survival of young birds into October improved from 2008 to 2009 with a 35% increase in the juvenile/adult hen ratio and a 38% increase in the juvenile/adult ratio. A comparison with brood data shows that 2.81 young/hen observed in July decreased to 1.91 by October.

Winter survival of birds was good throughout the Eastern Region in 2009-2010. Sage-grouse are adapted to heavy snow cover, cold temperatures and deep snow as long as heavy crusting is not experienced and especially if there are vast sagebrush areas available for migration of sage-grouse to winter ranges. Lek count data on comparable leks in the Eastern Region for 2010 are summarized as follows:

- +8% in Elko County;
- +7% in Eureka County;
- +23% in Lander County; and
- -5% in White Pine County.

There has been a gradual downward trend in sage-grouse lek attendance over the long-term throughout the Eastern Region since the 1960's. Following gradual overall increases between 2000 and 2006, a downward trend was documented between 2006 and 2009 with increases in 2010 in 3 of the 4 counties.

Elko County harbors some of the largest sage-grouse populations within Nevada. There are a total of 10 PMUs within this planning area. Four biologists share responsibilities for these 10 PMUs. Lek-monitoring efforts were coordinated between Elko NDOW and Elko BLM Field Office personnel as well as volunteers. Monitoring by NDOW personnel focused on trend ground counts and ground-truthing of existing leks in the database. BLM efforts were directed more towards checking leks for activity associated with burned areas, proposed power line projects or in areas that have little historic data available.

In Elko County during the spring of 2010, NDOW personnel monitored 14 trend leks which were checked between 1 and 7 times each during March, April and early May. They counted 599 males with an average of 43 males/lek. This represented an 8% increase from 2009. There was a shift in 2010 when leks peaked. Seven leks peaked in early-May, six in April and one in March. In 2009 most leks peaked in mid to late April, one peaked in mid-March and one in early May. A continued effort will be made in Elko County to ground truth questionable leks. Recently burned leks will continue to be monitored to evaluate if they persist and leks abandoned because of fire will continued to be surveyed to determine if they become occupied sometime in the future.

In Eureka County, the peak male attendance on the 10 comparable grounds for 2009 was 170 for an average of 17 males per ground. This resulted in a 7% increase from 2009 when 159 males were counted for an average of 16 males per ground. The slight increase occurred even with 1 lek having no birds in attendance in 2010. The increase in 2010 followed a 16% decrease the previous year. In addition to trend counts, there were 8 additional leks surveyed by NDOW and UNR graduate students in 2010 for a total of 18 leks to compare. These 18 leks had 288 males in attendance for an average of 16 males/lek. In 2009, there were 279 males yielding an average of 16 males/lek. One of the 8 additional leks monitored had no male sage-grouse in attendance in 2010. Using this extended list of leks monitored, an increase of 3% in lek attendance was documented.

In Lander County 5 trend leks were monitored and 152 males were observed in 2010 for an average of 30 males/lek compared to 114 males and 23 males/lek in 2009. This accounts for a 23% increase of male attendance on trend leks compared to the 2009 counts. No new leks were documented in 2010.

In White Pine County, lek monitoring was complicated by lingering snow, poor access and many mornings lost to poor weather conditions. The result was a decline in the number of leks checked compared to 2009. USGS initiated a long-term sage-grouse study along the SWIP transmission line corridor. Twenty-nine comparable leks were monitored in 2010 with 355 males observed for 12 males/lek. This compares to 375 males counted on those same leks in 2009

for 13 males/lek. This represented a 5% decrease in lek attendance. Overall in 2010, 67 leks were visited and 891 males were observed for an average of 13 birds/lek or 17 birds/active lek. Grouse were not observed on 14 of the leks checked. Of the 12 potentially new leks found in 2009, most were revisited in 2010 and 6 were verified as active.

Lek data indicate sage-grouse populations are still widely distributed throughout the Region in spite of recent wildfire and development challenges. Vast areas of burned habitat may have fragmented some sage-grouse populations. Most of them still have adjacent grouse populations that will be able to colonize back into these burns if they recover over the next 15 to 25 years. Additional uncontrolled wildfires in the future could exacerbate the habitat fragmentation problem and threaten the future of sage-grouse in significant portions of Elko County. Trend lek counts are down over the long-term (20 years). Strutting ground and harvest data indicate base populations of sage-grouse are low to moderate in the Region compared to the late 1970's and early 1980's.

Productivity Potential

Large areas north of Interstate 80 in Elko County were negatively impacted when significant wildfires burned hundreds of thousands of acres of sage-grouse habitat from 2005 to 2007. Combined with acreages from previous wildfires since 1999, more than one million acres of sage-grouse habitat has been impacted. Initially, burned areas come back as mostly a grass-forb complex with only limited seasonal use value for sage-grouse. If sites were in poor ecological condition, many return to cheatgrass and other noxious weeds, thus providing no habitat for sage-grouse for the foreseeable future. Of major concern is the loss of wintering habitat (October through March) and spring production habitat (March through June) for nesting and early brood rearing. If these wildfires continue to burn significant acreages of sage-grouse habitat, Elko County could soon be facing significant challenges in terms of supporting the healthy populations it has been known for in the past. Summer conditions in 2010 were good for brooding sage-grouse in most of the Eastern Region due to average precipitation received in the spring and good insect availability.

Fall Prediction

The harvest of sage-grouse increased in the Eastern Region in 2009 along with an increase in the number of wings collected from hunter harvested birds. The increased juvenile/adult hen ratio from wings and slight increase in trend lek counts in 2010 all indicate a stable to slight increase in the base population of sage-grouse in the short term. Bird availability in the Eastern Region is predicted to be fair where habitat is intact and in some of the recovering burns but poor in areas of Elko County where large wildfires have destroyed sage-grouse habitat. Measurable precipitation occurring immediately prior to and during the season tends to reduce hunting success. Dry conditions often concentrate birds making them more available to the hunter. Hunting is expected to be fair to good in most of the Region for 2010.

SOUTHERN REGION

Harvest

Three of the four counties making up the Nevada Department of Wildlife's (NDOW) Southern Region support sage-grouse. Although sage-grouse occur in both Esmeralda and Lincoln counties, these populations are not considered large enough at this time to support an open season. Currently, Nye County is the only county within the Southern Region which maintains an open sage-grouse season.

The 2009 sage-grouse season in Nye County was 15 days in length, running from September 25th to October 9th. This season structure was first put into place in Nye County in 2007. Prior to the 2007 season, the standard had been a 9 day season running from early to mid October. Daily bag and possession limits have remained unchanged at two daily and four in possession. Harvest data indicate that 200 hunters harvested a total of 326 sage-grouse in the Southern Region in 2009. In comparison, 183 hunters harvested a total of 347 sage-grouse during the 2008 season. According to post-season questionnaire data, interest in sage-grouse hunting in Nye County has remained comparatively low for the past 10 years. However, for the past three seasons, apparently due to the change in season structure that took place in 2007, there has been a return to levels of hunter interest and total birds harvested not seen since the late 1990's. Not only has hunter participation increased since the change in season structure, sportsmen appear to be having more success locating birds during this earlier season when birds are associated more closely with water.

Questionnaire data indicate a few sportsmen continue to report pursuing sage-grouse in both Esmeralda and Lincoln counties. Although harvest numbers reported are very low, both counties are closed to sage-grouse hunting. These types of reports should be followed up in order to determine if people are actually pursuing sage-grouse in these closed areas, if the information provided is simply a mistake, or if it is meant to be intentionally misleading.

It is important to note that although the questionnaire data provide important information regarding overall harvest and hunter pressure trends; small sample sizes may produce biased results. Refer to the following table for the short- and long-term perspectives of harvest.

Table 7. SOUTHERN REGION (NYE COUNTY) SAGE-GROUSE HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	10yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	347	326	181	-7%	80%
No. of Hunters	183	200	133	9%	50%
No. of Days	332	432	264	30%	64%
Birds / Hunter	1.9	1.9	1.3	0%	46%
Birds/Hunter Day	1.0	1.1	0.7	10%	57%

Population Status

Each spring, NDOW, BLM, and USFS personnel, as well as PROWL volunteers, conduct sage-grouse lek surveys in central Nevada. These surveys help determine sage-grouse breeding population status and trends. There have been fourteen leks identified as trend leks in central

Nevada, and an effort is made to conduct a survey at each of these leks once per week for five weeks in order to determine peak attendance of both male and female grouse.

During the spring of 2010, a total of 22 leks was visited in central Nevada, resulting in a maximum count of 592 sage-grouse, 493 of which were cocks. During the previous spring, 2009, a total of 26 leks were visited in central Nevada resulting in a maximum count of 592 sage-grouse, 517 of which were cocks. Lek data gathered on strutting grounds that were surveyed both in 2009 and in 2010 reflect an overall increase in cock attendance of nine percent. An average of 31 cocks per active lek was observed in 2010 compared to 28 cocks per active lek in 2009, again based upon those surveyed in both 2009 and 2010.

Of 13 trend grounds surveyed in both 2009 and 2010, six showed decreases in cock attendance from 2009, six showed increases in cock attendance, and one showed no change. 2010 trend lek survey data indicate that overall cock attendance was up 13 percent from 2009. This increase is somewhat misleading due to a very large increase in a single lek. One lek increased from 50 males in 2009 to 85 males in 2010. If data from this lek is removed from the analysis, the overall cock attendance on trend leks shows a five percent increase, as opposed to the 13 percent increase shown when including this lek.

Sage-grouse wings collected from hunter harvested birds each fall provide important information to NDOW biologists. These wings are used to determine male/female harvest ratios, nesting success, and young of the year recruitment rates. A record total of 188 wings was collected in central Nevada in 2009. Data obtained from assessing these wings indicate that the juvenile per adult hen ratio during the fall of 2009 was approximately 1.56 juveniles/adult hen. While this level of recruitment was an improvement over the 1.42 juveniles/adult hen experienced in 2008, it is still below the rate of 2.0 that is considered necessary for maintenance of sage-grouse populations in most cases. The reliability of wing data is partially dependent upon sample size, and although an increasing number of wings are being collected in central Nevada, sample sizes are still very small when compared to the rest of the state. Wing data for central Nevada are summarized in Table 2.

Table 8. SOUTHERN REGION SAGE-GROUSE WING DATA

Year	Total Sample	Adults		Juveniles		Young/ Ad Hen
		Males	Females	Males	Females	
2000	33	5	10	7	11	1.8
2001	76	10	16	21	28	3.1
2002	63	10	25	9	19	1.1
2003	75	6	20	26	23	2.5
2004	62	14	24	10	14	1.0
2005	90	8	23	36	23	2.6
2006	155	28	40	31	56	2.2
2007	127	30	58	17	22	0.67
2008	103	11	38	22	32	1.42
2009	188	14	68	53	53	1.56
Average	97	14	32	23	28	1.80

Productivity Potential

Favorable moisture and temperature patterns through the summer and fall of 2009, and into the spring of 2010, greatly benefited habitat conditions in central Nevada. These conditions also helped improve the body condition of wildlife species that had suffered in 2006, 2007, and parts of 2008, through some of the worst conditions seen in central Nevada for some time.

While comparatively deeper snow accumulations and colder temperatures during the 2009-10 winter likely resulted in somewhat higher over-winter mortality in some populations than has been the case in the previous few winters, the increased productivity of surviving animals, as well as the improved habitat conditions resulting from the increased moisture, should far outweigh these relatively minor losses.

Due to favorable precipitation patterns, and also cooler than normal temperatures, 2010 experienced a long lasting spring green up period. Although cold, wet conditions during late spring can cause high chick mortality in some cases, the timing of the precipitation and cooler temperatures during the spring of 2010 was such that chick survival was not appreciably affected in most areas.

Due to small sample sizes, 2010 brood survey data are not sufficient to make accurate comparisons with previous years. Despite this fact, limited data and anecdotal observations made throughout the summer indicate sage-grouse production in 2010 was comparatively good. Although brood survey data provide important information to wildlife managers, due to the many factors that can affect chick survival through the summer and early fall, the data is of minimal value in predicting actual recruitment rates. Wings collected in the fall from hunter harvested sage-grouse is presently the most effective method of determining recruitment. Unfortunately, in areas where sage-grouse hunting does not occur, as in Lincoln County, this source of data is unavailable.

Fall Prediction

Despite the fact that the winter of 2009-10 saw greater snow accumulations, and cooler temperatures than the previous several winters, survival of adult sage-grouse should have been good. Sage-grouse have evolved successful strategies to deal with winter conditions in the Great Basin, and overwinter mortality is comparatively low in all but the most severe winters in central Nevada. Good winter moisture receipts in conjunction with favorable conditions during the late spring and early summer period has resulted in much improved range conditions throughout central Nevada, improving production of sage-grouse. Due to increases in production, the availability of young birds should be comparatively good this fall, and the relatively new season structure should again allow sportsmen to more easily locate birds. The 2010 sage-grouse season is expected to be good in central Nevada. It is important to note that even with good bird availability, sage-grouse hunter success can vary widely dependent upon localized population densities, fall weather patterns, and an individual's knowledge of specific hunting areas and sage-grouse habits.

FOREST GROUSE

(Blue and Ruffed Grouse)

WESTERN REGION

Harvest

The 2009 Forest Grouse (Blue Grouse & Ruffed Grouse) hunting season was 122 days long, beginning on September 1st and ending on December 31st. During this time period 733 hunters participated in the hunt, harvesting 698 birds. These figures are up slightly from last year. Blue grouse make up the majority of the forest grouse harvest with most taken in the Carson Range of the Sierra Nevada above Reno. An estimated 110 ruffed grouse were killed by 110 hunters in the Santa Rosa's in northern Humboldt County*, which contain the only known population of ruffed grouse in the region. Limits for forest grouse were 3 daily and 6 in possession.

Table 9. Western Region sooty grouse harvest

	REGIONAL TOTALS:			Percent Change:	
	2008	2009	10-Yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	540	588	351	8.9%	67.5%
No. of Hunters	735	623	321	3.2%	94.1%
No. of Days	1880	1359	755	26.7%	80%
Birds / Hunter	0.73	0.9	1.1	-3.1%	-18%
Birds/Hunter Day	0.29	0.4	0.5	-21.1%	-20%

Table 10. Western Region ruffed grouse harvest

	REGIONAL TOTALS:			Percent Change:	
	2008	2009	Avg. 05-09	Prev. yr.	vs. Avg.
No. of Birds	41	110*	34.4	168.3%	219.8%
No. of Hunters	64	110*	54.8	71.9%	100.7%
No. of Days	99	204*	96	106.1%	112.5%
Birds / Hunter	0.64	1.0	0.52	66.7%	92.3%
Birds/Hunter Day	0.41	0.5	0.3	25.0%	66.7%

*expanded data appears over inflated

Population Status and Productivity Potential

Forest grouse populations are believed to be at moderate levels with stability in most areas. The Humboldt County biologist conducted one brood survey for ruffed grouse in 2010 and found 6 chicks. Climatic conditions including a very wet spring in 2010 should allow for good production and recruitment. The limited information available for the past few years indicates that the Humboldt County ruffed grouse population may be expanding.

Forage and escape cover for forest grouse brood survival in the higher elevations is adequate, centering on aspen stands/riparian areas. Habitat improvement projects initiated by the USFS

in the Carson Range will be taking place in 2009 and 2010 in some very good grouse areas which may increase the local population's size and distribution.

Fall Prediction

The western part of the state received record amounts of precipitation in the spring of 2010, combined with mild temperatures. This scenario should prove beneficial to the area's upland game bird populations. Populations of forest grouse should remain at moderate and healthy levels, providing for adequate hunter participation and satisfaction.

EASTERN REGION

Harvest

The 2009 blue (dusky) and ruffed grouse season again ran for an extended 122 days from September 1 to December 31. Bag limits for forest grouse were 2 daily and 4 in possession from 1985 through 2006 and have been 3 daily and 6 in possession since the 2007 season.

Blue grouse make up the majority of forest grouse harvest. Ruffed grouse harvest originates from Elko County. Prior to 2007, reported ruffed grouse harvest was very minimal (25 estimated in 2006). In 2007, the hunter questionnaire was changed to get a better sample of ruffed grouse hunters by separating the two forest grouse species. Reported ruffed grouse harvest has been 223, 268 and 649 birds by 254, 245 and 413 hunters for the 2007, '08 and '09 seasons respectively.

Table 11. EASTERN REGION BLUE GROUSE HARVEST BY COUNTY
Post-season Questionnaire Data

COUNTY	COUNTY TOTALS:			Percent Change	
	2008	2009	Avg.	Prev. yr.	vs. Avg.
Elko	684	1325	408	94%	225%
Eureka	51	5	54	-90%	-91%
Lander	112	203	55	81%	269%
White Pine	527	608	681	15%	-11
Eastern Region	1,374	2,141	1,198	56%	79%

Table 12. EASTERN REGION BLUE GROUSE HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	Avg.	Prev. yr.	vs. Avg.
No. of Birds	1,374	2,141	1,198	56%	79%
No. of Hunters	863	1,142	697	32%	64%
No. of Days	1,951	3,287	1,581	68%	108%
Birds / Hunter	1.6	1.9	1.7	18%	8%
Birds/Hunter Day	0.7	0.7	0.8	-8%	-15%

The 2009 blue grouse harvest increased 56% from 2008 and was 79% above the ten-year-average (1999-2008). Following 6 consecutive years in which White Pine County led the Region in blue grouse harvest, Elko County has shown the highest harvest in the Eastern Region from 2007 to 2009. Elko County provided 62% of the region's harvest in 2009 while White Pine County provided 28%. The Eureka County 2009 blue grouse harvest decreased 90% from 2008 and was well below average. Lander County's 2009 blue grouse harvest increased 81% from 2008 and was 269% above average. Harvest data suggest blue grouse populations experienced average or better production in northern and western portions of the Eastern Region in 2009 while production in the southeast was average or lower.

Population Status

A total of 23 blue grouse were classified in the Eastern Region in 2009 including 6 hens and 16 young for an average brood size of 3.5 chicks/brood, 2.67 chicks/hen and 2.29 young/adult. In comparison, a total of 20 blue grouse were classified in the Eastern Region in 2008 including 7 hens and 13 young for an average brood size of 3.0 chicks/brood, 1.86 chicks/hen and 1.86 young/adult. During the summer of 2009, there were 9 blue grouse classified in Elko County, 8 in Lander County and 6 in White Pine County. No blue grouse were classified in Eureka County.

A total of 38 ruffed grouse were classified in 2009 incidental to ruffed grouse trapping operations in the Bull Run Mountains of Elko County. There were 12 hens and 20 chicks in the sample including 2 complete broods. Ratios were 4.0 chicks/brood, 1.67 chicks/hen and 1.11 young/adult.

Wings were collected from blue grouse hunters in 2009 and assessed to determine male/female ratios and production. A total of 56 wings were collected from Elko and White Pine Counties consisting of 18 adult males, 14 adult females, 9 juvenile males and 15 juvenile females. These resulted in a male/female ratio of 0.93, a juvenile/hen ratio of 1.71 and a juvenile/adult ratio of 0.75. In 2008, 90 wings were collected resulting in a male/female ratio of 1.00, a juvenile/hen ratio of 2.50 and a juvenile/adult ratio of 1.43. Collection of blue grouse wings is relatively new and sample sizes remain small. Sample sizes will hopefully expand as hunter awareness and cooperation increases.

With brood and wing data being limited, harvest levels remain the most reliable indicator of population status. Overall, 2009 forest grouse populations were average or better in the northwest portion of the region and were below-average to average in the southeast portion where severe drought conditions dominated through 2007 and 2008.

Productivity Potential

The major impact to brooding forest grouse is believed to be the condition of riparian habitat. The removal of understory vegetation in riparian areas reduces cover that is valuable for brood-rearing habitat, making chicks more susceptible to predation. Within the Eastern Region, winter moisture was below-average to average in the north and above-average in the south. Spring precipitation was above average throughout most of the region. Nesting and escape cover for early brooding in the Eastern Region was good to excellent. The summer of 2010 has been mostly dry and may increase the usual late-summer reliance on riparian habitats. Overall, 2010 brooding habitat values should be good, although not as good as in 2009. Productivity potential in the north may be lower, while potential in the south may be similar to last year.

Fall Prediction

Forest grouse availability in 2010 is predicted to be good in the Eastern Region. Population levels are predicted to be fair to good in all 4 counties of the Eastern Region. Eureka and Lander counties have much more limited distribution than Elko and White Pine counties. Blue grouse hunting in 2010 should be better than 2009 in the south, but may not reach the high levels of 2009 in the north.

SOUTHERN REGION

Harvest

The 2009 forest grouse season ran for 122 days, starting on September 1st, and ending on December 31st. The forest grouse season was increased from the previous 91 day season to the new 122 day season for the first time in 2008. Bag and possession limits were also increased in 2008 from the traditional two and four structure to three and six. This bag and possession limit remained unchanged in 2009. Although the forest grouse season is open statewide, neither blue grouse nor ruffed grouse occur in Clark County, and blue grouse are the only species of forest grouse that currently occur in Esmeralda, Lincoln, and Nye counties.

Harvest data obtained from upland game hunters indicate that a total of 79 blue grouse was harvested by 114 hunters during the 2010 Southern Region Forest Grouse season. 100% of the reported harvest came from Nye and Lincoln counties. In comparison, 2008 saw a harvest of 22 blue grouse by 72 hunters in the Southern Region. Blue grouse harvest can be greatly affected in some years, regardless of overall numbers of birds available, by heavy snow accumulations during that later part of the season, which can make access to grouse habitat difficult for sportsmen.

Although questionnaire data provide important information regarding overall harvest and hunter pressure trends, it can be influenced by sampling bias. This bias is particularly apparent when sample sizes are small, as is typically the case with forest grouse. Refer to the following table for a breakdown of the Southern Region harvest, as well as the short- and long-term perspectives of harvest.

Table 13. SOUTHERN REGION FOREST GROUSE HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	10yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	22	79	30	259%	163%
No. of Hunters	72	114	47	58%	143%
No. of Days	139	262	119	89%	120%
Birds / Hunter	0.3	0.7	0.7	133%	0%
Birds/Hunter Day	0.2	0.3	0.3	50%	0%

Population Status and Productivity Potential

From 2006 to mid 2008, wildlife in central Nevada suffered through some of the worst drought conditions seen in quite some time. Fortunately, climatic conditions in central Nevada improved greatly beginning in the summer of 2009, and continuing through the spring of 2010. These improved conditions benefited wildlife habitats throughout central Nevada, which in turn has aided in improving the body condition and productivity of many species of wildlife.

While comparatively deeper snow accumulations and colder temperatures during the 2009-10 winter likely resulted in somewhat higher over-winter mortality in some wildlife populations, blue grouse have adapted to deal with these conditions very successfully. Blue grouse populations typically display a unique “reversed” migration pattern. Birds normally move to higher elevation habitats with the onset of winter, and survive by roosting above ground in coniferous trees where they are protected from the elements and can feed on pine needles, often times gaining weight, until spring when they move down to breeding areas.

Due to favorable precipitation patterns, and also cooler than normal temperatures, the spring and early summer of 2010 saw a lush and long lasting green up period. This not only allowed for an increase in the abundance of forbs, but also extended the length of time in which they were available. Forbs are very high in nutrient value, and blue grouse should have benefited greatly from this resource. Improved conditions also resulted in good production of understory vegetation which provides critical cover for blue grouse nests and chicks. Although cold, wet conditions during late spring can also cause high chick mortality in some cases, the timing of precipitation and cooler temperatures during the spring of 2010 was such that chick survival should not have been appreciably affected.

Fall Prediction

With regard to forest grouse, even more so than with other species of upland game, erratic fluctuations in data and small sample sizes can make post-season questionnaire data somewhat difficult to analyze. Consequently, the data that may be most helpful in making predictions for the upcoming blue grouse season are birds per hunter and birds per hunter day. These data indicate that the 2009 blue grouse season was an improvement over the 2008 season, and that overall, hunter success was comparable to the 10 year average, which indicates central Nevada blue grouse populations remain stable. The blue grouse season in the Southern Region is expected to be fair for 2010. Hunters familiar with the habits of blue grouse should be able to locate birds in their typical haunts, and there should be an increase in the number of young birds available for harvest this season.

SNOWCOCK

EASTERN REGION

Harvest

The 2009 snowcock season ran from September 1 to November 30 which was identical to the 2008 season. The daily bag limit was 2 birds which has remained in effect since 2001.

Post-hunt follow-up calls used the past 4 years have significantly improved reporting compliance. For the 2009 Snowcock hunting season, 127 questionnaires were received from 136 known permits issued (94 %). Of those 127 received, 61 indicated that they did not hunt. The 66 hunters who reported spending time in the field, reported harvesting 12 birds, wounding and losing 1 bird, and seeing 627 snowcocks during 124 days of hunting. Past reported snowcock harvest has ranged between 2 and 23 birds annually and has averaged approximately eight birds/ year since 1980. Further changes in the permitting and reporting requirements will make further improvements for the 2010 season.

Population Status

The habits and remote habitat preference of these birds make standard population surveys extremely difficult. Random sightings and observations noted during other wildlife management activities are recorded. Snowcock density and distribution surveys were previously conducted in conjunction with helicopter mountain goat/bighorn sheep surveys. Aerial surveys conducted since 1994 indicated good distribution of birds throughout the East Humboldt/Ruby Mountain complex in suitable habitats. Actual numbers counted have ranged from the record sample of 217 birds observed in 1994 to a low of 68 birds in 2001. A total of 79 birds were counted in 2010. Beginning in 2005, bighorn sheep surveys and Rocky Mountain goat surveys were rescheduled to late winter to better assess lamb and kid recruitment. Unfortunately, because snowcock data were collected incidental to helicopter sheep and goat surveys, summer aerial surveys are no longer being conducted. This year, aerial surveys for bighorn sheep and mountain goats were conducted as part of disease monitoring and as such, incidental summer snowcock observations were made. For unit 101, 15 birds were observed, for unit 102, 48 birds were observed, and for unit 103, 16 birds were observed. Due to windy conditions, survey altitude was increased and as such, observations of snowcock were compromised and could attribute to the low sample size.

Productivity Potential

Climatic conditions for the past few years were represented by average winters with relatively harsh spring weather in occupied snowcock habitat. During the 2009 breeding and nesting periods, above average snow pack was present and spring moisture was well above normal, potentially helping nest success and brood survival. The snowcock population appears to be at a moderate level at the current time based on the observations from hunters and helicopter surveys. More intensive survey work would be needed to adequately assess snowcock population condition and trend.

Fall Prediction

Climatic conditions, habitat preference, the bird's wary nature, and the current moderate population level are expected to keep harvest levels low. In 2009, 74 more birds were observed by hunters in 15 more hunter days than in 2008. Bird availability is expected to be fair to good during the 2010 hunting season and harvest is expected to remain at a low level.

CHUKAR PARTRIDGE

WESTERN REGION

Harvest

A two day Junior Upland Game hunting season occurred on September 26th and 27th. The hunt was open to hunters 15 years of age and younger. Youth hunters are required to be accompanied by an adult 18 years or older. The young hunters can pursue and harvest chukar, Hungarian partridge, quail and rabbit during the Youth hunting seasons. Daily bag and possession limits for chukar and Hungarian partridge were 6 daily and 12 in possession.

The standard chukar and Hungarian partridge hunting season for those hunters 16 year of age and older opened on October 10 and closed on February 7, 2010. The daily bag and possession limits for the 2009 hunting season was 6 birds per day and 18 birds in possession. Limits were singly or in aggregate for the two species.

Table 14. WESTERN REGION CHUKAR HARVEST
Post-season Questionnaire Data

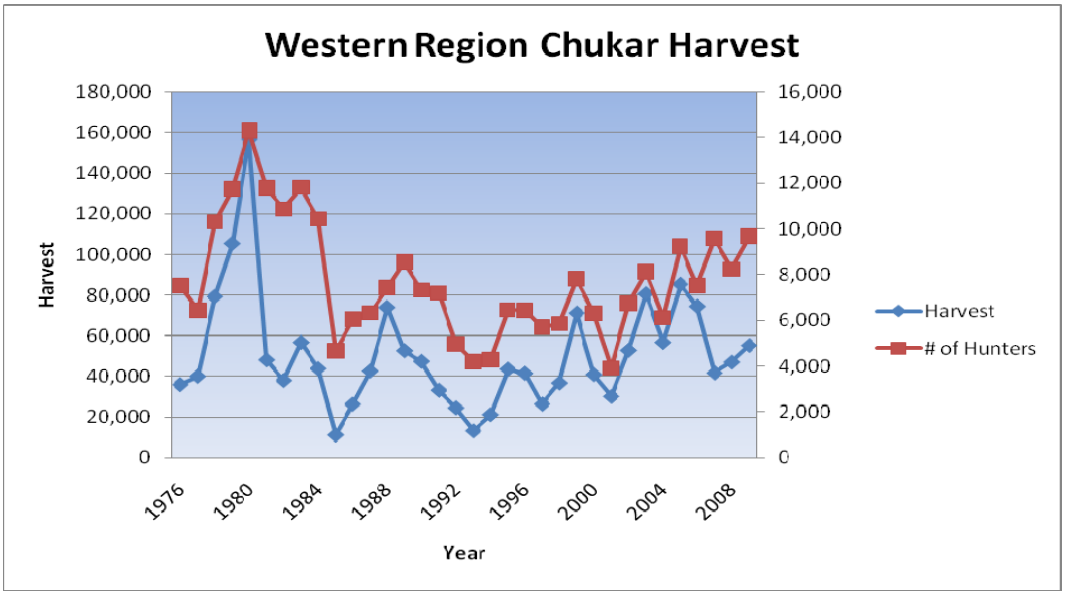
	REGIONAL TOTALS:			Percent Change	
	2008	2009	10-Yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	47,022	55,293	58,123	17.6%	-4.9%
No. of Hunters	8,239	9,684	7,367	17.5%	31.4%
No. of Days	33,696	38,495	31,848	14.2%	20.9%
Birds / Hunter	5.7	5.7	7.9	0.0%	-28.2%
Birds/Hunter Day	1.4	1.44	1.9	2.9%	-22.4%

Chukar harvest within the Western Region has steadily increased over the past two years. In 2007, western Nevada experienced one of its driest years on record and chukar recruitment and survival were poor. This resulted in less birds being available to hunters and led to a reduction in both overall chukar harvest and hunter success. In 2009, a total of 55,293 birds were harvested in the Western Region. The increase in the number of birds harvested mimics the increase in the number of hunters who participated in chukar hunting in 2009. Total harvest from this past hunting season was just slightly below the ten-year average. The number of hunters that participated in chukar hunting during the 2009 season rose sharply when compared with the 2008 hunting season and was the highest number of hunters recorded since 1984. This level of participation may be partially explained by the current economic conditions and hunters choosing to hunt closer to home instead of traveling farther to go chukar hunting.

The number of hunters participating in the sport of chukar hunting has remained at high levels since 2005. In 2009, 9,684 hunters participated in chukar hunting within the Western Region. The highest participation and harvest of chukar occurred between the years 1978 to 1984. The number of hunters participating in chukar hunting ranged between 10,000 and 14,000 hunters during this time period. In 1980, a record 156,000 chukar were harvested within the western Region.

The 2009 total statewide chukar harvest increased by almost 25% when compared with the 2008 hunting season. However, both the 2009 statewide and western Region chukar harvest remained approximately 5% below the recent ten-year average. As is usually the case, the chukar harvest in the western Region made up a very high percentage of the total statewide harvest (72.2%). Within the western Region, the harvest of chukar in Humboldt and Washoe Counties made up a very high percentage of the total regional harvest (82.7%).

Hunters who hunted chukar in Humboldt County had the most success with an average of 7.9 birds per hunter and 1.7 birds per day. Washoe, Pershing and Churchill Counties also had good success and averaged between 3.7 and 5.4 birds per hunter and between 1.2 and 1.4 birds per day.



Brood surveys were conducted by NDOW biologists during late July thru mid August and indicated that chukar recruitment rates within the western Region were average. The chicks per hen ratios from the surveys indicated an average range of between 4 and 8 chicks per hen. This is lower than the average that was observed in 2009 (between 7 and 12 chicks per hen), but will continue to allow for stable to increasing trends for chukar populations within the Western Region. Chukar populations within the Western Region are estimated to be at or near moderate levels.

Nevada Department of Wildlife biologists flew chukar density surveys during August of 2010. The density surveys indicated increasing trends for most chukar populations within the Western Region. However, there were a few areas, or survey routes, where lower numbers of birds were counted. These areas will more than likely experience stable to decreasing trends in 2010. Overall, chukar numbers should increase within the Western Region in 2010.

An average to below average winter in 2009-10 was bolstered by a very wet spring. In late spring, wet systems moved through western Nevada. Intermittent summer thundershowers in late July and early August also helped to improve habitat conditions in some localized areas. Overall, habitat conditions were much improved heading into the nesting and early brood rearing periods. However, it did appear that at least some late or delayed nesting occurred and

that early brood survival may have been impacted by the storm fronts and resulting wet conditions. However, dry conditions returned by late summer and lower elevation habitats were once again very dry. Due to the improved moisture, upper elevation habitats remain in better condition than what has been observed in recent years. As lower elevation habitats dry out, chukar generally move up in elevation to take advantage of the better habitat conditions. Water availability has improved at the upper elevations but remains poor at the mid to lower elevations due to the drought conditions experienced over the past several years.

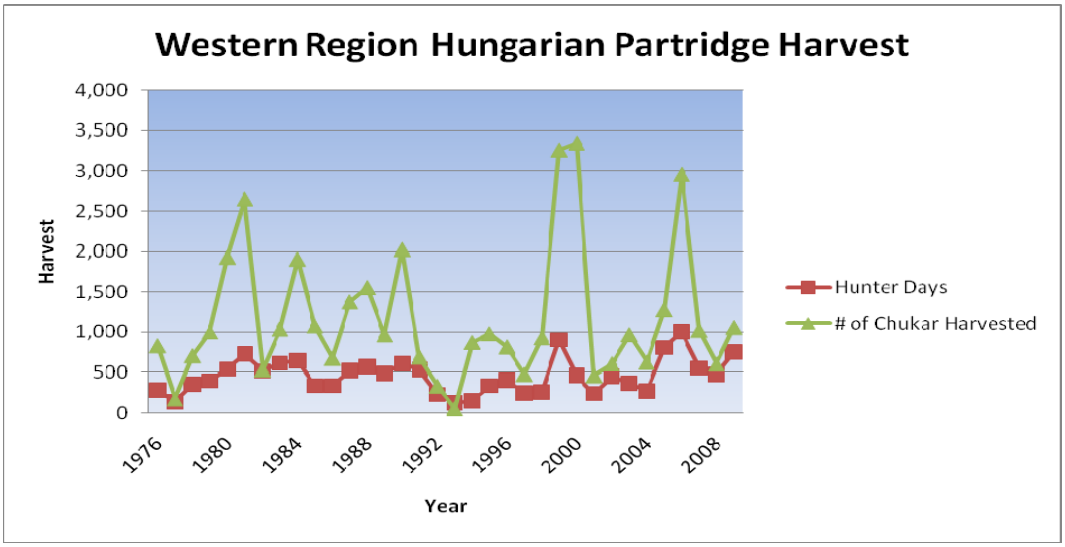
The average recruitment observed in 2009-10 will result in stable to increasing trends for most chukar populations within the western Region. Chukar hunting this coming fall and winter should be very similar to the 2009 season with some "hot spots" and some areas with lower to moderate population densities. Total harvest for the western region is expected to be similar to the 2009 harvest level. Hunters can expect to see a decent number of young bird's in the harvest, especially in the early portion of the hunting season.

Table 15. WESTERN REGION HUNGARIAN PARTRIDGE HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	10-Yr Avg.	Prev. yr.	vs. Avg.
Number of Birds	607	1,059	1,515	74.5%	-30.1%
Number of Hunters	478	752	554	57.3%	35.9%
Number of Days	2,424	3,295	1,968	35.9%	67.5%
Birds/Hunter	1.27	1.41	2.7	10.9%	-47.3%
Birds/Hunter Day	.25	0.32	0.8	28.3%	-62.1%

Hungarian Partridge hunting improved in 2009 when compared with the 2008 hunting season but remains well below the ten-year average for harvest and hunter success. However, the level of participation by those hunters who pursue "Huns" remains very high despite the tough hunting conditions that have persisted over the past few years. The harvest of Hungarian partridge primarily occurs in Humboldt County where nearly 79% of the harvest occurred in 2009. Other counties to report the harvest of "Huns" were Washoe, Pershing, Lyon and Churchill Counties.

Much of the Hungarian partridge harvest occurs when hunters are in the field chasing chukar partridge and happen to come across a covey of "Huns". Generally, Hungarian partridge inhabit areas at the mouths of canyons and the flats below a particular mountain range. Often times, hunters will observe a covey of "Huns" at the lower elevations while driving or walking into the areas they hunt chukar. In the winter or during a green-up at the lower elevations, coveys of chukar and "Huns" can often be found in the same general area.



Productivity Potential

Habitat conditions improved dramatically due the above average moisture received this past spring. Unfortunately, the unsettled weather continued into the nesting and early brood rearing stages. The wet conditions and cooler temperatures are believed to have had at least some effect on the timing of nesting and may also have effected early brood survival. It was apparent during field surveys that some delays in nesting may have occurred or that a portion of the hens were on their second nest attempt. However, the chicks that were able to hatch had improved habitat conditions when compared with the very dry years in 2007-08.

Population Status

In 2009, good recruitment allowed bird populations in western Nevada to experience a moderate increase in overall bird numbers. In 2010, recruitment was not quite as good but still strong enough to allow for the increasing trend to continue. Overall, chukar and Hungarian partridge numbers within the western Region continue to be at or near moderate levels.

Fall Prediction

Chukar and Hungarian partridge hunters should experience a fair to good hunting season this coming fall. Hunting should be similar to the 2009 season with some locations offering hunters more birds to pursue. Early season hunters should find plenty of birds in and around water sources. Hunting may become more difficult once significant moisture is received and birds become less reliant on water sources.

EASTERN REGION

Harvest

The 2009 chukar and Hungarian partridge season was 121 days in length running from October 10, 2009 through February 7, 2010. Limits were 6 daily and 18 in possession, singly or in aggregate. In addition youth hunters (15 years of age or younger) were allowed to hunt for two days during a special youth season (September 26-27, 2009).

Table 16. EASTERN REGION CHUKAR HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	Avg.	Prev. yr.	vs. Avg.
No. of Birds	10,579	15,172	21,548	43%	-30%
No. of Hunters	2,275	2,758	3,054	21%	-10%
No. of Days	9,417	11,473	12,583	22%	-9%
Birds / Hunter	4.7	5.5	6.9	18%	-21%
Birds/Hunter Day	1.1	1.3	1.7	18%	-22%

The 2009 Eastern-Region harvest of 15,172 chukars was up from the previous year's harvest of 10,579 but down from the 2005-2007 harvest levels. It was 30% below the previous 10-year-average and the second lowest harvest since 1997 when only 9,428 birds were killed. Harvest was down along with hunting pressure indicating bird availability was low and hunters were not as willing to go after low chukar numbers. The number of birds per hunter and birds/hunter day increased slightly from 2008 but was still below the 10-year-average.

Table 17. EASTERN REGION HUNGARIAN PARTRIDGE HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	Avg.	Prev. yr.	vs. Avg.
No. of Birds	727	1,187	1,602	63%	-26%
No. of Hunters	545	675	675	24%	12%
No. of Days	2,213	1,960	2,114	-11%	-7%
Birds / Hunter	1.3	1.8	2.6	32%	-32%
Birds/Hunter Day	0.3	.6	0.8	84%	-26%

Regional Hun harvest was reported to be 1,187 birds in 2009 which was 26% below the long-term average of 1,602 birds but was up 63% from the 2008 harvest level. The lowest Hun harvest on record was 66 birds in 1994. The highest reported Hun harvest was 7,011 birds in 1974.

Population Status

In the Eastern Region, Lander County was the only county to collect chukar brood data. Time constrains and other upland game trapping projects hindered extensive brood surveys in 2009.

The total Lander County chukar sample for 2009 was 72 including 6 broods with 48 chicks for 8 chicks/brood. In comparison, there was a total 2008 sample collected in Lander County of 292 chukars classified as 124 adults and 138 young in 15 complete broods for 7.3 young/brood.

Chukar populations were extremely low following several years of drought and the harsh winter of 1992-93 but exhibited a remarkable recovery between 1997 and 1999. Population data collected since 2000 suggested partridge populations were above average in the Region with the exceptions of the past 3 years. Although 2009 was below average it did increase slightly. Hungarian partridge base populations have been at low levels throughout the Eastern Region. Harvest increased slightly from the previous year but was still well below average.

Productivity Potential

Above average harvest from 2001 through 2006 indicated chukar populations had recovered throughout most of the Region. The 2007 production year was the poorest on record and this was reflected in bird availability for the last 2 years. Chukar harvest decreased an additional 40% in 2008 and was the lowest since 1997. Base populations throughout the Region were below average.

The moisture received in northern Nevada in late May and early June of 2010 was above average and improved nesting and brooding habitat for chukar. The adult chukar population fared well throughout the winter. No extended periods of deep snow or freezing temperatures were observed in northern Nevada and green-up was documented from early February throughout the remainder of the winter. Chukar and Hun production was expected to be good based on habitat conditions and observations of chukar and Hungarian partridge broods so far in 2010.

Four helicopter chukar density surveys were conducted in the Eastern Region in 2010. A total of 1,338 chukars were observed yielding an average of 33 chukars/square mile. In comparison, a comparable survey conducted in 2009 yielded a total of 872 chukars for an average density of 18 chukars/square mile.

Fall Prediction

Chukar hunters are expected to experience fair to good chukar hunting in the Eastern Region in 2010 as birds begin to recover from low levels documented the past 3 years. Hungarian partridge hunting is expected to be fair and mostly incidental to chukar hunting.

SOUTHERN REGION

Harvest

The 2009-10 chukar and Hungarian partridge season was 121 days in length beginning on the 10th of October, 2009, and ending on February 7th, 2010. Bag and possession limits remained unchanged at six daily and 18 in possession.

Hungarian partridge do not typically occur in the Southern Region, and although on occasion a few sportsmen will report the harvest of a small number of Hun's, these reports are likely due to misidentification of young of the year chukar. The remainder of this report will deal solely with chukar partridge.

Figure 1 illustrates chukar harvest and hunting pressure trends for the Southern Region, based upon post-season questionnaire data for the 1980-09 period. Although the actual numbers can vary greatly year to year, the trend lines in Figure 1 above make it apparent that overall hunter participation and the total number of birds harvested has been increasing over the past 20 years in the Southern Region. The rapid population growth in Clark County is almost certainly the reason behind the increase. During the 2009-10 season, a total of 1,755 hunters expended 4,645 days of effort and harvested a total of 6,116 chukar. The 2009-10 total harvest represents the fourth highest number of harvested chukar in the past three decades in the Southern Region. In comparison, data for the 2008-09 season indicated that a total of 1,221 hunters expended 5,198 days of effort and harvested 3,707 chukar. Despite expending fewer days in the field, sportsmen were considerably more successful in their pursuit of chukar in 2009-10. Another interesting occurrence was that for the third straight year, Clark County led the Southern Region in chukar harvest with a total of 2,202 birds.

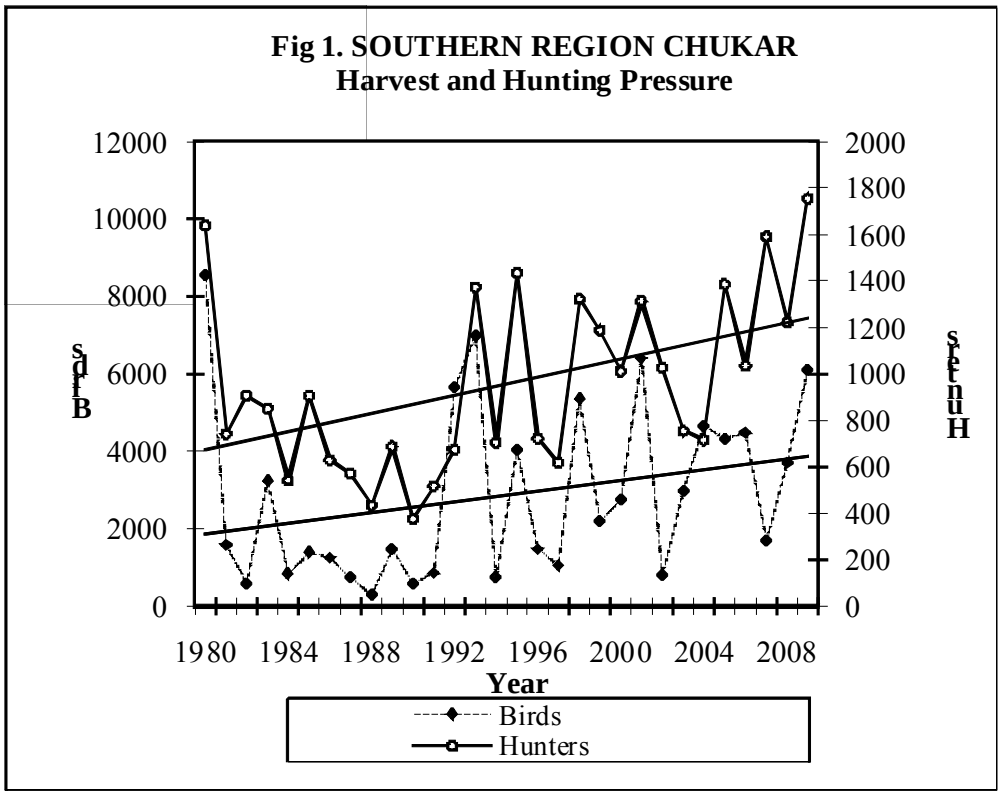


Table 18. SOUTHERN REGION CHUKAR HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	10yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	3,707	6,116	3,397	65%	80%
No. of Hunters	1,221	1,755	1,124	44%	56%
No. of Days	5,198	4,645	4,186	11%	11%
Birds / Hunter	3.0	3.5	3.2	17%	9%
Birds/Hunter Day	0.7	0.9	0.9	29%	0%

Population Status and Productivity Potential

Central Nevada experienced some of the worst drought conditions seen in many years from 2006 to mid 2008. Wildlife throughout central Nevada suffered reduced production and recruitment rates, and increased mortality during this period. Beginning in the summer of 2009, and continuing through the spring of 2010, climatic conditions improved greatly. This improvement benefited wildlife habitats throughout central Nevada, which in turn has aided in improving the body condition and productivity of many species of wildlife.

Comparatively deeper snow accumulations and colder temperatures during the 2009-10 winter likely resulted in somewhat higher over-winter mortality in central Nevada chukar populations than had been the case in the previous few winters. Despite this fact, the increased productivity of surviving adult birds, as well as improved habitat conditions resulting from the increased moisture, should far outweigh these relatively minor losses.

Due to favorable precipitation patterns in central Nevada, and also cooler than normal temperatures, the spring and early summer of 2010 saw a lush and long lasting green up period. This not only allowed for an increase in the abundance of preferred forage species like forbs, but also extended the length of time in which they were available. Forbs are very high in nutrient value, and all upland game populations should have benefited greatly from this resource. Improved climatic conditions also resulted in good production of grasses, which provide critical cover for chukar nests and chicks. Although cold, wet conditions during late spring can affect chick survival in some cases, and it is likely that some areas did experience isolated storms that increased chick mortality; most areas were not appreciably affected in 2010. A healthy base of adult chukar along with good production should have allowed for another moderate increase in birds in central Nevada.

Western Regional Climate Center data for Lincoln County indicate this portion of the Southern Region is currently at 107% of average annual precipitation. Although the overall amounts of precipitation that Lincoln County has received during the current water year have helped produce comparatively favorable habitat conditions for chukar, the timing of moisture receipts was less than optimal. The spring and early summer period in Lincoln County was rather dry, but preliminary brood surveys indicate good production none the less.

Due to increased production resulting from favorable moisture patterns during late 2008 and early 2009, chukar numbers were good in southern Nevada during the 2009-10 season. Unfortunately, much of Clark County has seen a return to relatively dry conditions this past year. Although 2010 started well, with large amounts of precipitation falling in southern Nevada during January, the reprieve was short lived, and a return to drier conditions followed. Unfortunately,

the monsoon season has seen a continuation of less than optimal moisture patterns, and most areas have not received sufficient precipitation to sustain vigor in many plant species. Insect availability in early-midsummer may be characterized as poor to fair throughout much chukar habitat in Clark County. Due to the increases in chukar numbers seen in 2009, a healthy base of adult chukar was present coming into this past spring, but due to lowered production rates, overall numbers of chukar in southern Nevada are likely somewhat diminished from those seen in 2009-10.

Fall Prediction

In central Nevada, increased production and improved habitat conditions should help increase overall chukar numbers and once again result in good numbers of young chukar being available for harvest during the 2010-11 season. Although chukar numbers in central Nevada remain relatively high, fall precipitation patterns can affect overall hunter success in any given year. Overall, the chukar outlook for central Nevada is good, and hunters should experience another favorable season.

Comparatively good production in Lincoln County should result in decent numbers of young birds available for harvest this fall. The overall outlook for Lincoln County can be characterized as moderate to good, with a few areas having higher densities of birds.

Very productive years are relatively rare in the Mojave Desert, but bird availability has been comparatively good in Clark County during the past two years. Unfortunately, conditions have not remained quite as favorable this past spring and summer. Although production suffered in 2010, a healthy base of adult birds in conjunction with a few areas of slightly better production should allow for a fair season this fall. It is not likely that another banner year like that experienced in 2009-10 will occur again in southern Nevada until conditions improve.

QUAIL

WESTERN REGION

Harvest

The 2009-10 California and mountain quail season was 120 days in length running from October 10, 2009 through February 7, 2010. Quail season ran concurrent with the Chukar and Hungarian Partridge season. Bag limits were 10 daily and 20 in possession for California quail and 2 daily and 4 in possession for mountain quail.

Table 19. WESTERN REGION CALIFORNIA QUAIL HARVEST

	REGIONAL TOTALS:			Percent Change	
	2008	2009	10-Yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	36,079	31,903	24,218	-11.6%	31.7%
No. of Hunters	4,775	4,162	3,089	-12.8%	34.7%
No. of Days	19,746	16,467	11,913	-16.6%	38.2%
Birds / Hunter	7.6	7.7	8.0	1.4%	-4.5%
Birds/Hunter Day	1.8	1.9	2.1	6.0%	-6.9%

Table 20. WESTERN REGION MOUNTAIN QUAIL HARVEST

	REGIONAL TOTALS:			Percent Change	
	2008	2009	3-Yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	1,374	1627	1,282	18.4%	26.9%
No. of Hunters	406	649	443	59.9%	46.5%
No. of Days	1,803	2432	1,689	34.9%	44.0%
Birds / Hunter	3.4	2.5	2.9	-26.5%	-13.8%
Birds/Hunter Day	0.8	0.7	0.8	-12.5%	-12.5%

California quail harvest data indicates a slight decline in hunter participation and subsequent harvest from what was reported in 2008 but harvest and participation levels for 2009 remain above the long-term trend. Harvest data for mountain quail indicate increases in both hunter participation and harvest for both short and long-term levels. Hunting opportunities for mountain quail remain confined to the northwestern portion of Nevada with 96 percent of the harvest occurring in the western region. Washoe, Lyon and Churchill Counties provide for most of the harvest. California quail hunting is also a western region phenomenon with 94 percent of the hunters reporting that they harvested 96 percent of the birds in the northwestern portion of the state.

Population Status

Northwestern Nevada offers knowledgeable quail hunter's opportunities to pursue both California quail and mountain quail within the same day and sometimes within the same mountain range. Overall, mountain quail make up a very small proportion of the total quail harvest within the Western Region as populations are well below historic highs. Recent trapping and transplanting efforts in portions of Churchill County and most recently Humboldt

County are beginning to produce recreational opportunities for hunters. This past spring, 96 mountain quail were released in northern Humboldt County in an attempt to re-establish them back into their historic range.

California quail are found throughout the region and are typically associated with upland riparian areas or urban interfaces. Populations of California quail like most other upland species are greatly influenced by precipitation levels and the timing of weather events over the course of the year. For example, heavy winter snowfall can contribute to above average losses of adults while a lack of timely spring moisture can dramatically reduce production and recruitment rates.

Productivity Potential

This past winter produced generally below average precipitation receipts with no major snow events that would have lessened quail survivability over the winter. Dry conditions persisted into the early spring but were broken with a series of weather fronts that produced significant amounts of moisture in the form of rain during late May and into early June. It appears that these late spring rains were helpful in stimulating late production. Brood survey information and general observations of quail production near the urban interfaces indicate average to above average production. Quail production in upland areas also appears to be near average with most quail groups having young associated with them.

Fall Prediction

Quail populations within the Western Region are thought to be at moderate levels based on harvest numbers and production and recruitment rates observed this summer. Hunters should find relatively decent numbers of California quail to pursue in the agricultural areas and in areas surrounding the urban interface. California quail numbers in upland areas in most cases should be at or above levels observed last year. Mountain quail will still be available to the hunter in the mountains where they exist but will continue to be a challenge to locate in the vast amount of habitat available to them.

EASTERN REGION

Harvest

The 2009-10 quail season was 121 days in length running from October 10, 2009 through February 7, 2010. It was concurrent with the chukar and Hungarian partridge season. Bag limits of 10 daily and 20 in possession were the same as last year in all 4 of the Eastern Region counties for all quail species except mountain quail. Mountain quail limits were 2 daily and 4 in possession.

Table 21. EASTERN REGION QUAIL HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	Avg.	Prev. yr.	Vs. Avg.
No. of Birds	430	313	407	-27.2%	-23.1%
No. of Hunters	117	122	105	-2.4%	15.9%
No. of Days	299	493	273	57.0%	80.9%
Birds / Hunter	3.6	2.6	4.5	-25.4%	-42.6%
Birds/Hunter Day	1.4	0.6	1.4	-53.6%	-56.2%

Quail harvest in 2009 decreased 27% over the previous year in the Eastern Region and was 23% below the long-term average. The Eastern Region California quail harvest accounted for less than 1% of the total statewide harvest. Twenty-nine mountain quail were reported harvested in the Eastern Region from Elko County compared to 13 last year.

Population Status

The base population of California quail was reduced by the severe winter of 1992-93. In order to bolster populations in the Region, 218 California (Valley) quail were released into Lander and White Pine counties in 1996 and 40 California quail were released at the Baker Silver Creek Ranch in White Pine County in the spring of 2004. A follow-up release of 41 California quail was made at the Baker's Silver Creek Ranch in 2005. In the spring of 2009, 242 California quail were released at 2 sites on the west side of the Ruby Mountains in Unit 102. Brood surveys, sightings, harvest and hunter-day data indicate quail populations remain at low levels throughout the Eastern Region.

There were 675 mountain quail from China Lake Naval Air Weapons Station released into Elko and Lander counties between 1993 and 1996 and between 2000 and 2002. Very few mountain quail observations have been documented indicating these releases have most likely failed to establish viable populations.

Productivity Potential

The Eastern Region experienced a long cool wet spring in 2010 with temperatures above freezing during the critical nesting periods. Range conditions were excellent for nesting and

brooding habitat. The productivity potential for quail was estimated to be good in the Eastern Region.

Fall Prediction

Eastern Region quail populations are very low compared to most of the State. Small relatively isolated quail populations in the Region will provide limited hunting opportunities during the 2010 season. Quail are normally harvested in the Eastern Region by hunters pursuing other species such as rabbits and chukar. The quail harvest is expected to be higher than last year in the Eastern Region.

SOUTHERN REGION

Harvest

The 2009-2010 quail season began October 10th, 2009 and extended through February 7th, 2010 (121 days). Limits were ten daily and 20 in possession. Based on hunter questionnaire data for the Southern Region, 3,288 hunters harvested 20,640 quail during the 2009-2010 season. This total represents a 25% increase from the 2008-2009 quail season.

Table 22. SOUTHERN REGION GAMBEL'S QUAIL HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008-09	2009-10	00-09 AVG.	PRE. YR.	10 YR. AVG.
No. of Birds	16,516	20,640	16,161	+25%	+27.7%
No. of Hunters	3,258	3,288	2,344	+0.9%	+40.3%
No. of Days	12,815	13,448	9,650	+4.9%	+39.4%
Birds / Hunter	5.10	6.28	7.70	+23.1%	-18.4%
Birds/Hunter Day	1.30	1.53	1.83	+18.1%	-15.9%

Quail harvest, birds per hunter, number of hunter days, birds per hunter, and birds per hunter day all increased compared to the 2008-09 season. Number of birds harvested, numbers of hunters, and number of hunter days were above the ten-year average, while birds per hunter, and birds per hunter day were below the ten-year average. The following table presents current harvest figures as well as short-term harvest perspectives.

Table 23. SOUTHERN REGION QUAIL HARVEST BY COUNTY
Post-season Questionnaire Data

	2008-09	2009-10	% Difference
Clark	12,307	16,224	+31.8%
Esmeralda	43	283	+558%
Lincoln	3,429	3,788	+10.4%
Nye	737	344	-53.3%
Total	16,516	20,640	+19.9%

Clark County supported the highest percentage of the harvest for the region – 79%. Lincoln County was next with approximately 18% of the Gambel's Quail harvested, followed by Nye at 1.6% and Esmeralda County with 1.3%.

Population Status

Dry conditions prevailed throughout much of the Southern Region from March through July, with wetter than average conditions in January, February, and August. Cooler than normal temperatures existed through much of the same time period, especially in the northern portions of the region. July was apparently the hottest month on record in Clark County. Obviously, the Southern Region weather conditions are quite varied, as are the production levels of Gambel's Quail. Quail populations are at low to moderate levels throughout the Southern Region and will likely remain at those levels. Areas with favorable weather conditions will have areas of higher

densities of quail. Quail harvest increased as predicted during the 2009-2010 season simply by watching precipitation patterns.

Productivity Potential

Limited brood surveys were conducted in the Southern Region during 2010. Moderate numbers of birds observed indicate a static trend in bird numbers for 2010. Average summer moisture across areas of the Southern Region should allow for reasonable conditions for increased cover, forage, and insects, which should benefit quail.

Fall Prediction

According to the DOE-CEMP, precipitation in southeastern Nevada is 107% of average. Although lower than average precipitation fell during the spring, moderate conditions should allow for average quail production. Gambel's Quail populations are at low-to-moderate levels, with most areas experiencing low to moderate production that will likely lead to little change in harvest from the previous year.

Mountain Quail

Brood surveys did not provide enough meaningful data for analysis, however, due to favorable precipitation patterns, and also cooler than normal temperatures, 2010 experienced a long lasting spring green up period favorable to mountain quail. Although cold, wet conditions during late spring can cause high chick mortality in some cases, the timing of the precipitation and cooler temperatures during the spring of 2010 was such that chick survival was not appreciably affected in most areas. This means that the production that was observed should have been good enough to result in moderate increases in mountain quail numbers.

PHEASANT

WESTERN REGION

Harvest

Harvest data indicates that 690 hunters harvested 628 pheasants and spent 254 days in the field. Pheasant harvest is near the 10-year average and hunter participation has increased every year since 2005 and is 40% higher than the 10-year average. Hunter days in the field were the lowest they have been since the inception of the post-season questionnaire (1976). High hunter participation and low hunter days suggests that the majority of pheasant hunters only spent one day hunting (0.9 birds/hunter), while a select few hunters spent multiple days hunting and were very successful (2.5 birds/hunter day).

Table 24. WESTERN REGION PHEASANT HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	10-Yr Avg.	Prev. yr.	vs. Avg.
No. of Birds	428	628	692	36%	-9%
No. of Hunters	493	690	495	17%	40%
No. of Days	1,206	254	1,074	-81%	-76%
Birds / Hunter	0.87	0.9	1.4	16%	-37%
Birds/Hunter Day	0.35	2.5	0.6	630%	285%

Population Status

Overall, the Western Region's pheasant population is thought to be at low levels but is demonstrating a slight increasing trend in Humboldt and Pershing Counties. Pheasant populations in the Western Region reside within Lovelock Valley of Pershing County, Mason and Smith Valleys of Lyon County and Lahontan Valley of Churchill County. The largest population exists in Paradise and the Quinn River Valley near Orovada in Humboldt County. Based on harvest data, pheasant numbers in Humboldt County peaked in 2003 then bottomed out in 2007. Humboldt County's pheasant population is now showing an increasing trend and is thought to be at an average level.

The Lyon County pheasant population currently remains at low levels based on harvest data and pheasant crow count data that is recorded at the Mason Valley Wildlife Management Area (MVWMA). Pheasant crow call count data was recorded at MVWMA in the spring for a six week period. Results from 2010 survey indicated that crow counts were averaging 2.75 calls/week, which is well below the long-term averages of 14 calls/week. Due to a dramatic decline in the pheasant population at MVWMA, a pheasant program was initiated in 2009. The program involves the use of a surragator. A surragator is a self contained unit that provides food, water, warmth and protection to chicks for the first five weeks of the bird's life. It has been suggested that the greatest mortality occurs during the first five weeks. Also, it has been inferred that by placing a surragator in a location where a manager would like to establish a population that birds will obtain a homing instinct to live and reproduce where they were raised and released. In 2009 and 2010, two surragators were utilized at MVWMA. Total birds released in 2009 at MVWMA were 170 pheasants. In 2010 as of July 28 a total of 148 pheasants have been raised and released. This total was comprised of 27 ring-necked pheasants fitted with white plastic leg bands and 121 Manchurian cross pheasants fitted with yellow plastic leg bands. MVWMA decided to stop using

ring-necked pheasants and only utilize Manchurian cross with ring-necked stock because Manchurian pheasants exhibit naturally wild characteristics and have shown a higher survival rate when placed in a surragator. Additionally, another 150 pheasants are scheduled to be released on MVWMA in September. This past spring MVWMA coordinated with USDA/Wildlife Services (WS) to perform predator control on the area to aid in pheasant survival. During a five-week period WS removed 30 coyotes, 16 raccoons, 2 gray foxes, 42 ravens, 1 skunk, 3 bobcats and 10 beavers. MVWMA anticipates continuing this program for another three years. After that time frame, the program will be evaluated.

Based on harvest data, the Pershing County pheasant population was at moderately high levels in the mid to late 1990's then fell to very low numbers by 2004. This population has exhibited an increasing trend since 2006. Presently, the population is thought be at a moderate level but significantly lower than the pheasant numbers observed in the 1970's and 1980's. Biologists believe that the many pheasant hunting clubs around Lovelock Valley have aided in providing wild populations with food, water, escape and thermal cover. However, Lovelock Valley is also regularly subject to drought because of its reliance on Rye Patch Reservoir for irrigation. Multiple drought years and clean farming practices with less cereal crops grown are thought of as leaving Lovelock Valley's pheasant population at reduced levels.

The Lahontan Valley pheasant population in Churchill County remains at extremely low levels. Harvest data, field observations from biologists and the public indicate very low numbers. In 2010, post-season hunt questionnaire data indicated that 11 birds were harvested. 2009 values indicated that 12 birds were harvested and the 10-year average harvest of pheasants in Churchill County is 21. Agricultural practices that are clean and favor alfalfa combined with increased urbanization have reduced the pheasant population in the Lahontan Valley.

Productivity Potential

Brood rearing habitat conditions in Humboldt County and MVWMA are thought of as being good, while conditions in Lovelock Valley are fair. Pheasant mortality in Humboldt County and MVWMA remains low. Random sightings from biologists this spring suggest that pheasant production will be average this year. No formal pheasant brood surveys are conducted in the Western Region.

Fall Prediction

The majority of the statewide harvest has occurred in Humboldt County since 1999. Humboldt County produced 69% of Nevada's pheasant harvest in 2009. Humboldt County should provide the greatest harvest opportunities in the state for the 2010 season. Pershing County (12% statewide harvest 2009) will also offer limited opportunities for the upcoming season. Lyon County (MVWMA) is still rebuilding its population; however, some harvest opportunities may exist for the upcoming season. Pheasant hunting throughout the rest of the Western Region will continue to depend upon pen raised birds for harvest opportunities.

SOUTHERN REGION

Harvest

In 2009, hunter questionnaire data indicated 40 pheasants were harvested by 34 hunters. Collectively, hunters expended 62 days afield. The Southern Region accounted for 5% of the statewide pheasant harvest and 4% of the total number of pheasant hunters.

Population Status

The small pheasant population in Moapa Valley has been impacted by protracted drought conditions, habitat loss and high predation rates. Department personnel on OWMA indicated no pheasants have been observed on the management area thus far in 2010. Presently, there are no data or accounts that would suggest a viable pheasant population exists in Moapa Valley.

Re-establishment of a viable pheasant population would likely require releases of wild birds, adequate precipitation, habitat conservation, and, pending the determination of overall effectiveness, continuance of raven control.

Fall Prediction

Pheasant hunting opportunities in Moapa Valley are extremely limited, perhaps nonexistent. In recent years, opportunities to hunt pheasants in the Southern Region have declined due to downward population trend and habitat loss. Presently, the pheasant population in the Moapa Valley is not deemed viable. Recently, there have been several unsubstantiated reports of pheasants having been released in Pahranagat Valley, Lincoln County. No releases of pheasants in Lincoln County have been authorized by NDOW.

WILD TURKEY

WESTERN REGION

Harvest

Fall 2009

The Mason Valley Wildlife Management Area (MVWMA) had three separate hunt periods lasting 10- days for the limited entry hunt. The first hunt period began on October 5, 2009 and the last one concluded on November 3, 2009. Quotas consisted of 10 resident tags per hunt period. The hunt allows for the taking of any turkey. Harvest results for the 2009 fall hunt are depicted in Table 25.

Table 25. FALL 2009 TURKEY HARVEST – WESTERN REGION

Area	# Tags Issued	Percent Return	# Turkeys Harvested	% Success Participants*
MVWMA	30	93%	9	39%
Lyon County	31	87%	6	25%

*Participant success determined by dividing harvest by the number of hunters reporting that they hunted.

Hunter effort reported for the MVWMA increased to an average of 2.61 days in the fall of 2009 compared to 2.00 days in 2008. The average number of days that hunters expended scouting on the MVWMA prior to their hunt increased to 1.04 days per hunter in 2009 compared to 0.61 days in 2008.

Eighty-nine percent of the Lyon County hunters returned their harvest questionnaires. Of the hunters reporting, 11% of the hunters reported not taking to the field. The hunters that participated harvested 6 turkeys consisting of 3 jakes and 3 hens.

Starting in 2010 the fall turkey seasons will no longer be available. Fall turkey seasons were discontinued due to an overall decline in turkey populations as well as low overall hunter success. Traditionally during the fall hunt structure, hens make up 80-90% of the harvest. By eliminating the fall hunt we can conserve adult hens to allow for an increase in population numbers. Once populations recover, the fall hunt may be reinstated to allow for harvest. A large part of the recovery will depend on habitat conditions and increased precipitation totals.

Spring 2010

The spring 2010 season for MVWMA consisted of 4 consecutive seasons the first beginning on March 25th, 2010 and the last concluding on May 3rd, 2010. The various hunt periods included 10 resident and 1 nonresident tag. Churchill and Lyon Counties opened on March 25th, 2010 and ran till May 3rd, 2010 with an open quota in Lyon County and two consecutive hunt periods in Churchill County. An open quota system allows any hunter the opportunity to take to the field each season to hunt any bearded turkey.

A new change in the Churchill and Lyon County for the spring 2011 season will require hunters to obtain permission from private landowners to hunt their property. The permission slip will

provide hunters the opportunity to access private land prior to applying for the tag. In the past, with an open quota system, hundreds of sportsman would obtain a tag with no guarantee of a place to hunt.

Humboldt County has an open quota season in Paradise Valley with some stipulations. Persons wishing to participate in this hunt must obtain permission from a Paradise Valley private landowner and submit a form provided by the landowner. Harvest results for all spring 2010 hunts are illustrated in Table 26.

Table 26. SPRING 2010 TURKEY HARVEST – WESTERN REGION
Based Upon Post-Season Questionnaires (Resident and Non-Resident)

Hunt Area		# Tags Issued	#Questionnaires Returned	DNH	Number Successful	Percent Success*
Mason Valley WMA		44	44	7	6	16%
Lovelock Valley		10	10	1	5	56%
Open Quota Areas	Lyon County	174	42	11	4	13%
	Paradise Valley	24	2	0	1	50%
	Churchill County	10	8	3	1	20%
Western Region Totals:		262	106	22	17	31%

*Participant success determined by dividing harvest by the number of hunters reporting that they hunted.

For the past three years the Western Region has experienced poor hunter success on the MVWMA as well as the surrounding Lyon County private lands. Historically the Mason Valley Management Area has averaged a 30 – 45 % hunter success rate. This year's hunter success was 13% and is identical to last year success. These low success rates indicate a decline in the turkey population. Lyon County issued 174 tags compared to 181 tags last year; a decrease of four percent. Following consecutive low recruitment years, the available turkeys for harvest has declined resulting in lower hunter success. Hunter success rates between the Lyon County open tag and the MVWMA tag show similar trends in success rates.

Hunter success for the Churchill County 2010 spring hunt was 20%, and is similar to what was reported last year. Newly enacted for the 2011 season is a landowner permission slip that the landowner must sign for a hunter to access and hunt private land.

Paradise Valley hunter success this year was 50% but only 2 of 24 hunters reported their hunting activities. Paradise Valley landowners issued 24 tags this year compared to 21 tags last year; an increase of 14% in tags.

Pershing County hunter success for the 2010 season was 56%, which equaled what was reported in 2009. Hunter opportunity was split into two seasons: the first season started on March 25, 2010 and concluded on April 13, 2010 while the second season started on April 14, 2010 and concluded on May 3, 2010. Reducing tag numbers and splitting the season appears to have aided hunters in accessing private property, therefore increasing hunter success.

Population Status

The overall success of hunters has been low for several years now. Reduced observations of mature toms indicate production has been low on the MVWMA area and in the surrounding

Lyon County in recent years. Surveys conducted in July on the MVWMA found 35 hens, 3 jakes and 15 class three poults.

Predation can negatively affect wild turkey populations. In 2010, USDA Wildlife Services' removed predatory species on the MVWMA to help facilitate a faster recovery of game species on the management area. The following predatory species were removed in a six-week period: 30 coyotes, 16 raccoons, 2 foxes, 2 skunks, 3 bobcats, and 42 ravens.

Also important to hen and brood survival is agricultural practices that occur on the management area. The reduction of alfalfa and legume crops over the last five years has had a negative effect on nesting and brood success of wild turkeys. Over the years, the management area has reduced the amount of alfalfa because it requires more water to raise. Crops that have been raised in its place require less water and include cereal crops that provide cover and winter food resources but do not provide the same nesting cover and food resource that alfalfa does. The MVWMA allows outside farmers to farm and cultivate crops on the management area. Farmers, for the most part, are required to grow crops that are known to be beneficial to wildlife. However, farmers at the MVWMA are growing onions, which have no benefit to wildlife species. The habitat conditions in Lyon County were normal in the winter and early spring months.

The Western Region turkey populations continue to exist at low densities associated with limited available habitat. Desert shrub communities provide needed cover and protection in and around agricultural fields. The fragmentation of turkey habitat that exists in Churchill County causes turkeys to exist in low densities across a large geographic area. High hen mortality occurs in agricultural fields in Churchill County where the cover in agricultural fields provides the best nesting habitat for the wild turkeys in this region. High hen mortality occurs annually from combines used to cut agricultural crops. The Churchill County turkey population is believed to be static at this time. The Lovelock Valley is very similar to Lahontan Valley; the only exception is the thick cover associated with the Humboldt River corridor which provides habitat for turkeys away from agriculture.

EASTERN REGION

Harvest

There were 6 turkey hunt choices in 7 units located in 3 counties in the Eastern Region that were open for turkey hunting during the 2010 spring season. These hunts included Hunt Unit 091 in Elko County, Hunt Unit 101 in Elko County, Hunt Units 065 and 102 in Elko County, Hunt Unit 103 in Elko and White Pine counties, Hunt Unit 115 in White Pine County, and Hunt Units 151 and 152 in Lander County along the Humboldt River.

Unit 091 (Pilot Peak) was open to hunting for the first time in the spring of 2010. There were 5 turkey tags available in this unit. Three turkeys were harvested (60% Success) including 2 toms and 1 jake. Five hunters reported spending 12 days scouting and 20 days hunting. One unsuccessful hunter reported having an opportunity to harvest a turkey but chose not to.

This was the first year Unit 101 (Clover Valley) was available to turkey hunting. There were 5 turkey tags in this unit. Four hunters participated in the hunt in which 2 toms were harvested (50% Success). One hunter elected not to harvest even though the opportunity presented itself. The 4 hunters reported spending 6 days scouting and 9 days hunting.

There were 17 turkey tags available in Units 065 and 102 (Lamoille). Ten tag holder were successful in harvesting a turkey (71% success) including 9 toms and 1 jake. One tag-holder reported not hunting and 1 hunter elected not to harvest even though the opportunity presented itself. Nine of the 10 successful hunters harvested their turkey in Unit 102 and 1 harvested in Unit 065. Hunter success increased from 55% success in 2009 to 71% in 2010, the second straight year of increased success. The 15 hunters reported spending 39 days scouting and 59 days hunting.

There were 11 turkey tags in Unit 103 (South Ruby). Only 1 tom was harvested (13% success). Hunters reported difficulty in finding turkeys in this hunt. Due to poor the hunter results and the difficulty finding turkeys during surveys this hunt has been cancelled.

This was the third consecutive year that a hunt has been held in Units 151 & 152 in Lander County. Three tags were issued and all 3 hunters were successful in harvesting a tom. Two of the hunters harvested their turkey in Unit 151 and 1 harvested in Unit 152. The 3 hunters reported spending 19 days scouting and 19 days hunting. In total, 9 tags have been issued for this hunt over the 3 years and all hunters have been successful in harvesting a turkey.

Fifteen turkey tags were issued for Unit 115 in White Pine County. Six tom turkeys were harvested. Hunter success in Unit 115 decreased from 89% in 2009 to 50% in 2010. One tag holder reported not hunting. Thirteen hunters reported spending 8 days scouting and 55 days hunting.

Population Status

No turkeys were released in the Eastern Region during 2009. During 2006, the Utah Division of Wildlife released Rio Grande Turkeys on the Utah (east) side of Pilot Peak. Surveys within turkey habitat on the Nevada side have documented use by turkeys. A new hunt was established for the Nevada portion of Pilot Peak (Unit 091) beginning in 2010. This hunt is largely open to public access.

Reports from Unit 101 indicate the turkey population is gradually spreading throughout available habitat in Clover Valley and some turkeys have been documented in North Ruby Valley. A new hunt was established for the Clover Valley area beginning in the spring of 2010. This hunt area is almost entirely on private land and hunters are encouraged to get land owner permission prior to applying for a tag.

The Ruby Mountain turkey populations in Units 102 and 065 are doing well. Frequent turkey observations from Lamoille and the South Fork area were reported during 2010 and both of these populations are gradually spreading onto public land along the western benches of the Ruby Mountains. Hunt Unit 065 was added to the 102 hunt area for the 2010 season. Turkeys utilize habitat along the South Fork of the Humboldt River in the Twin Bridges area. This change made turkeys in this area available to hunters. Hunters should know that this area is mostly on private lands and permission is required prior to hunting the area. Turkeys do not currently occur in any other portion of Unit 065.

The south Ruby hunt area (Unit 103) has seen steady decline in turkey numbers. Hunters saw little to no sign of turkeys during the spring 2010 hunt. Surveys of the area also resulted in little to no turkey sign. The Unit 103 hunt had been cancelled. No immediate plans for turkey releases in the area exist.

The Lander County hunt (Units 151 & 152) continues to see excellent hunt success. Turkeys are spreading along the Humboldt River and annual production remains good.

During the summer of 2007 fires burned much of the areas used by turkeys in the Bruneau River area and the future of that release is uncertain. Limited reports indicate that turkeys are still present and as the habitat recovers in the area, turkeys may be able to make a comeback. Conditions and populations will continue to be monitored.

Productivity Potential

Spring moisture was good this year; broods have been reported in most of the turkey areas during the summer. With reports of jakes and good brood production during 2010 the outlook for the spring 2011 turkey hunts is good.

Fall/Spring Prediction

Turkeys in Units 091 (Pilot Peak), 101 (Clover Valley) and 102 (Lamoille) and the White Pine County Hunt Unit 115 are believed to be stable with a sufficient male population to sustain spring hunts. The Lander County turkey population is expanding and doing well with broods observed this summer. Hunting should be good again in Lander County. The future potential for hunts in the Eastern Region looks promising.

SOUTHERN REGION

Clark County

Harvest

Fall 2009

In the limited entry hunt, resident hunters vied for 10 either-sex turkey tags in Moapa Valley, Clark County. Five tags were apportioned to hunters in each of two consecutive seasons: October 5th through October 14th and October 15th through October 24th. An administrative matter required issuance of an eleventh tag. The fall 2009 seasons reflected reduced quotas and elimination of nonresident hunts. In fall 2008, resident and nonresident turkey hunters vied for 22 either-sex tags.

Based on questionnaire data that included 11 respondents, 10 hunters in Moapa Valley collectively expended 12 days scouting and 21 days hunting. One tagholder did not hunt. On average, hunters scouted 1.2 days and hunted 2.1 days. The turkey harvest in Moapa Valley was comprised of one hen and one jake. In 2008, the harvest consisted of ten hens and one tom. In the 2008 seasons, hunter success was 55%, and represented an increase relative to the 38% reported in 2007.

Spring 2010

The spring limited entry drawing in Moapa Valley involved three consecutive ten-day seasons: March 25th – April 3rd, April 4th – April 13th, and April 14th – April 23rd. Three resident tags were allotted in each of the three seasons. The spring 2010 seasons reflected reduced quotas and elimination of nonresident hunts. In spring 2009, resident and nonresident hunters vied for 18 bearded turkey tags.

Based on questionnaire data submitted by nine hunters, four toms and two jakes were harvested. In 2009, five toms and four jakes were harvested. All respondents in 2010 spring seasons actively hunted, yet one hunter chose not to harvest. Hunter success among nine hunters equated to 67%, and reflected an increase relative to the 60% reported last year. Overall, hunters expended 36 days scouting and 33 days hunting. On average, hunters scouted four days and hunted 3.7 days.

Lincoln County

Harvest

Spring 2010

The Nevada Wildlife Commission authorized four spring wild turkey seasons in Lincoln County. The Resident Junior Spring Wild Turkey Hunt was held under an open quota, and ran April 14th – April 23rd. The spring limited entry drawing in Lincoln County involved three seasons that ran consecutively: March 25th – April 3rd, April 4th – April 13th, and April 24th – May 3rd. Twenty resident tags and two nonresident tags were allotted for each hunt.

Relative to the previous year, the 2010 seasons were marked by reduced hunter opportunity, yet increased hunter success. Return information from Lincoln County wild turkey hunters

shows a 7.1% decrease in turkey tags available for the 2010 season. The number of birds harvested showed a 90% increase from the previous year and 16% above the long-term average. In view of spring turkey hunting opportunity statewide, seasons in Lincoln County accounted for 28% of total tags and 28% of total harvest. Current Lincoln County harvest figures as well as short- and long-term perspectives are presented in table 1.

Nine hunters reported that they had opportunities to harvest turkeys, but chose not to. Hunters continue to complain about overcrowding, which is difficult to address. Lower quotas in 2011 may help to reduce conflicts, however, hunters will still congregate in the areas of public land known to hold higher densities of wild turkeys.

Table 27. Lincoln County Turkey Harvest

	REGIONAL TOTALS:					Percent Change	
	2007	2008	2009	2010	2001-10 AVG	PRE. YR.	10 YR. AVG.
Number of Tags Issued	295	117	140	130	85	-7%	34%
Total Birds Harvested	48	18	10	19	16	+90%	+16%
Percent Success	16%	15%	7%	14.6%	17%	+7.6%	-13%

Population Status

Moapa Valley

Overall, unfavorable environmental conditions have prevailed since November 2005. During this time, conditions have generally ranged from abnormally dry to drought. Vegetative abundance and vigor and insect availability have ranged from poor to fair. Observed nesting success and poult survival have appeared low relative to observations in recent years (2003-05) marked by high precipitation receipts. More recently, although the winter of 2009-10 was wetter than the four preceding winters, subsequent precipitation receipts in spring and summer monsoon months were below average.

On June 9, 2009, a turkey survey was conducted in the Logandale–Overton area of Moapa Valley. The objective was to document the distribution of turkeys with emphasis on birds already recruited into the population. A total of 148 turkeys was encountered in 17 areas. The sample was comprised of 95 hens, 45 jakes and 8 toms. No turkey surveys were conducted in 2010.

In Moapa Valley, wild turkey habitat exists in a fairly confined, narrow band along the Muddy River. Wild turkeys tend to concentrate throughout the year in a relatively small area that includes the OWMA and nearby croplands in Overton and Logandale. Increasingly, crop fields adjacent to the river are being subdivided and developed for housing and commercial enterprises. It is anticipated in the near future, the loss of habitat coupled with an inevitable no-shooting ordinance will likely result in a reduced turkey population and restriction to hunting.

Lincoln County

Wild turkeys were introduced to Lincoln County in 1999. Initial releases proved successful, and a limited hunt was opened in 2001. At that time, turkeys were found primarily in association with private lands. Hunting pressure quickly served to disperse many birds from private lands to adjacent, less productive public lands. Additional releases in various locations in Lincoln County have resulted in a low-density, broadly distributed turkey population. In fall 2009, a total of 62 wild turkeys were released in two areas of southeastern Lincoln County. Two complements of 31 birds were released on the north end of the Delamar Mountains and eastern portion of the Clover Mountains. Additional release sites remain in Lincoln County and releases will be done when birds become available.

In recent years, prevailing drought conditions have limited population expansion. Moreover, it is likely the wild turkey population has contracted. No brood surveys were conducted in Lincoln County in 2010.

In central Lincoln County, lightening-caused wildfires burned large expanses of dense pinyon-juniper woodland in the Clover Mountains (Unit 242) and Delamar Mountains (Unit 241). In many areas five years post fires, regenerated varieties of oak now provide excellent mast sources. In addition, increased flow rates at many springs and seeps have improved water and insect availability.

Fall Prediction

Moapa Valley

Over the long term, the wild turkey population in the Moapa Valley is expected to trend downward due to drought, habitat loss and degradation, predation, harassment, and illegal take. Indications are that the population has declined. Nevertheless, hunters should experience little difficulty in locating turkeys on private lands during the fall either-sex hunt.

A substantial proportion of the Moapa Valley turkey population occurs on private land, and as a result, tagholders generally have to seek landowner consent to access fields. Incidences have arisen where this situation ultimately resulted in lost hunting opportunity for some sportsmen.

Lincoln County

In 2010, turkey hunters experienced greater success; however, a contracted turkey population resulted in reduced quota. Wild turkeys still appear to be scattered across Lincoln County in relatively low densities, although certain areas appear to hold higher densities of birds. In the near future, hunt quotas may be adjusted downward in line with the trend of the turkey population.

RABBIT

WESTERN REGION

Harvest

An estimated 1,637 hunters harvested 8,776 cottontail rabbits and expended 9,100 days hunting in the Western Region during the 2009-2010 season. Those figures resulted in an average of 5.4 rabbits/hunter and 1 rabbit harvested/day. All 2009 post-season questionnaire data for cottontail rabbits is greater than its respective 10-year averages except rabbits/hunter and rabbits/hunter day. Interest in rabbit hunting has increased every year since 2007. Additionally, hunter numbers and days in the field are 100% or greater than their respective 10-year averages. It is thought that these increases may have been influenced by increases in chukar hunters this past year.

Table 28. WESTERN REGION RABBIT HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	10-Yr Avg.	Prev. yr.	vs. Avg.
No. of Rabbits	5,363	8,776	4,645	64%	89%
No. of Hunters	1,028	1,637	814	59%	101%
No. of Days	5,211	9,100	3,619	75%	151%
Rabbits / Hunter	5.22	5.4	6.2	3%	-14%
Rabbits/Hunter Day	1.02	1.0	1.3	-6%	-25%

NDOW is continuing to determine pygmy rabbit harvest levels using upland game harvest questionnaire data. Estimated harvest data from 2009 implies that 139 pygmy rabbits were harvest by 52 hunters who spent 186 days of hunting, which resulted in 2.7 pygmy rabbits/hunter and 0.8 pygmy rabbits/hunter day. Three years of expanded harvest data has shown an average of 142 pygmy rabbits harvested by 35 hunters who averaged 258 days in the field. The three-year averages are slightly higher than 2009-10 values.

Population Status and Production Potential

Post-season harvest data suggests that the Western Region rabbit population reached high levels in 2005 then gradually declined. Presently, the Western Region's rabbit population is thought to be stable at moderate levels. Habitat conditions for rabbit reproduction this past May and June were thought to be good to excellent. No formal surveys are conducted for rabbits in the Western Region.

Fall Prediction

Last season the Western Region enjoyed 50% of the statewide harvest on rabbits. Counties with the highest harvest were Humboldt (14% statewide harvest), Washoe (13% statewide harvest) and Churchill (12% statewide harvest). These counties in addition to Lyon County should provide ample harvest opportunities for the 2010-2011 season.

EASTERN REGION

Harvest

The 2009-10 rabbit season was 142 days long, extending from October 10, 2009 to February 28, 2010 compared to 141 days last year. Bag limits were the same as in the past, with 10 daily and 20 in possession. The season and bag limits were concurrent with all counties in the state. The regional rabbit harvest summary from the Small Game Post-Season Questionnaire survey is reported below.

Table 29. EASTERN REGION RABBIT HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008	2009	Avg.	Prev. yr.	vs. Avg.
No. of Rabbits	4,739	3,876	5,895	-18.2%	-34.3%
No. of Hunters	502	557	550	11.0%	1.3%
No. of Days	2,616	2,920	2,288	11.6%	27.6%
Rabbits / Hunter	9.4	7.0	11.6	-26.3%	-39.8%
Rabbits /Hunter Day	1.8	1.3	2.5	-26.7%	-47.2%

There was a decrease in the regional rabbit harvest from the previous year's total (18%) as well as the long-term average (34%). The number of hunters in 2009 was up 11% from the previous year. Rabbits/hunter (n=7.0) decreased 26% from the previous year and was 40% lower than the long-term- average. Rabbits/hunter day (n=1.3) was below both the previous year and long-term-average. Pygmy and White-tailed jackrabbit reported harvest increased in the Eastern Region counties compared to the previous year.

Population Status

Eastern Region rabbit populations appear to be at average levels. Biologist observations and the number of road-killed rabbits have been less in recent years however spring observations are showing that populations may be on their way back up.

Productivity Potential

Weather conditions, especially precipitation levels have provided good conditions for rabbits throughout most of the Region for past 2 years. Due to the cool wet spring cover and forage for rabbits in the 2010 summer was excellent. The productivity potential remains good throughout most of the Eastern Region in 2010.

Fall Prediction

The Eastern Region rabbit population is expected to increase throughout most of the Eastern Region. Rabbit hunters should experience good hunting during the 2010-11 season and harvest is expected to be above average.

SOUTHERN REGION

Harvest

The 2009-2010 rabbit season ran from October 10th, 2009 to February 28, 2010, for a total of 142 days in length. Bag limits were 10 daily and 20 in possession.

Post-season questionnaire data for the four counties of the Southern Region show that 1,274 hunters harvested a total of 4,901 rabbits during 5,154 days of hunting. The number of rabbits harvested, number of days hunted, and rabbits per hunter all decreased compared to both short the previous year, while the number of hunters increased and the rabbits per hunter day stayed static. The Southern Region accounted for approximately 28% of the statewide rabbit harvest during the 2009-10 rabbit season.

Table 30. SOUTHERN REGION RABBIT HARVEST
Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2008-09	2009-10	AVG.	PRE. YR.	10 YR. AVG.
No. of Rabbits	5,776	4,901	4,973	-15.1%	-1.4%
No. of Hunters	1,160	1,274	836	+9.8%	+52.4%
No. of Days	5,785	5,154	4,131	-10.9%	+24.8%
Rabbits / Hunter	5.00	3.80	7.05	-24%	-46.1%
Rabbits /Hunter Day	1.00	1.00	1.41	0.0%	-29.1%

Table 31. SOUTHERN REGION RABBIT HARVEST BY COUNTY
10% Questionnaire Data

	2008-09	2009-10	2009-10 % of harvest	% Difference Short-term
Clark	2,750	3,139	64%	+14.1%
Esmeralda	139	154	3.1%	+10.8%
Lincoln	1,606	756	15.4%	-52.9%
Nye	1,282	851	17.4%	-33.6%
Total	5,776	4,901	100%	-15.1%

Population Status

The Southern Region rabbit population appears to stable at low to moderate populations levels. No rabbit transects were driven in 2010 because they do not appear to provide any meaningful data. Rabbit populations are generally subject to cyclical changes which are normal to most populations of Lagomorphs.

Fall Prediction

According to the WRCC Weather Data, precipitation in southeastern Nevada is 107% of average. Moderate precipitation during the late-summer of 2010 should result in rabbits going into fall in good condition. Isolated summer thundershowers should result in areas with moderate to good range conditions that will benefit rabbits. Cottontail rabbit populations appear to be at low levels, however, most areas should be experiencing low-to-moderate production that will likely lead to little change in harvest from the previous year.

FURBEARERS

Overall statewide harvest of furbearing animals during the 2009-10 season was well below long term averages. Harvest of all furbearing species decreased 35% when compared to the 2008-09 season. Bobcat harvest for the 2009-10 season, statewide was 1,240. This was a 51% decrease from the 2008-09 season, and 46% below the 30 year average of 2,282 cats per season. Kitten production increased to 0.54 kittens per adult female, an increase of 217% over 2008-09 production rate of 0.17 kittens/ adult female. Coyote harvest during the 2009-10 season decreased 37% from the previous season. The USDA-Wildlife Services reported that coyote numbers were high in many areas of the State in 2009-10. Red fox harvest, which had increased to a record 18 in 2007-08, decreased to just 4 foxes in 2009-10. The number of licensed trappers during the 2009-10 season decreased 12% to 918 licenses sold. This number was still above the 30 year average of 695 trappers, but below the average numbers sold (1,256 licenses) through the high years of the 1980's. Fur prices were generally above long term averages with bobcat prices increasing slightly despite an anticipated price reduction.

A truncated bobcat season during 2009-10 helped NDOW accomplished two important goals related to bobcat management. The first of those goals was to reduce bobcat harvest overall. Despite a strong fur market, this goal seems to have been achieved. The second goal was to increase juvenile survival. A decreased harvest accomplished through the shortened season increased juvenile survival. The Board of Wildlife Commissioners approved for a second year the Department's recommendation for a shortened bobcat season for 2010-11, with the same general goals in mind.

Furbearer harvest data are obtained each year by summarizing and expanding postseason questionnaire information obtained from licensed trappers. The Department sends trappers a log book at the beginning of each season to facilitate their documentation of trapping effort. These data have been comparable for decades. The Department obtains bobcat harvest data and trapper effort through a mandatory check-in process. Trappers are required to retain and remit a portion of the lower jaw preserving one or more canine teeth. The canines are later extracted by biologists who can determine the age classification of the animal, either adult or juvenile, based upon tooth characteristics. Cumulative data discloses the age structure of the bobcats harvested for a geographic area.

WESTERN REGION

Harvest

This past trapping season's harvest figures for furbearing animals were obtained through a post-season questionnaire sent to all licensed trappers. These sample figures are expanded to represent total harvest. Additional data on bobcats is derived from information turned in by trappers at the time of pelt sealing.

In the Western Region, a total of 2,827 furbearing animals were harvested. Western Region trappers recorded 50% of the state's total fur harvest of just over 5,680 animals. Access was good and fuel prices were lower than last year, and favorable trapping conditions persisted throughout the season with mild weather until late in the winter. Table 1 represents the furbearer and predator harvest in the Western Region for the 2009-2010 trapping season, indicating the seven most sought after species.

Table 1. Western Region Furbearer Harvest.

Species:	2008-09	2009-10	Average 2000-09	Percent Change	
				Prev. Year	10 Year Avg.
Bobcat	883	428	810	-.52%	-47%
Coyote	1,131	875	890	-23%	-2%
Gray Fox	88	83	169	-6%	-51%
Kit Fox	207	110	200	-47%	-45%
Beaver	390	392	398	1%	-1%
Muskrat	959	711	1389	-26%	-49%
Mink	52	56	42	8%	34%

Bobcat

Bobcat harvest data is collected annually from information reported by the trappers on their bobcat harvest report forms. Additional data is derived from the collection and processing of the lower jaw of each animal. Trappers are required to turn in the lower jaw, with intact canines, at the time their pelts are sealed. One canine from each jaw is then removed to determine juvenile or adult.

Table 2. Western Region Bobcat Harvest.

	2008-09	2009-10	Average 2000-09	Percent Change	
				Prev. Year	10 Year Avg.
Bobcat Harvest	883	428	789	-51%	-47%
Bobcat Trappers	176	124	103	-29%	20%
Trap Days	229,735	94,002	134,751	-59%	-30%
Trap Days / Cat	269	220	177	-18%	24%
Bobcats / Trapper	5.1	3.5	7.6	-31%	-54%
Season Length	120 days	82 days	NA	NA	NA
Kitten/Adult Female	0.12	0.63	0.27	430%	130%
Adult Male/ Adult Female	1.4	1.51	1.56	7%	3%

Bobcat harvest for the Western Region is down considerably from the previous year and the previous 10 year average (Table 2). Production may have stabilized following the wet spring of 2009 which allowed for an increase in populations of species accommodating the prey base. Recruitment, whether it be from young of the year or from immigration, appears to have been at or above maintenance levels over the long term. Additionally, the ratio of adult males/adult females, at 1.5, is indicative of a healthy bobcat population. The shortened trapping season seems to have had the desired response given the figures in Table 2.

Virtually all species saw an increase in the price of pelts at the fur auctions with muskrat, raccoon, mink and coyote realizing the largest increases (Table 3).

Population Status and Analysis

Furbearer populations in north western Nevada appear healthy and at sufficient numbers to maintain population viability. Two consecutive years of wet spring time conditions should equate to better production, enhanced survival and therefore improved recruitment for the Regions furbearers; something that this past years shortened season should assist. Over the long term the bobcat populations has shown a elasticity to varying climatic conditions, trapping pressure and changes in the prey base, which is an indication of good overall population health. Despite the advancements in technology, mainly the use of OHV's and GPS technology, there appears to remain many areas throughout the state where trapper access is low, allowing for source areas, or refugia of bobcats.

Table 3. Statewide Fur Auction Prices

Species	Total Value of Catch	AVERAGE PRICE		% Change
		2008-09	2009-10	
Beaver	$8,357.91	$9.62	$13.33	39%
Otter	$0.00	$0.00	$0.00	NA
Muskrat	$4,100.91	$2.51	$5.61	124%
Mink	$1,230.25	$4.07	$12.95	218%
Raccoon	$1,026.00	$3.68	$9.00	145%
Bobcat	$352,160.00	$263.86	$284.00	8%
Coyote	$40,983.98	$9.62	$27.07	181%
Badger	$1,333.64	$11.38	$17.32	52%
Striped Skunk	$342.20	$6.21	$5.80	-7%
Ring-tailed Cat	$0.00	$10.89	$0.00	NA
Kit Fox	$4,250.73	$8.89	$11.71	32%
Gray Fox	$17,561.19	$16.83	$21.39	27%
Red Fox	$91.24		$22.81	NA
Total	**$431,438.05**			

Gray fox and Kit fox populations are unpronounced but stable, based on habitat conditions and harvest figures. These two fox species, along with coyotes are broadly distributed and their populations occur in varying densities throughout their habitat.

Aquatic furbearer populations, which include beaver, muskrat, otter and mink, will fluctuate around annual climatic conditions and the resulting local water levels. There were two reports of otter in the Western Region this year. Beaver numbers are thought to be substantial in the Carson, Truckee and Walker river sheds, but this analysis is subject to increased complaints which are influenced by climatic conditions and the resultant water flows.

Some furbearers are trapped every year to alleviate depredation and nuisance issues. There are several private companies doing this work, assuaging NDOW personnel from responding to non-emergency calls and reducing costs to NDOW of thousands of dollars. Per the depredation permits that are issued these companies must report annual take of furbearer and non-game mammals. Enforcement of this requirement is not consistent and thus the reported numbers are conservative. In 2009 these companies reported the take of: 31 beaver; 41 muskrat; 91 raccoon; and 109 skunks.

EASTERN REGION

Harvest

During the 2009-10 season 884 furbearers were taken in the Eastern Region. The 2 prior year's furbearer harvest in the Eastern Region was 1,732 in 2008-09 and 2,477 in 2007-08. This year's harvest represents a 49% decrease over last year's fur harvest in the Eastern Region and a 64% decrease over the harvest from 2 years ago. The harvest level of most furbearing species was below the 10-year- average. Over the past decade low interest in furbearer harvest has resulted in relatively low 10-year-average figures. Fewer trappers were afield last year than the previous year. Comparisons of current and historic Eastern Region furbearer and predator harvest for several species are presented in Table 4. For a complete list please see furbearer tables in the appendix.

Table 4. EASTERN REGION FURBEARER HARVEST

Species:	AVERAGE 1998-08	2008-09	2009-10	Percent Change	
				Prev. Year	10 Year Avg.
Beaver	132	255	217	-14.9%	64.4%
Muskrat	40	7	20	185.7%	-50.0%
Coyote	702	622	265	-57.4%	-62.3%
Gray Fox	89	103	18	-82.5%	-79.8%
Kit Fox	22	31	3	-90.3%	-86.4%
Red Fox	5	11	4	-14.9%	64.4%
Otter	7	5	4	185.7%	-50.0%

During the 2009-10 trapping season fur values varied widely from species to species. Prices were up slightly for most furbearer species during the 2009-10 season. Trapper interest remained elevated largely due to bobcat prices (average $284) which were slightly higher than the 10-year-average ($241). Instability in the world fur trade continues to have the most significant effect upon the Nevada fur industry. Prices and interest are expected to remain somewhat unpredictable but directly proportional.

Population Status

Prey base populations (rodents and lagomorphs) were lower than usual throughout the Region. Dry weather over several years was believed to be the primary reason for lower prey. Near record precipitation received in June 2009 helped to improve prey base populations, but, recovery from the previous low numbers will take some time.

Red fox are becoming more common throughout the Eastern Region. Trapping records and sightings indicate a general expansion of red fox numbers and distribution.

Gray fox pelt value increased 27% last season and gray fox harvest dropped 92% from the 2008-09 season to the 2009-10 season. Gray fox harvest is closely related to bobcat trapping interest due to the fact the species overlap in habitat use. Gray fox have a widespread distribution and it is believed that they will respond favorably to what should be increased prey availability due to a wet spring.

Kit fox populations within the Eastern Region are fairly widespread with populations present in most valleys. Kit fox harvest decreased during the past season and harvest information indicates trapping interest is relatively low.

Table 5. EASTERN REGION BOBCAT HARVEST

	Average 2000-09	2008-09	2009-10	Percent Change	
				Prev. Year	10 Year Avg.
Bobcat Harvest	847	663	277	-58.2%	-67.3%
Bobcat Trappers	141	154	64	-58.4%	-54.6%
Trap Days	148,796	171,653	37,042	-78.4%	-75.1%
Trap Days / Cat	141	262	134	-48.9%	-5.0%
Bobcats / Trapper	6	4.3	4.3	0.0%	-28.3%
Season Length	119	120	81	-32.5%	-31.9%

The number of bobcats harvested in the Eastern Region decreased during the 2009-10 season. The number of trap days required to catch a cat decreased from the previous year and was below the long-term average. Juvenile production was up significantly (0.50) from the last 2 years (0.34 and 0.17 respectively) and nearly equal to the long-term average (0.54). The number of cats per trapper (4.3) was the same as last year and below the long-term average. Bobcat pelt prices rose slightly in 2009-10.

The coyote harvest decreased by 57% during this past season. The average price for coyote pelts increased dramatically in 2009-10, but was still below the long-term average. Average prices were below $30. In addition to sport harvest, Wildlife Services personnel removed coyotes in response to livestock depredation complaints and the Department's predator management program.

The 2008-09 Eastern Region beaver harvest decreased compared to the previous year. Regional beaver harvest was above long-term averages. Beaver populations are believed to be at high levels following many years of low pelt prices and trapper interest. Beaver distribution is expanding in a few areas in response to favorable riparian conditions and increased stream flow. The Department responded to numerous beaver complaints throughout the year. Harvest levels are traditionally related to beaver pelt prices, but recent years have seen an increase in

take while prices have remained low. Harvest should remain low as long as pelt prices are down.

Regional muskrat harvest continued to be negligible and was well below the previous highs of the 1970's, 1980's and 1990's. The isolated muskrat populations that exist throughout the Region fluctuate annually depending on climatic conditions and local water levels. The only large, stable population of muskrat within the Eastern Region is at the Ruby Lake National Wildlife Refuge. Ruby Lake is no longer available for harvest since the Refuge is not allowing muskrat trapping.

The distribution of otter and mink is widespread throughout the major drainages of the Eastern Region. Information regarding these species is extremely limited at the present time. Localized population levels are believed to be moderate and stable. During last fiscal year the Department of Wildlife removed six otter incidental to removing beaver related to wildlife damage complaints.

Analysis

Bobcat harvest levels have been regulated for many years through season length adjustment. Historically, season length reductions were recommended when juvenile production was low and trapping interest was high. Production was 0.17 in 2008-09 and 0.34 in 2007-08. In response to 2 consecutive years of low juvenile production, the bobcat season was reduced from 120 days to 81 days for the 2009-2010 season. Production was 0.50 during the 2009-10 year. Other biological parameters measured to evaluate trends in the bobcat population indicate stability. The adult male to adult female ratio was 1.2 in 2009-10. The ratio was 1.2 in 2008-09 and 1.4 in 2007-08. The effort necessary to trap a cat was down from last year, and below the long-term-average. With the shortened season and numerous trappers taking a hiatus from trapping, bobcat take was well below any recent or long term levels. Bobcat populations are healthy and stable in the Eastern Region.

Beaver harvest decreased in 2009-10 after 3 years of increase in the Eastern Region, and was above the long-term-average. Beaver populations remain at moderate to high levels and continue to present problems to some private landowners. Beaver trapping seasons of maximum length have been maintained in order to maximize beaver harvest. This has been desirable from both a biological and damage management standpoint.

The majority of river otter harvested within the Region were captured incidental to beaver trapping. With low beaver trapping interest, few otter are taken. Nevada does not offer an export seal for otter, which will continue to depress prices and trapping interest. Populations should remain stable along major drainages and reservoirs.

Overall, populations of furbearer species in the Eastern Region remain at healthy levels with stable to increasing population trends for both prey species and furbearers.

SOUTHERN REGION

Harvest

Based on post-season questionnaires and trapper-submitted bobcat harvest reports, 1,956 animals were harvested in the Southern Region during the 2009-10 trapping year. This figure

represents a 33% decrease compared to 2,919 animals harvested in 2008-09. Notable changes relative to last year involved decreased harvest of coyote and gray fox, and increased harvest of kit fox. Current harvest figures as well as short- and long-term perspectives are presented in Table 6.

Table 6. SOUTHERN REGION FURBEARER HARVEST

	Average 1999-08	2007-08	2008-09	2009-10	%Difference Short-term	%Difference Long-term
Beaver	13.5	19	39	18	-54%	+33%
Muskrat	23.7	0	0	0	NA	NA
Coyote	477.0	878	672	374	-44%	-22%
Gray Fox	622.7	1,203	981	720	-27%	+16%
Kit Fox	137.7	202	215	250	+16%	+82%

Harvest levels over the short and long term decreased for coyote and increased for kit fox. Although fewer gray foxes were taken in the last trap season relative to in recent years, the harvest was above the long-term average. Over the long term, beaver and muskrat harvest has been erratic. In the 2009-10 trap seasons, commonly sought species associated with higher average valuations included bobcat, coyote, gray fox and kit fox. Bobcat and gray fox seasons were not concurrent in 2009-10. The gray fox season (November 1, 2009—February 28, 2010) remained unchanged from last year. As a consequence of contracted bobcat populations throughout Nevada, the bobcat season was abbreviated from 120 days to 81 days. The bobcat season opened December 1, 2009 and closed February 19, 2010.

Bobcat

In the Southern Region, 535 bobcats were harvested through trapping and shooting during the 2009-10 season, which reflected a 43% decrease relative to the 2008-09 season. Compared to the long-term average, the bobcat harvest in 2009-10 represented a 36% decrease (Table 2).

In the 2009-10 season, fewer trappers harvested fewer bobcats while expending less time per bobcat compared to trappers in 2008-09. The Southern Region bobcat harvest (trapping and shooting) comprised 43% of the statewide total, which reflected an increase relative to the 36% proportion reported last year. Current trapping figures as well as short- and long-term harvest perspectives are presented in Table 2.

Table 7. SOUTHERN REGION BOBCAT HARVEST

	Average 1999-08	2007-08	2008-09	2009-10	%Difference Short-term	%Difference Long-term
Bobcat Harvest	835	929	932	535	-43%	-36%
Bobcat Trappers	127	196	184	122	-34%	-4%
Trap Days	151,807	138,672	181,312	95,585	-47%	-37%
Trap Days/Cat	194	170	210	194	-15%	-8%
Bobcats/Trapper	6.2	4.2	4.7	4.4	-6%	-29%
Season Length	120.3	121	120	81	-33%	-33%

Population Status

Based on analysis of bobcat tooth data, kitten production in the Southern Region increased above previously reported production levels of 0.14 and 0.22 corresponding to 2007-08 and 2008-09 seasons, respectively. Bobcat harvest data compiled after the 2009-10 season indicate a kitten per adult female ratio of 0.49, which reflected a 26% decrease relative to the long-term (1980-2006) average ratio of 0.66.

The Mojave Desert bobcat populations experienced a 40% increase in the ratio of kittens per adult female from 0.25 in 2008-09 to 0.42. However, compared to the long-term (1980-06) average ratio of 0.70 kittens per adult female, the Mojave Desert populations experienced a 40% decrease in kittens per adult female.

Great Basin bobcat populations experienced a 73% increase in the ratio of kittens per adult female from 0.15 in 2008-09 to 0.56. Compared to the long-term (1980-06) average ratio of 0.73 kittens per adult female, Great Basin populations experienced a 23% decrease in kittens per adult female.

The U.S. Department of Agriculture, Wildlife Services, removes predators in response to livestock depredation complaints, and increasingly, aggressive coyotes in situations of human and pet encounters. The increase in reported incidences of human and pet interactions with coyotes is largely related to continued rapid urbanization and habitat loss in Southern Nevada.

Kit fox, gray fox and coyote populations in the Southern Region are broadly distributed, and occur in varying densities.

Status and trend information corresponding to furbearers associated with wetlands (i.e., beaver and muskrat) is largely unavailable in the Southern Region. Harvest of these species is minimal. The impacts to aquatic furbearers by protracted drought conditions are unknown. Beavers occur in southern Nevada and appear to have small stable populations. Muskrat populations in the Southern Region are limited in size and distribution, and occur in Pahranagat Valley, Lincoln County, and Overton Wildlife Management Area, Clark County.

In 2005 and 2006, lightening caused wildfires in Clark and Lincoln counties impacted wildlife habitats over broad areas. Wildfires in Clark County occurred in the Spring Mountains and Gold Buttes. In Lincoln County, wildfires impacted wildlife habitats in the Delamar Mountains, Meadow Valley Mountains, Mormon Mountains, Clover Mountains, Tule Desert and Pahroc Mountains. Initially, the areas affected by fires offered diminished resources (i.e., food and cover) for many wildlife species. Some furbearer habitats that were profoundly altered by fires may already reflect improvements through native plant establishment and increased prey availability.

Fall Prediction

Bobcat harvest levels in the upcoming 2010-11 season are anticipated to vary across areas despite moderately high demand and market prices. Bobcat trapper participation is anticipated to remain largely unchanged relative to the 2009-10 season. Trappers will likely encounter reduced bobcat abundance in some areas. It is anticipated the availability of bobcats in the upcoming season will likely be influenced by low recruitment rates in recent successive years. In the 2007-08 and 2008-09 seasons, high harvest levels were superimposed on the impacts of drought and overall contracting bobcat populations.

Harvest levels of gray fox and kit fox are expected to remain high relative to bobcat harvest due to incidental catch among the increased number of bobcat trappers.

APPENDIX I
INDEX TO TABLES

Table Name **Page Number**

Upland Game

Furbearers

Waterfowl

APPENDIX II
Small Game Questionnaire Data

SUMMARY OF STATEWIDE UPLAND GAME HARVEST 1965-2009 From Post-season Questionnaire								
Year	Sage Grouse	Hunters	Blue Grouse	Hunters	Chukar Partridge	Hunters	Hungarian Partridge	Hunters
1965	12,948	6,786	559	494	131,048	16,458	ND	ND
1966	6,138	3,883	451	506	28,963	6,028	ND	ND
1967	7,284	4,584	408	564	48,984	8,376	ND	ND
1968	11,765	5,499	975	559	78,064	10,047	ND	ND
1969	23,270	7,605	767	611	124,353	14,536	ND	ND
1970	23,775	9,180	645	570	16,886	18,615	ND	ND
1971	20,805	7,845	660	645	155,895	17,127	ND	ND
1972	17,686	9,099	1,301	882	75,520	14,116	ND	ND
1973	24,930	8,536	2,529	1,237	131,608	13,936	ND	ND
1974	22,924	9,348	3,409	1,696	161,813	17,952	9,625	2,160
1975	16,376	8,331	2,168	1,534	89,408	14,292	2,671	1,185
1976	13,902	5,977	1,752	1,047	56,440	9,626	2,020	870
1977	7,561	4,230	2,257	1,164	52,245	7,853	1,503	606
1978	17,693	6,647	2,663	1,396	108,775	12,296	2,234	796
1979	28,228	8,090	3,123	1,684	151,270	13,960	2,665	1,042
1980	14,648	5,895	1,824	1,112	218,965	15,481	4,895	1,465
1981	15,522	6,731	2,916	1,560	84,498	11,486	8,671	1,469
1982	13,015	6,150	1,792	1,501	55,454	10,738	2,151	1,257
1983	14,495	6,297	939	1,379	79,222	10,979	2,999	1,105
1984	11,555	5,960	1,183	1,043	52,243	9,264	3,299	1,079
1985	ND	ND	1,125	1,063	19,514	6,842	1,271	484
1986	3,967	2,361	1,897	950	43,555	9,325	1,802	774
1987	9,104	3,866	1,694	1,063	52,640	10,200	2,609	983
1988	7,564	3,722	1,856	1,317	101,194	13,065	3,888	1,260
1989	9,445	4,320	2,303	1,225	82,464	14,545	1,655	847
1990	13,697	5,331	2,357	1,291	75,834	10,941	3,829	1,247
1991	13,371	5,564	1,161	1,285	46,700	11,364	1,526	858
1992	12,871	5,126	3,179	1,422	46,780	9,206	750	489
1993	9,782	4,352	1,490	1,141	24,232	7,519	368	377
1994	9,004	4,238	847	796	28,563	6,871	938	275
1995	7,529	4,042	1,606	1,127	62,009	11,613	1,985	658
1996	8,111	3,906	1,969	919	61,972	11,041	1,455	760
1997	5,125	3,471	1,105	1,113	36,950	9,178	1,055	480
1998	5,723	3,277	1,550	857	62,289	10,742	2,830	750
1999	6,070	3,097	1,702	997	105,655	15,586	8,759	2,069
2000	4,728	2,520	925	844	61,310	11,721	4,801	992
2001	2,691	1,708	1,168	666	54,350	8,905	2,223	697
2002	3,940	2,412	1,064	801	72,545	10,722	1,504	789
2003	4,557	2,177	1,305	688	115,738	12,491	2,266	892
2004	5,244	2,194	833	523	76,081	9,134	1,482	523
2005	3,175	1,526	2,046	1,268	120,135	14,727	2,767	1,613
2006	3,701	1,981	2,822	1,987	104,408	15,654	4,334	1,866
2007	4,897	3,197	1,699	1,643	61,153	14,448	1,775	1,114
2008	5,775	3,271	1,936	1,670	61,307	11,735	1,334	1,023
2009	**8,944**	**4,461**	**2,807**	**1,878**	**76,851**	**14,197**	**2,272**	**1,438**

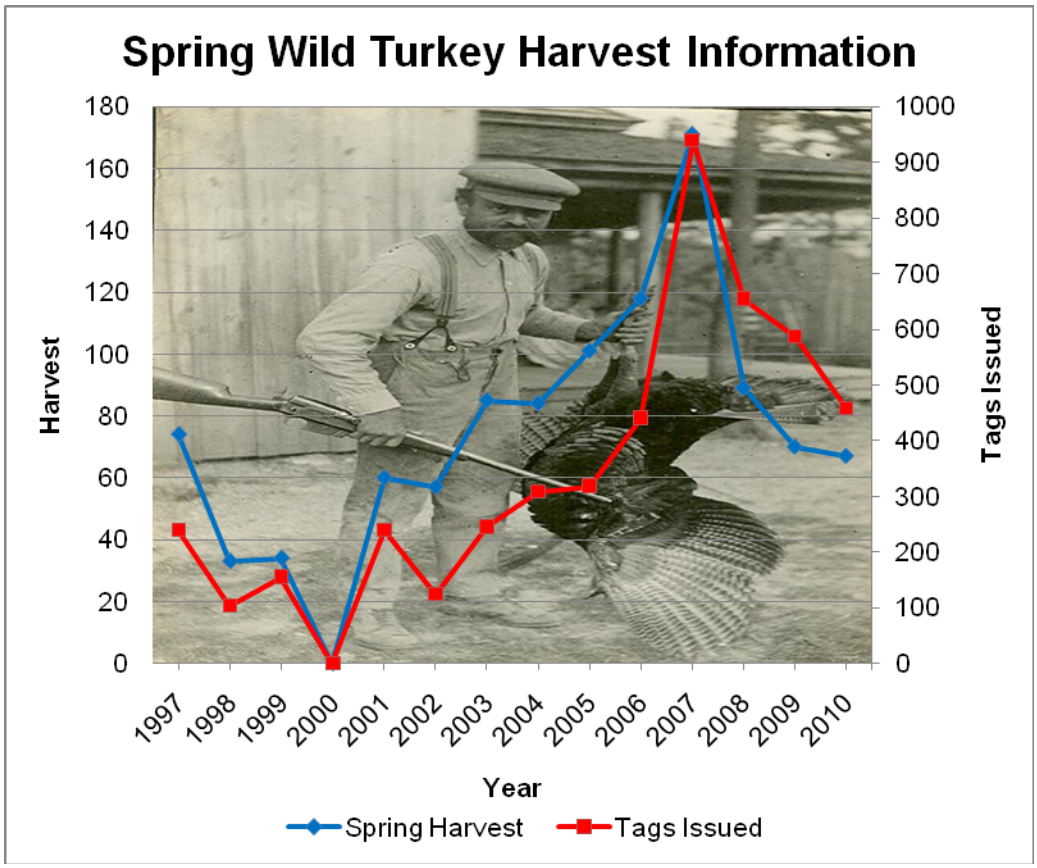
SUMMARY OF STATEWIDE UPLAND GAME HARVEST 1965-2009 From Post-season Questionnaire (page 2)								
Year	**Quail**	**Hunters**	**Pheasant**	**Hunters**	**Rabbit**	**Hunters**	**Dove**	**Hunters**
1965	58,110	8,944	20,787	10,595	29,796	6,656	120,827	9,516
1966	70,906	8,008	22,319	10,714	29,502	6,039	96,074	7,073
1967	73,548	8,040	2,676	2,016	27,048	5,748	155,556	10,476
1968	134,002	12,275	2,847	3,159	55,465	8,924	110,253	9,658
1969	107,287	11,396	2,938	2,377	56,660	9,662	170,419	11,125
1970	105,646	13,533	4,125	3,555	64,181	12,282	131,290	12,084
1971	67,027	9,040	4,357	3,191	49,004	9,387	115,761	10,608
1972	37,111	7,636	5,274	3,441	29,682	7,376	119,461	10,149
1973	41,696	6,532	5,012	2,887	28,059	6,476	129,945	10,552
1974	65,674	8,431	7,188	3,842	45,926	9,124	140,639	11,487
1975	104,954	8,790	8,046	4,117	58,573	9,122	147,189	12,234
1976	68,629	8,694	5,910	3,469	53,133	8,800	146,586	9,571
1977	71,720	7,825	4,969	2,987	71,898	9,592	125,504	9,802
1978	104,939	9,050	5,322	2,946	99,817	10,491	113,048	9,390
1979	171,972	11,338	6,072	3,139	136,502	11,550	125,462	9,123
1980	138,863	11,128	6,740	3,305	105,671	9,904	143,253	9,843
1981	70,882	9,451	5,424	4,031	62,831	8,871	120,424	8,858
1982	54,397	9,620	3,119	3,325	52,168	9,386	112,810	9,948
1983	88,434	9,575	2,461	2,412	45,344	7,375	117,294	8,248
1984	62,981	8,241	3,110	2,839	40,406	6,961	85,501	8,173
1985	59,756	7,511	2,314	1,928	27,266	5,277	80,974	6,435
1986	49,423	7,384	2,535	1,731	25,709	5,481	69,998	6,123
1987	51,404	6,810	1,703	1,223	33,470	5,745	66,348	5,747
1988	60,398	6,484	2,758	1,359	45,215	6,545	55,454	5,371
1989	30,632	5,125	1,246	1,178	33,341	5,533	52,132	5,459
1990	21,471	4,336	1,058	1,054	38,449	5,298	59,863	5,670
1991	32,791	5,195	1,177	1,373	23,565	5,059	58,503	6,255
1992	34,265	4,966	1,041	1,129	39,893	4,994	49,710	4,804
1993	63,723	5,874	681	952	25,817	4,504	54,929	5,242
1994	52,044	5,798	1,973	1,341	20,035	3,900	68,270	6,112
1995	74,223	7,303	1,117	735	17,962	4,030	61,418	5,790
1996	39,989	5,054	557	556	16,694	3,284	54,291	4,923
1997	35,194	5,569	839	935	11,783	3,446	57,244	5,623
1998	62,619	6,814	1,315	1,047	18,404	3,346	53,138	4,895
1999	54,996	6,909	990	1,058	15,183	3,291	41,068	4,270
2000	34,757	5,782	699	808	12,114	2,659	45,955	4,193
2001	35,718	4,006	1,095	574	12,672	2,247	31,749	3,329
2002	24,420	5,006	1,015	686	7,554	2,085	62,977	5,355
2003	49,422	5,939	1,523	639	14,638	2,734	37,750	4,074
2004	38,353	3,725	783	387	17,604	2,196	34,650	3,434
2005	35,662	3,352	338	227	18,269	1,554	49,795	4,110
2006	38,557	4,022	388	218	38,727	1932	53,851	4,590
2007	44,185	8,403	344	360	4,278	494		
2008	53,150	8,262	463	588	15,878	2,691		
2009	**33,139**	**4,426**	**741**	**798**	**17,553**	**3,468**		

NEVADA WILD TURKEY RETURN CARD DATA – SPRING 2010 (STATEWIDE TOTALS)													
Hunt Area	Tag Quota	# Tags Issued	# Qstr. Rtnd	% Rtn	Effort					Harvest			Chose Not to Harvest
					# Succ.	%Succ.	Hunter Days	Scout*	DNH*	Tom	Jake	Lost	
Elko Co. - Unit 091	5	5	5	100%	3	60%	20	12	0	2	1	0	1
Elko Co. - Unit 101	5	5	4	80%	2	50%	9	6	0	2	0	0	1
Elko Co. - Unit 102	17	17	15	88%	10	71%	59	39	1	9	1	0	1
Elko & White Pine - Unit 103	11	11	9	82%	1	13%	37	20	1	1	0	0	1
Lander Co. - Units 151 & 152	3	3	3	100%	3	100%	19	19	0	3	0	0	0
Lincoln County	66	66	62	94%	15	28%	156	78	8	11	4	4	2
Lincoln County (Youth)	Open	64	50	78%	4	11%	100	59	13	2	2	0	7
Pershing County	10	10	10	100%	5	56%	26	46	1	2	3	0	4
Mason Valley WMA	44	44	44	100%	6	16%	118	52	7	4	2	1	2
Moapa Valley	9	9	9	100%	6	67%	33	36	0	4	2	0	1
White Pine Co. - Unit 115	15	15	13	87%	6	50%	55	8	1	6	0	0	2
Lyon County except MVWMA	Open	174	42	24%	4	13%	130	56	11	3	1	0	4
Churchill County - Unit 181 & 182	10	10	8	80%	1	20%	30	20	3	1	0	0	1
Paradise Valley	Open	24	2	8%	1	50%	19	16	0	1	0	0	0
TOTALS:	**195**	**457**	**276**	**60%**	**67**	**29%**	**811**	**467**	**46**	**51**	**16**	**5**	**27**

NEVADA WILD TURKEY RETURN CARD DATA - FALL 2009 (STATEWIDE TOTALS)														
Hunt Area	# Tags Issued	# Qstr. Rtnd	% Rtn	Effort					Harvest					
				# Succ.	%Succ.	Hunt	Scout*	DNH*	Tom	Jake	Hen	Lost	Opportunity	
Mason Valley WMA	30	28	93%	9	39%	60	24	5	0	2	7	1	2	
Moapa Valley	11	11	100%	2	20%	21	12	1	0	1	1	0	1	
Churchill Co.				N	O		S	E	A	S	O	N		
Lyon Co.	31	27	87%	6	25%	71	17	3	0	3	3	0	0	
TOTALS:	**72**	**66**	**92%**	**17**	**30%**	**152**	**53**	**9**	**0**	**6**	**11**	**1**	**3**	

*expressed as days

SUMMARY OF STATEWIDE TURKEY HARVEST 1997-2010						
Year	*Harvest*		*Tags Issued*		*Hunter Effort (days)*	
	Spring	*Fall*	*Spring*	*Fall*	*Spring*	*Fall*
1997	74	28	239	79	No Data	No Data
1998	33	29	103	75	No Data	No Data
1999	34	No Data	155	No Data	No Data	No Data
2000	No Data	13	No Data	51	No Data	No Data
2001	60	17	239	57	No Data	No Data
2002	57	4	124	65	No Data	No Data
2003	85	45	245	130	706	264
2004	84	26	308	116	835	241
2005	101	44	318	104	1043	124
2006	118	51	440	134	1456	289
2007	171	29	938	92	2371	194
2008	89	29	654	81	1269	129
2009	70	17	586	72	1298	152
2010	67	Closed	457	Closed	811	Closed
TOTALS:	**1043**	**332**	**4806**	**1056**	**9789**	**1393**
AVERAGE:	**80**	**28**	**370**	**88**	**1224**	**199**



Summary of Statewide Fur Harvest 1980-2010
From post-Season Questionnaire

Year	Trappers	R-TCat	Weasel	Beaver	Skunk	Otter	Muskrat	Mink	Raccoon	Kit Fox	Gray Fox	Red Fox	Badger	Bobcat	Coyote	Total Value
1980-81	1,567	81	4	2,123	296	46	30,165	245	133	1,103	1,294		589	4,257	10,304	$1,640,904
1981-82	1,524	87	12	1,148	209	9	24,227	167	115	865	1,112		536	3,392	14,129	$1,545,102
1982-83	1,509	35	0	834	220	7	19,920	143	520	832	937		569	3,786	13,882	$1,499,808
1983-84	1,184	49	3	897	209	3	32,128	127	80	914	1,013		362	3,027	10,055	$1,071,431
1984-85	1,250	42	10	495	115	5	10,849	24	78	1,205	619		496	3,077	10,306	$1,038,602
1985-86	1,051	58	14	1,219	147	0	8,211	100	163	1,373	1,040		353	2,657	6,119	$877,423
1986-87	875	28	0	1,722	129	49	14,864	380	106	1,345	767		397	1,305	7,745	$830,114
1987-88	875	86	2	675	80	19	12,641	126	108	1,004	630		366	1,458	6,373	$641,495
1988-89	512	25	2	367	30	4	2,135	113	52	845	439		141	2,189	2,352	$546,993
1989-90	592	29	2	1,020	103	3	149	47	53	397	811		97	2,489	1,717	$336,394
1990-91	462	9	1	421	49	0	410	24	14	87	212		55	939	1,252	$122,767
1991-92	334	17	1	1,089	118	9	680	80	52	514	443		151	2,476	3,718	$447,162
1992-93	488	14	0	254	53	1	100	20	17	488	223		112	1,175	3,746	$176,354
1993-94	510	16	0	403	67	8	273	72	56	537	612		233	1,820	4,477	$348,844
1994-95	524	25	1	625	45	7	876	116	23	247	354		182	1,270	3,298	$165,352
1995-96	373	9	0	398	13	5	1,372	41	14	172	376		53	806	1,791	$157,861
1996-97	420	15	2	564	96	8	6,717	75	48	195	498		96	1,509	3,209	$218,439
1997-98	482	10	1	780	35	13	9,604	80	62	298	565		58	1,705	2,227	$196,671
1998-99	320	7	0	421	21	1	3,415	17	11	154	318		94	899	1,003	$183,203
1999-00	382	9	2	544	79	6	3,078	71	46	193	434		91	1,637	1,202	$172,585
2000-01	408	12	1	301	32	5	592	22	62	138	448		49	949	1,185	$145,022
2001-02	380	8	0	553	71	8	425	33	52	135	497	1	40	1,145	1,071	$229,284
2002-03	564	16	0	641	73	13	75	40	105	187	554	2	73	2,198	1,340	$414,808
2003-04	580	19	0	666	184	5	546	29	110	414	967	9	256	2,744	2,726	$781,849
2004-05	615	7	2	441	74	19	468	45	89	399	536	9	170	2,666	2,003	$644,688
2005-06	585	17	1	409	91	7	1,280	33	72	442	720	3	152	3,316	1,776	$1,147,034
2006-07	857	11	9	494	295	1	4,546	108	116	516	1,608	12	555	4,911	2,956	$1,248,873
2007-08	937	20	3	677	157	2	3,023	29	180	609	1,771	18	269	2,811	3,245	$1,543,803
2008-09	1,048	11	1	684	108	5	966	62	172	453	1,172	13	92	2,532	2,425	$726,901
2009-10	**918**	**4**	**11**	**627**	**74**	**5**	**731**	**95**	**114**	**363**	**821**	**4**	**77**	**1,240**	**1,514**	**$431,438**
Average	**695**	**26**	**5**	**954**	**125**	**13**	**7,674**	**85**	**117**	**585**	**721**	**8**	**284**	**2,282**	**4,591**	**$643,195**

NEVADA FUR HARVEST BY COUNTY 2009-2010																
Region	**County**	**Beaver**	**Muskrat**	**Coyote**	**Bobcat**	**G. Fox**	**K. Fox**	**Mink**	**Otter**	**Badger**	**Weasel**	**Raccoon**	**Striped Skunk**	**Spotted Skunk**	**Ring-Tail Cat**	**R. Fox**
Western	Carson	13	19	3	2	0	0	4	0	0	0	1	0	0	0	0
	Churchill	70	230	13	36	12	7	0	0	0	0	8	0	0	0	0
	Douglas	75	229	85	19	12	0	30	0	0	0	7	8	5	0	0
	Humboldt	0	0	380	124	0	8	0	0	13	0	0	3	0	0	0
	Lyon	179	9	70	60	35	28	19	0	1	0	50	34	1	0	0
	Mineral	0	0	7	13	3	11	0	0	3	0	0	0	0	0	0
	Pershing	7	0	120	64	9	32	0	0	3	0	0	0	0	0	0
	Storey	8	128	23	16	4	13	3	0	1	0	8	0	0	0	0
	Washoe	40	96	174	103	8	11	0	0	1	0	13	3	0	0	0
	TOTALS:	**392**	**711**	**875**	**437**	**83**	**110**	**56**	**0**	**22**	**0**	**87**	**48**	**6**	**0**	**0**
Eastern	Elko	217	20	159	127	1	0	39	4	19	11	7	8	0	0	4
	Eureka	0	0	28	34	7	0	0	0	0	0	0	0	0	0	0
	Lander	0	0	17	39	3	0	0	0	5	0	1	0	5	0	0
	White Pine	0	0	61	55	7	3	0	0	3	0	0	0	0	0	0
	TOTALS:	**217**	**20**	**265**	**255**	**18**	**3**	**39**	**4**	**27**	**11**	**8**	**8**	**5**	**0**	**4**
Southern	Clark	1	0	109	130	455	71	0	0	16	0	11	0	4	1	0
	Esmeralda	0	0	13	30	3	9	0	0	0	0	0	0	0	0	0
	Lincoln	16	0	69	198	160	93	0	1	7	0	8	0	0	0	0
	Nye	1	0	183	190	102	77	0	0	5	0	0	3	0	3	0
	TOTALS:	**18**	**0**	**374**	**548**	**720**	**250**	**0**	**1**	**28**	**0**	**19**	**3**	**4**	**4**	**0**
Statewide Totals:		**627**	**731**	**1514**	**1240**	**821**	**363**	**95**	**5**	**77**	**11**	**114**	**59**	**15**	**4**	**4**

NEVADA TRAPPERS BY SPECIES AND COUNTY 2009-2010

Region	County	Beaver	Muskrat	Coyote	Bobcat	G. Fox	K. Fox	Mink	Otter	Badger	Weasel	Raccoon	Striped Skunk	Spotted Skunk	Ring-Tail Cat	R. Fox
Western	Carson	1	3	3	2	0	0	0	0	0	0	1	0	0	0	0
	Churchill	5	4	5	11	8	4	0	0	0	0	1	0	0	0	1
	Douglas	8	7	9	8	5	0	4	0	0	0	4	3	1	0	0
	Humboldt	1	0	28	19	0	4	0	0	4	0	0	3	0	0	0
	Lyon	9	1	19	16	15	9	4	1	1	0	8	5	1	0	0
	Mineral	0	0	5	4	1	3	0	0	1	0	0	0	0	0	0
	Pershing	1	0	8	11	4	7	0	0	3	0	0	0	0	0	0
	Storey	3	1	3	5	3	1	1	0	1	0	1	0	0	0	0
	Washoe	4	5	35	25	5	4	1	0	1	0	3	3	0	0	0
	TOTALS:	**32**	**21**	**115**	**101**	**41**	**32**	**10**	**1**	**11**	**0**	**18**	**14**	**2**	**0**	**1**
Eastern	Elko	24	3	32	34	1	0	8	4	9	3	5	4	0	0	4
	Eureka	0	0	7	7	3	0	0	0	0	0	0	0	0	0	0
	Lander	0	0	4	4	1	0	0	0	3	0	1	0	1	0	0
	White Pine	0	0	23	19	9	3	0	0	3	0	0	0	0	0	0
	TOTALS:	**24**	**3**	**66**	**64**	**14**	**3**	**8**	**4**	**15**	**3**	**6**	**4**	**1**	**0**	**4**
Southern	Clark	1	0	48	25	39	16	0	0	17	0	4	0	3	3	1
	Esmeralda	0	0	1	9	5	3	0	0	0	0	0	0	0	0	0
	Lincoln	4	0	27	29	34	15	0	0	7	0	4	0	0	3	1
	Nye	1	0	31	30	31	17	0	0	5	0	0	1	0	3	0
	TOTALS:	**6**	**0**	**107**	**93**	**109**	**51**	**0**	**0**	**29**	**0**	**8**	**1**	**3**	**9**	**2**
Statewide Totals:		**62**	**24**	**288**	**258**	**164**	**86**	**18**	**5**	**55**	**3**	**32**	**19**	**6**	**9**	**7**

NEVADA FUR HARVEST VALUE 2009-2010

From Post-Season Questionnaire

Species	Total Value of Catch	AVERAGE PRICE		% Increase +
		2009-10	2008-09	% Decrease -
Beaver	$8,357.91	$13.33	$9.62	39
Otter	$0.00	$0.00	$0.00	NA
Muskrat	$4,100.91	$5.61	$2.51	124
Mink	$1,230.25	$12.95	$4.07	218
Raccoon	$1,026.00	$9.00	$3.68	145
Bobcat	$352,160.00	$284.00	$263.86	8
Coyote	$40,983.98	$27.07	$9.62	181
Badger	$1,333.64	$17.32	$11.38	52
Striped Skunk	$342.20	$5.80	$6.21	-7
Ring-tailed Cat	$0.00	$0.00	$10.89	NA
Kit Fox	$4,250.73	$11.71	$8.89	32
Gray Fox	$17,561.19	$21.39	$16.83	27
Red Fox	$91.24	$22.81	$0.00	NA
Total	**$431,438.05**			

SUMMARY OF STATEWIDE WATERFOWL HARVEST – 1970-2009

From Post-Season Questionnaire

Year	Duck Stamp Sales		Est'd. NV Hunters	Ducks	Geese			Tundra Swans*	Total Waterfowl
	Federal	Nevada			Dark	White	Total		
1970	14,361	--	12,913	147,211	6,649	3,488	10,137	208	**157,556**
1971	15,029	--	16,906	178,107	7,357	4,655	12,012	102	**190,221**
1972	12,701	--	14,605	149,565	8,066	1,756	9,822	124	**159,511**
1973	13,732	--	14,435	97,251	4,047	2,580	6,627	109	**103,987**
1974	11,714	--	14,902	139,080	5,480	1,498	6,978	190	**146,248**
1975	13,856	--	17,661	162,863	3,629	1,430	5,059	188	**168,110**
1976	13,146	--	15,154	139,598	6,379	3,194	9,573	206	**149,377**
1977	11,145	--	11,190	79,491	4,142	1,606	5,748	84	**85,323**
1978	12,154	--	12,452	104,840	5,998	942	6,940	90	**111,870**
1979	11,370	18,799	12,600	119,150	5,238	561	5,799	214	**125,163**
1980	11,705	18,300	12,487	101,765	4,515	388	4,903	103	**106,771**
1981	10,496	15,489	17,168	90,396	8,897	1,961	10,858	301	**101,555**
1982	11,969	17,250	18,921	97,582	6,558	759	7,317	161	**105,060**
1983	12,009	16,607	16,765	125,619	8,901	1,407	10,308	169	**136,096**
1984	12,950	16,451	17,799	108,570	11,658	1,386	13,044	199	**121,813**
1985	12,421	17,290	8,647	75,890	9,870	1,207	11,077	229	**87,196**
1986	11,749	20,000	8,357	67,615	6,969	249	7,218	196	**75,029**
1987	9,907	25,000	6,840	76,949	8,784	900	9,684	94	**86,727**
1988	7,564	28,700	4,432	37,338	8,690	950	9,640	78	**47,056**
1989	6,703	15,600	4,950	35,722	6,232	410	6,642	81	**42,445**
1990	6,647	9,050	4,446	35,693	10,655	529	11,184	67	**46,944**
1991	6,034	9,777	4,803	30,225	5,574	346	5,920	62	**36,207**
1992	6,303	7,277	3,453	19,589	10,140	281	10,421	29	**30,039**
1993	7,245	9,162	4,335	32,191	6,593	463	7,056	46	**39,293**
1994	7,704	8,469	5,112	46,340	8,573	595	9,168	88	**55,596**
1995	8,347	9,132	6,964	72,259	5,206	863	6,069	72	**78,400**
1996	7,702	9,127	7,228	83,908	9,028	892	9,920	119	**93,947**
1997	7,874	11,451	8,752	116,596	6,051	331	6,382	131	**123,109**
1998	8,331	11,420	8,574	122,092	8,635	819	9,454	185	**131,731**
1999	8,880	10,898	6,918	80,814	7,575	667	8,242	217	**89,273**
2000	8,000	10,085	6,159	56,579	4,537	151	4,688	78	**61,345**
2001	7,293	9,016	3,692	31,203	2,646	281	2,927	58	**34,188**
2002	6,914	8,460	4,028	33,113	4,980	133	5,113	40	**38,266**
2003	6,896	8,018	4,298	44,022	4,041	219	4,260	71	**48,353**
2004	5,991	7,501	3,572	38,305	1,479	1,135	2,614	78	**40,997**
2005	6,570	7,956	3,960	56,428	4,041	219	4,260	71	**60,759**
2006	6,704	8581	4,525	69,893	6,719	848	7,567	147	**77,607**
2007	6,337	7863	4,038	54,459	5,339	414	5,753	200	**60,412**
2008	5,995		3,212	42,916	4,384	325	4,709	113	**47,738**
2009			**4,273**	**51,696**	**6,400**	**718**	**7,118**	**56**	**58,870**

Individual year NV duck stamp sales noted by year beginning in 1989.
Individual Nevada hunters are calculated beginning in 2005.

NEVADA MID-WINTER WATERFOWL INVENTORY DATA 2006-2010						Current year compared to			
SPECIES	**2006**	**2007**	**2008**	**2009**	**2010**	**5 Year Average**	**46 Year Average**	**Highest**	**Lowest**
Mallard	23,061	25,979	28,950	17,326	15,148	22,594	13,956	28,950	4,321
Gadwall	9,132	4,551	3,055	2,739	1,042	4,465	2,901	12,832	550
Wigeon	3,624	2,414	820	1,941	1,267	2,187	1,295	4,154	205
G.W. Teal	17,524	6,222	3,973	4,601	2,010	9,772	6,473	26,150	540
B.W. Teal	0	0	0	0	0	0	8	75	0
Cinnamon Teal	10	0	0	2	55	5	43	660	0
Shoveler	4,264	5,321	5,654	4,679	1,738	4,439	3,321	24,700	224
Pintail	9,982	11,420	11,360	3,221	1,500	8,175	6,301	24,765	446
Wood Duck	30	10	2	46	35	20	26	150	0
Redhead	6,485	13,330	4,171	2,669	3,595	6,236	2,333	13,330	100
Canvasback	5,795	7,087	6,484	3,167	5,170	5,423	2,780	10,475	233
Scaup	699	989	262	116	215	481	234	1,850	10
Ringneck	2,398	3,316	2,155	803	728	2,210	796	3,316	13
Goldeneye	198	661	528	358	357	492	612	2,093	40
Bufflehead	2,243	2,300	1,727	1,480	1,019	1,880	875	2,571	153
Ruddy	4,126	10,970	5,659	10,432	6,162	7,361	4,633	22,532	268
Merganser	2,317	868	2,149	1,576	520	1,548	1,721	8,806	241
Miscellaneous	101	127	82	5	124	79	46	127	3
Total Ducks	**91,989**	**95,565**	**77,031**	**55,161**	**40,685**	**77,366**	**48,354**	**128,540**	**15,739**
% Change v. Prev. Year	**37%**	**4%**	**-19%**	**-28%**	**-26%**	**-47%**	**-16%**		
Dark Geese	20,842	17,366	24,827	21,590	17,210	20,522	15,519	35,806	3,457
Light Geese	1,219	1,075	1,578	39	0	701	813	7,678	10
Total Geese	**22,061**	**18,441**	**26,405**	**21,629**	**17,210**	**21,223**	**16,332**	**43,484**	**3,467**
% Change from Previous Year	**25%**	**-16%**	**43%**	**-18%**	**-20%**	**-19%**	**5%**		
Trumpeter Swan	28	28	28	38	31	37	28	60	10
Tundra Swan	2,750	3,803	2,266	1,191	351	2,093	2,243	10,742	31
Total Waterfowl	**116,828**	**117,837**	**105,730**	**78,019**	**58,277**	**100,720**	**66,956**	**149,746**	**22,097**
% Change v. Prev. Year	**37%**	**1%**	**-10%**	**-26%**	**-25%**	**-42%**	**-13%**		
Coot	33,261	39,330	17,827	43,380	25,193	33,691	19,086	65,280	3,926

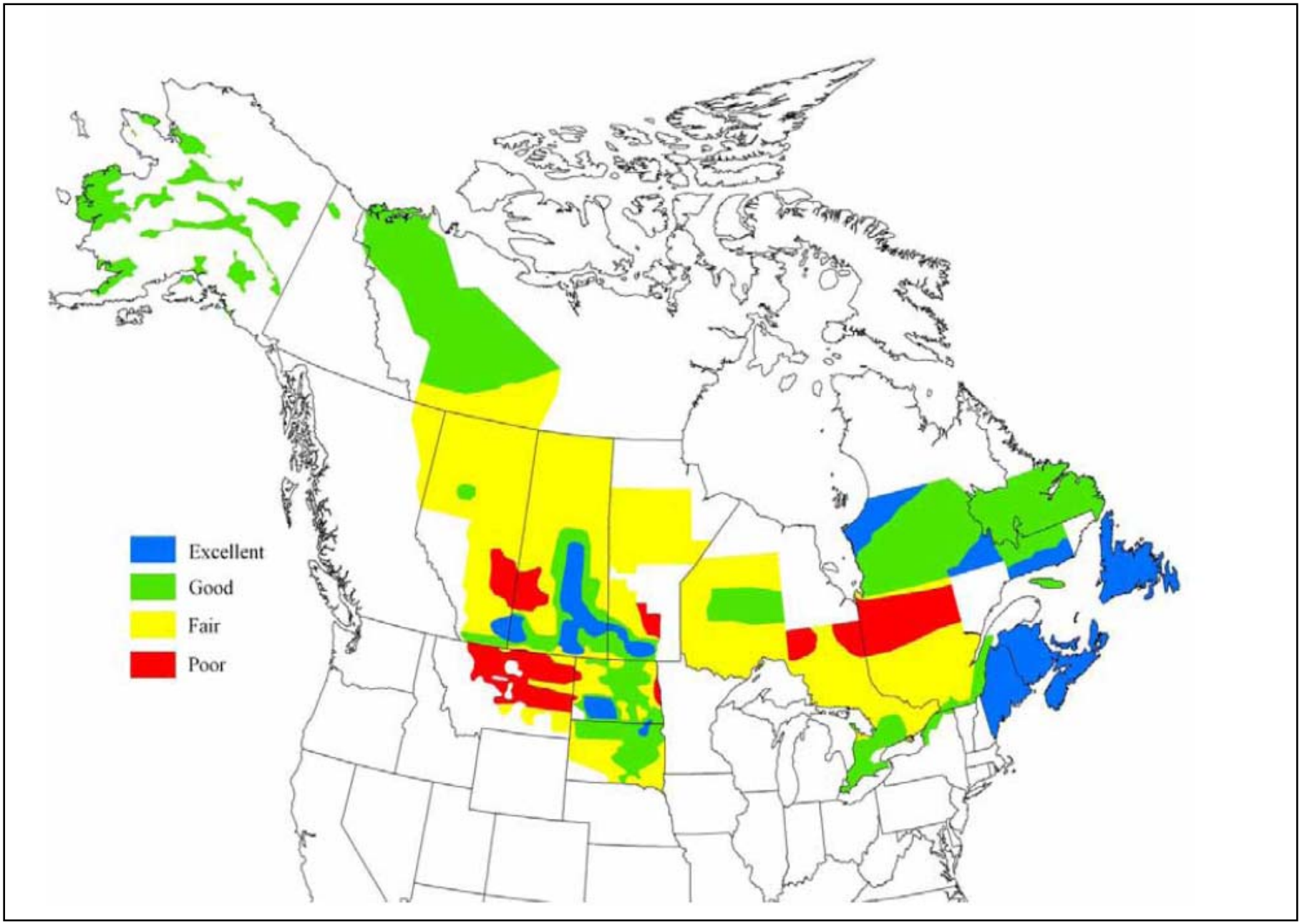
Composition of Nevada Duck Harvest
From U.S. Fish & Wildlife Service Parts Collection Survey and Harvest Information Program (from 1990 on)

AVERAGES:

	Mallard		Gadwall		Wigeon		GW Teal		Cinn. Teal		Shoveler		Pintail		Wood Duck	
	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T
1960'S	24,007	48.90%	6,198	12.60%	4,801	9.80%	12,248	25.00%	2,119	4.30%	7,111	14.50%	11,028	22.50%	225	0.50%
1970's	26,719	39.50%	7,243	10.70%	7,809	11.60%	17,156	25.40%	3,724	5.50%	5,784	8.60%	17,973	26.60%	309	0.50%
1980's	22,031	51.10%	7,383	17.10%	4,007	9.30%	10,777	25.00%	1,575	3.70%	5,565	12.90%	7,729	17.90%	174	0.40%
1990's	21,107	47.60%	7,068	15.90%	3,351	7.60%	11,464	25.90%	1,322	3.00%	3,151	7.10%	4,520	10.20%	484	1.10%
00-07	15,832	34.20%	6,468	14.00%	3,166	6.80%	9,332	20.10%	811	1.70%	4,559	9.80%	2,477	5.30%	307	0.70%
2007	12,936	29.50%	5,169	11.80%	3,278	7.50%	8,742	20.00%	532	1.20%	5,818	13.30%	2,983	6.80%	236	0.50%
2008	10,748	35.80%	4,690	15.60%	2,931	9.80%	4,104	13.70%	195	0.70%	3,127	10.40%	1,319	4.40%	195	0.70%
2009	**14,914**	**36.98%**	**4,636**	**11.49%**	**4,133**	**10.25%**	**7,988**	**19.81%**	**447**	**1.11%**	**3,296**	**8.17%**	**2,123**	**5.26%**	**168**	**0.42%**

	Redhead		Canvasback		Greater Scaup		Lesser Scaup		Ring-necked		Com. Goldeneye		Bufflehead		Ruddy		
	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	Est. Kill	% of T	**TOTALS:**
1960'S	2,803	5.70%	1,263	2.60%	103	0.20%	339	0.70%	342	0.70%	134	0.30%	342	0.70%	1,036	2.10%	**49,066**
1970's	3,193	4.70%	2,178	3.20%	43	0.10%	523	0.80%	623	0.90%	442	0.70%	547	0.80%	1,282	1.90%	**67,575**
1980's	2,482	5.80%	1,650	3.80%	25	0.10%	189	0.40%	774	1.80%	268	0.60%	491	1.10%	1,207	2.80%	**43,124**
1990's	2,478	5.60%	713	1.60%	12	0.00%	197	0.40%	1,258	2.80%	304	0.70%	379	0.90%	1,182	2.70%	**44,317**
00-07	801	1.70%	399	0.90%	23	0.00%	180	0.40%	754	1.60%	296	0.60%	429	0.90%	338	0.70%	**46,325**
2007	354	0.80%	1,447	3.30%	0	0.00%	236	0.50%	768	1.80%	354	0.80%	0	0.00%	325	0.70%	**43,800**
2008	440	1.50%	0	0.00%	0	0.00%	195	0.70%	831	2.80%	440	1.50%	0	0.00%	98	0.30%	**29,990**
2009	**559**	**1.39%**	**279**	**0.69%**	**0**	**0.00%**	**168**	**0.42%**	**503**	**1.25%**	**391**	**0.97%**	**670**	**1.66%**	**56**	**0.14%**	**40,331**

2010 Breeding Waterfowl Habitat Conditions



Duck Daily Bag Limit Restrictions History – Page 1.

	General	Mallard		Pintail		Canvas-back	Red-head	Scaup	Wood Duck	Ruddy Duck	Merg.	Notes	Bonus
		Drake	Hen	Drake	Hen								
1953	7	--		11[(a)]		--	--	--	**0**	--	--		4
1954	7	--		10[(a)]		--	--	--	**0**	--	--		3
1955	6	--		9[(a)]		--	--	--	1	--	Separate merganser season - 5 daily, but only one hooded merganser.		3
1956	6	--		9[(a)]		--	--	--	1	--			3
1957	5	--		8[(a)]		--	--	--	1	--			3
1958	5	--		9[(a)]		--	--	--	1	--			4
1959	5	--		5		2	2	--	1	1		**(1)**	
1960	4	--		4		**0**	**0**	--	1	--			
1961	5	--		5		**0**	**0**	--	1	--			
1962	4	--		4		**0**	**0**	--	1	--			
1963	4	--		4		**0**	**0**	--	2	--			
1964	5	--		5		2	2	--	2	--		**(2)**	
1965	4	3		3		2	--	--	2	--		**(7)**	
1966	6	--		--		--	--	--	2	--			
1967	6	--		--		2	--	--	--	--			
1968	5	3		--		2	--	--	--	--			
1969	5	--		--		2	--	--	--	--			
1970	6	--		--		6	--	--	--	--			
1971	6	--		--		2	--	--	--	--			
1972	6	--		--		**0**	--	--	--	--			
1973	5	--		7[(p)]		*1*	2	--	--	--	--	**(CH)**	2
1974	5	--		7[(p)]		*1*	2	--	--	--	--	**(CH)**	2
1975	7	--		--		2	2	--	--	--	--	**(2)**	
1976	7	--		--		2	2	--	--	--	--	**(2)**	
1977	7	--		--		2	2	--	--	--	--	**(2)**	
1978	7	--		--		2	2	--	--	--	--	**(2)**	
1979	7	--		--		2	2	--	--	--	--	**(2)**	
1980	7	--		--		2	2	--	--	--	--	**(2)**	
1981	7	--		--		2	2	--	--	--	--	**(2)**	
1982	7	--		--		2	2	--	--	--	--	**(2)**	
1983	7	--		--		2	2	--	--	--	--	**(2)**	
1984	7	--		4		2	2	--	--	--	--	**(2)**	
1985	5	3	1	3	1	1	2	--	--	--	--	**(2)**, **(6)**	
1986	5	4	1	4	1	1	2	--	--	--	--	**(2)**	
1987	5	4	1	4	1	1	2	--	--	--	--	**(2)**	
1988	4	3	1	1		**0**	2	--	--	--	--		
1989	4	3	1	1		1	2	--	--	--	--	**(3)**	
1990	4	3	1	1		1	2	--	--	--	--	**(3)**	
1991	4	3	1	1		2	2	--	--	--	--	**(2)**	
1992	4	3	1	1		2	2	--	--	--	--	**(2)**	
1993	4	3	1	1		2	2	--	--	--	--	**(2)**	

Continued next page

Notations described on next page

Duck Daily Bag Limit Restrictions History – Page 2.

1994	4	3	1	1	2	2	--	--	--	--	**(2)**	
1995	6	--	1	2	1	2	--	--	--	--		
1996	7	--	1	2	1	2	--	--	--	--		
1997	7	--	2	3	1	2	--	--	--	--		
1998	7	--	2	1	1	2	--	--	--	--		
1999	7	--	2	1	1	2	4	--	--	--		
2000	7	--	2	1	1	2	4	--	--	--		
2001	7	--	2	1	1	2	4	--	--	--	**(4)**	
2002	7	--	2	1	**0**	2	4	--	--	--		
2003	7	--	2	1	1	2	4	--	--	--	**(4), (5)**	
2004	7	--	2	1	1	2	4	--	--	--	**(4), (5)**	
2005	7	--	2	1	1	2	3	--	--	--	**(4)**	
2006	7	--	2	1	1	2	3	--	--	--		
2007	7	--	2	1	2	2	3	--	--	--		
2008	7	--	2	1	0	2	2	--	--	--	**(8)**	
2009	7	--	2	2	1	2	3	--	--	--	**(8)**	
2010	**7**	--	**2**	**2**	**1**	**2**	**3**	--	--	--	**(8)**	

	General	**Mallard**		**Pintail**		**Canvas-back**	**Red-head**	**Scaup**	**Wood Duck**	**Ruddy Duck**	**Merg.**	**Notes**	Bonus[a]
		Drake	Hen	Drake	Hen								

General Notations:

Symbol "--" indicates that this species has no separate limit restrictions from the general bag limit.

0 = Season closed for this species

Bonus Duck Notations:

(a) Bonus ducks - the indicated number represents the number of **pintails** or **wigeon** or the aggregate of both that could be taken in addition to the general bag limit.

(p) Bonus pintail - the indicated number represents the number of **pintails** that could be taken in addition to the general bag limit.

Canvasback & Redhead Daily Bag Limit Notations:

(1)	hunters could shoot 2 canvasbacks or 2 redheads or 2 ruddy duck or 2 in the aggregate
(2)	hunters could shoot no more than 2 canvasbacks or 2 redheads or one of each
(3)	hunters could shoot no more than 2 redheads, or a redhead and a canvasback

Partial Season Notations:

(CH)	canvasback closed in CH Co. only
(4)	Partial canvasback season
(5)	Partial pintail season
(8)	Partial scaup season

Other Pintail / Mallard Notations:

(6)	hunters could shoot 3 mallards or 3 pintails or 5 in the aggregate of which no more than 1 ♀ pintail and 1 ♀ mallard may be taken
(7)	hunters could shoot 3 mallards or 3 pintails or 6 in the aggregate

APPENDIX II

2009-10 SMALL GAME HARVEST DATA

Derived from Modified Post-season Questionnaire

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire ESTIMATED HARVEST

WATERFOWL **Species:** **DUCKS** Run date: 7/27/2010

HUNTING SEASON: 2009-10 **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

R	County of Harvest	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	934	55	464	16.86	2.01	1.8%	0.8%
	Churchill	22,403	2,423	10,411	9.25	2.15	43.3%	34.5%
	Douglas	2,850	277	2,069	10.29	1.38	5.5%	3.9%
	Humboldt	1,164	156	1,230	7.47	0.95	2.3%	2.2%
	Lyon	4,317	834	2,998	5.18	1.44	8.4%	11.9%
	Mineral	1,953	140	829	13.96	2.36	3.8%	2.0%
	Pershing	1,114	153	636	7.28	1.75	2.2%	2.2%
	Storey	483	201	40	2.41	12.20	0.9%	2.9%
	Washoe	3,196	676	2,631	4.73	1.21	6.2%	9.6%
EASTERN	Elko	2,750	430	1,480	6.39	1.86	5.3%	6.1%
	Eureka	691	84	449	8.19	1.54	1.3%	1.2%
	Lander	290	71	230	4.07	1.26	0.6%	1.0%
	White Pine	483	100	338	4.82	1.43	0.9%	1.4%
SOUTHERN	Clark	4,059	488	2,288	8.31	1.77	7.9%	7.0%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lincoln	2,813	546	1,467	5.15	1.92	5.4%	7.8%
	Nye	2,196	388	976	5.66	2.25	4.2%	5.5%
	TOTALS:	**51,696**	**7,022**	**28,536**	**7.36**	**1.81**	**100%**	**100%**
Estimated # of Individual Hunters:				**4,273**				

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire ESTIMATED HARVEST

WATERFOWL **Species:** **DARK GEESE** Run date: 7/27/2010

HUNTING SEASON: **2009-10** **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

R	County of Harvest	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	189	26	225	7.40	0.84	3.0%	1.1%
	Churchill	1,500	628	3,735	2.39	0.40	23.4%	28.0%
	Douglas	1,308	207	1,620	6.32	0.81	20.4%	9.2%
	Humboldt	307	72	736	4.29	0.42	4.8%	3.2%
	Lyon	1,180	429	1,561	2.75	0.76	18.4%	19.1%
	Mineral	46	23	141	2.00	0.33	0.7%	1.0%
	Pershing	31	31	156	1.00	0.20	0.5%	1.4%
	Storey	13	13	41	1.00	0.31	0.2%	0.6%
	Washoe	644	294	1,479	2.19	0.44	10.1%	13.1%
EASTERN	Elko	286	92	337	3.11	0.85	4.5%	4.1%
	Eureka	161	49	158	3.32	1.02	2.5%	2.2%
	Lander	74	36	164	2.07	0.45	1.2%	1.6%
	White Pine	97	36	107	2.71	0.90	1.5%	1.6%
SOUTHERN	Clark	345	153	884	2.25	0.39	5.4%	6.8%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lincoln	199	102	427	1.95	0.47	3.1%	4.6%
	Nye	20	54	158	0.38	0.13	0.3%	2.4%
	TOTALS:	**6,400**	**2,243**	**11,929**	**2.85**	**0.54**	**100%**	**100%**
Estimated # of Individual Hunters:				**1,745**				

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire ESTIMATED HARVEST

WATERFOWL **Species:** **WHITE GEESE** Run date: 8/19/2009

HUNTING SEASON: 2009-10 **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

R	County of Harvest	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Churchill	272	201	1,343	1.36	0.20	37.9%	34.5%
	Douglas	34	16	21	2.17	1.63	4.8%	2.7%
	Humboldt	18	13	61	1.40	0.30	2.6%	2.3%
	Lyon	95	100	251	0.95	0.38	13.2%	17.3%
	Mineral	71	24	113	3.00	0.63	9.9%	4.1%
	Pershing	0	13	18	0.00	0.00	0.0%	2.3%
	Storey	26	3	40	10.00	0.67	3.7%	0.5%
	Washoe	24	45	245	0.53	0.10	3.3%	7.7%
EASTERN	Elko	45	11	48	4.25	0.94	6.3%	1.8%
	Eureka	8	3	79	3.00	0.10	1.1%	0.5%
	Lander	3	5	11	0.50	0.25	0.4%	0.9%
	White Pine	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
SOUTHERN	Clark	69	74	533	0.93	0.13	9.6%	12.7%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lincoln	26	37	143	0.71	0.19	3.7%	6.4%
	Nye	26	37	129	0.71	0.20	3.7%	6.4%
	TOTALS:	**718**	**581**	**3,035**	**1.24**	**0.24**	**100%**	**100%**
Estimated # of Individual Hunters:				**433**				

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire ESTIMATED HARVEST

WATERFOWL **Species:** **COOT** Run date: 8/19/2009

HUNTING SEASON: 2009-10 **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

R	County of Harvest	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Churchill	343	113	565	3.02	0.61	26.3%	37.4%
	Douglas	5	3	177	2.00	0.03	0.4%	0.9%
	Humboldt	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lyon	26	18	66	1.43	0.40	2.0%	6.1%
	Mineral	0	5	18	0.00	0.00	0.0%	1.7%
	Pershing	0	3	3	0.00	0.00	0.0%	0.9%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Washoe	74	21	172	3.50	0.43	5.7%	7.0%
EASTERN	Elko	82	21	32	3.88	2.58	6.3%	7.0%
	Eureka	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lander	0	3	3	0.00	0.00	0.0%	0.9%
	White Pine	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
SOUTHERN	Clark	319	58	333	5.50	0.96	24.4%	19.1%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lincoln	195	29	137	6.73	1.42	14.9%	9.6%
	Nye	261	29	124	9.00	2.11	20.0%	9.6%
	TOTALS:	**1,306**	**303**	**1,628**	**4.30**	**0.80**	**100%**	**100%**
Estimated # of Individual Hunters:				**243**				

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire ESTIMATED HARVEST

WATERFOWL **Species:** **SNIPE** Run date: 8/19/2009

HUNTING SEASON: 2009-10 **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

R	County of Harvest	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Churchill	94	48	160	1.97	0.59	44.0%	44.8%
	Douglas	5	2	107	3.00	0.04	2.2%	1.5%
	Humboldt	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lyon	0	3	5	0.00	0.00	0.0%	3.0%
	Mineral	0	3	11	0.00	0.00	0.0%	3.0%
	Pershing	0	3	3	0.00	0.00	0.0%	3.0%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Washoe	11	14	150	0.78	0.07	5.2%	13.4%
EASTERN	Elko	2	5	11	0.33	0.14	0.7%	4.5%
	Eureka	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lander	0	2	2	0.00	0.00	0.0%	1.5%
	White Pine	2	2	2	1.00	1.00	0.7%	1.5%
SOUTHERN	Clark	26	14	97	1.78	0.26	11.9%	13.4%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0.0%	0.0%
	Lincoln	40	6	21	6.25	1.92	18.7%	6.0%
	Nye	35	5	13	7.33	2.75	16.4%	4.5%
	TOTALS:	**214**	**107**	**581**	**2.00**	**0.37**	**100%**	**100%**
Estimated # of Individual Hunters:				**88**	100.0%			

NEVADA DEPARTMENT OF WILDLIFE

Small Game Post-season Questionnaire ESTIMATED HARVEST

MIGRATORY BIRDS **Species:** **MOURNING DOVE** Run date: 8/24/2010

HUNTING SEASON: 2009-10 **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

R	County of Harvest	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	791	72	232	11.03	3.41	1.7%	1.7%
	Churchill	10,145	583	2,463	17.39	4.12	22.1%	13.9%
	Douglas	1,396	110	435	12.70	3.21	3.0%	2.6%
	Humboldt	1,480	158	359	9.38	4.13	3.2%	3.8%
	Lyon	6,178	603	1,851	10.25	3.34	13.4%	14.4%
	Mineral	493	41	132	12.12	3.75	1.1%	1.0%
	Pershing	782	67	191	11.68	4.09	1.7%	1.6%
	Storey	356	53	175	6.77	2.04	0.8%	1.3%
	Washoe	8,691	904	3,036	9.62	2.86	18.9%	21.6%
EASTERN	Elko	1,937	256	734	7.57	2.64	4.2%	6.1%
	Eureka	273	43	84	6.33	3.26	0.6%	1.0%
	Lander	433	72	136	6.03	3.18	0.9%	1.7%
	White Pine	968	96	215	10.13	4.50	2.1%	2.3%
SOUTHERN	Clark	7,448	658	2,212	11.33	3.37	16.2%	15.7%
	Esmeralda	313	24	74	13.10	4.23	0.7%	0.6%
	Lincoln	1,839	215	497	8.54	3.70	4.0%	5.1%
	Nye	2,432	232	827	10.48	2.94	5.3%	5.5%
	TOTALS:	**45,954**	**4,184**	**13,652**	**10.98**	**3.37**	**100%**	**100%**
Estimated # of Individual Hunters:				**3,864**				

NEVADA DEPARTMENT OF WILDLIFE

Small Game Post-season Questionnaire ESTIMATED HARVEST

MIGRATORY BIRDS **Species:** **White-winged Dove** Run date: 8/24/2009

HUNTING SEASON: 2009-10 **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

County of Harvest	Total Harvest	# of Hunters	Kill/ Hunter	% of total Kill	% of total Hunters
Clark	275	50	5.48	67.3%	75.0%
Nye	134	17	8.00	32.7%	25.0%
TOTALS:	**409**	**67**	**6.11**	**100%**	**100%**
Estimated # of Individual Hunters:		**81**			

NEVADA DEPARTMENT OF WILDLIFE

Small Game Post-season Questionnaire ESTIMATED HARVEST

MIGRATORY BIRDS **Species:** **Eurasian Collared Dove** Run date: 8/24/2010

HUNTING SEASON: 2009-10 **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

R	County of Harvest	Total Harvest	# of Hunters	Kill/ Hunter	% of total Kill	% of total Hunters
WESTERN	Carson City	120	2	50.00	3.0%	0.5%
	Churchill	579	84	6.91	14.7%	17.4%
	Douglas	124	19	6.50	3.2%	4.0%
	Humboldt	579	60	9.68	14.7%	12.4%
	Lyon	519	84	6.20	13.2%	17.4%
	Mineral	0	0	0.00	0.0%	0.0%
	Pershing	170	24	7.10	4.3%	5.0%
	Storey	0	0	0.00	0.0%	0.0%
	Washoe	69	17	4.14	1.8%	3.5%
EASTERN	Elko	175	19	9.13	4.4%	4.0%
	Eureka	5	2	2.00	0.1%	0.5%
	Lander	22	5	4.50	0.5%	1.0%
	White Pine	7	5	1.50	0.2%	1.0%
SOUTHERN	Clark	1,102	105	10.48	28.0%	21.9%
	Esmeralda	108	7	15.00	2.7%	1.5%
	Lincoln	55	14	3.83	1.4%	3.0%
	Nye	306	33	9.14	7.8%	7.0%
	TOTALS:	**3,938**	**481**	**8.19**	**100%**	**100%**

Estimated # of Individual Hunters: **459**

NEVADA DEPARTMENT OF WILDLIFE

Small Game Post-season Questionnaire ESTIMATED HARVEST

MIGRATORY BIRDS **Species:** **AMERICAN CROW** Run date: 8/24/2009

HUNTING SEASON: 2009-10 **Expanded Data**

Survey Type: **Harvest and Hunting Pressure by County of Kill**

R	County of Harvest	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	0.00	0.00	0.0%	0.0%
	Churchill	136	29	172	4.75	0.79	13.7%	14.1%
	Douglas	50	5	7	10.50	7.00	5.0%	2.4%
	Humboldt	311	26	69	11.82	4.48	31.3%	12.9%
	Lyon	91	10	43	9.50	2.11	9.1%	4.7%
	Mineral	5	2	2	2.00	2.00	0.5%	1.2%
	Pershing	50	12	24	4.20	2.10	5.0%	5.9%
	Storey	0	2	5	0.00	0.00	0.0%	1.2%
	Washoe	10	10	77	1.00	0.13	1.0%	4.7%
EASTERN	Elko	69	10	43	7.25	1.61	7.0%	4.7%
	Eureka	17	2	5	7.00	3.50	1.7%	1.2%
	Lander	31	7	43	4.33	0.72	3.1%	3.5%
	White Pine	7	2	2	3.00	3.00	0.7%	1.2%
SOUTHERN	Clark	165	69	43	2.38	3.83	16.6%	34.1%
	Esmeralda	0	0	0	0.00	0.00	0.0%	0.0%
	Lincoln	0	2	5	0.00	0.00	0.0%	1.2%
	Nye	53	14	41	3.67	1.29	5.3%	7.1%
	TOTALS:	**995**	**203**	**581**	**4.89**	**1.71**	**100%**	**100%**
Estimated # of Individual Hunters:				**127**				

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-Season Questionnaire

UPLAND GAME SURVEY — **SAGE-GROUSE**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders **Harvest and Hunting Pressure by County of Kill**

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City*	0	2	5	0.0	0.0	0%	0%
	Churchill	189	89	137	2.1	1.4	2%	2%
	Douglas	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Humboldt	2479	1074	2421	2.3	1.0	28%	24%
	Lyon*	0	1	3	0.0	0.0	0%	0%
	Mineral*	0	1	1	0.0	0.0	0%	0%
	Pershing*	6	3	6	2.0	1.0	0%	0%
	Storey*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Washoe	1642	853	1737	1.9	0.9	18%	19%
	Western Region Subtotals:	***4317***	***2023***	***4310***	***2.1***	***1.0***	***48%***	***45%***
EASTERN	Elko	2505	1195	2947	1.9	0.8	28%	27%
	Eureka	553	263	542	2.5	1.1	6%	6%
	Lander	700	405	721	1.6	0.8	8%	9%
	White Pine	537	368	800	2.1	1.0	6%	8%
	Eastern Region Subtotals:	***4295***	***2232***	***5011***	***1.9***	***0.9***	***48%***	***50%***
SOUTHERN	Clark*	0	3	5	0.0	0.0	0%	0%
	Esmeralda*	6	1	3	6.0	2.0	0%	0%
	Lincoln*	0	3	7	0.0	0.0	0%	0%
	Nye	326	200	432	1.9	1.1	4%	4%
	Southern Region Subtotals:	***332***	***207***	***447***	***1.6***	***0.7***	***4%***	***5%***
	TOTALS:	**8944**	**4461**	**9767**	**2.0**	**0.9**	**100%**	**100%**

* Indicates raw data, not expanded data. These counties were closed to sage-grouse hunting and had reported harvest; however, when expansion factors were applied to the raw data, inflated numbers of birds harvested was calculated. These number are not appropriate so the raw data is being used to indicated some reported harvest and hunting activity in closed units.

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY — **BLUE GROUSE**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders

Harvest and Hunting Pressure by County of Kill

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	54	59	129	0.9	0.4	2%	3%
	Churchill	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Douglas	74	104	227	0.7	0.3	3%	6%
	Humboldt	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lyon	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Mineral	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Pershing*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Washoe	460	460	1003	1.0	0.5	16%	24%
	Western Region Subtotals:	***588***	***623***	***1359***	***0.9***	***0.4***	***21%***	***33%***
EASTERN	Elko	1325	702	1863	1.9	0.7	47%	37%
	Eureka	5	5	5	1.0	1.0	0%	0%
	Lander	203	109	282	1.9	0.7	7%	6%
	White Pine	608	326	1137	1.9	0.5	22%	17%
	Eastern Region Subtotals:	***2140***	***1142***	***3287***	***1.9***	***0.7***	***76%***	***61%***
SOUTHERN	Clark	0	35	69	0.0	0.0	0%	2%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lincoln	25	20	49	1.3	0.5	1%	1%
	Nye	54	59	143	0.9	0.4	2%	3%
	Southern Region Subtotals:	***79***	***114***	***262***	***0.7***	***0.3***	***3%***	***6%***
	TOTALS:	**2807**	**1878**	**4908**	**1.5**	**0.6**	**100%**	**100%**

* Data was not expanded and was zeroed out. These figures are considered either misidentification or erroneous.

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY — **RUFFED GROUSE**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders — **Harvest and Hunting Pressure by County of Kill**

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Churchill	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Douglas	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Humboldt	110	110	204	1.0	0.5	14%	21%
	Lyon	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Mineral	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Pershing	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Washoe	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Western Region Subtotals:	***110***	***110***	***204***	***1.0***	***0.5***	***14.5%***	***21.1%***
EASTERN	Elko	649	413	1359	1.6	0.5	86%	79%
	Eureka	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lander	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	White Pine	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Eastern Region Subtotals:	***649***	***413***	***1359***	***1.6***	***0.5***	***85.5%***	***78.9%***
SOUTHERN	Clark	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lincoln	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Nye	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Southern Region Subtotals:	***0***	***0***	***0***	***0.0***	***0.0***	***0%***	***0%***
	TOTALS:	**760**	**523**	**1563**	**1.5**	**0.5**	**100%**	**100%**

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY — **CHUKAR**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders

Harvest and Hunting Pressure by County of Kill

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	84	79	247	1.1	0.3	0%	1%
	Churchill	2286	620	1855	3.7	1.2	3%	4%
	Douglas	131	71	173	1.9	0.8	0%	0%
	Humboldt	25628	3252	14701	7.9	1.7	33%	23%
	Lyon	1201	499	1941	2.4	0.6	2%	4%
	Mineral	105	74	313	1.4	0.3	0%	1%
	Pershing	5475	1190	3941	4.6	1.4	7%	8%
	Storey	313	168	512	1.9	0.6	0%	1%
	Washoe	20071	3731	14812	5.4	1.4	26%	26%
	Western Region Subtotals:	***55293***	***9684***	***38495***	***5.7***	***1.4***	***72%***	***68%***
EASTERN	Elko	7603	1469	6394	5.2	1.2	10%	10%
	Eureka	2879	426	1589	6.8	1.8	4%	3%
	Lander	4072	725	3016	5.6	1.4	5%	5%
	White Pine	617	139	473	4.4	1.3	1%	1%
	Eastern Region Subtotals:	***15172***	***2758***	***11473***	***5.5***	***1.3***	***20%***	***19%***
SOUTHERN	Clark	2202	786	3195	2.8	0.7	3%	6%
	Esmeralda	176	71	80	2.5	2.2	0%	0%
	Lincoln	1687	426	732	4.0	2.3	2%	3%
	Nye	2052	473	638	4.3	3.2	3%	3%
	Southern Region Subtotals:	***6116***	***1755***	***4645***	***3.5***	***1.3***	***8%***	***12%***
	TOTALS:	**76581**	**14197**	**54613**	**5.4**	**1.4**	**100%**	**100%**

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY — **HUNGARIAN PARTRIDGE**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders

Harvest and Hunting Pressure by County of Kill

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Churchill	82	31	51	2.7	1.6	4%	2%
	Douglas	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Humboldt	752	563	2589	1.3	0.3	33%	39%
	Lyon	41	36	138	1.1	0.3	2%	2%
	Mineral	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Pershing	5	41	113	0.1	0.0	0%	3%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Washoe	179	82	404	2.2	0.4	8%	6%
	Western Region Subtotals:	***1059***	***752***	***3295***	***1.4***	***0.3***	***47%***	***52%***
EASTERN	Elko	716	481	1371	1.5	0.5	32%	33%
	Eureka	297	97	297	3.1	1.0	13%	7%
	Lander	174	92	261	1.9	0.7	8%	6%
	White Pine	0	5	31	0.0	0.0	0%	0%
	Eastern Region Subtotals:	***1187***	***675***	***1960***	***1.8***	***0.6***	***52%***	***47%***
SOUTHERN	Clark*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Esmeralda*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lincoln*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Nye	26	10	46	2.5	0.6	1%	1%
	Southern Region Subtotals:	***26***	***10***	***46***	***2.5***	***0.6***	***1%***	***1%***
	TOTALS:	**2272**	**1438**	**5301**	**1.6**	**0.4**	**100%**	**100%**

* Indicates that data was eliminated and zeroed out. Gray Partridge are not know to exist in Clark, Esmeralda and Lincoln Counties.

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY

CALIFORNIA QUAIL

Expanded Data

HUNTING SEASON: **2009-10**

Survey Type: Upland Game Stamp Holders

Harvest and Hunting Pressure by County of Kill

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	347	112	39	3.1	8.9	1%	3%
	Churchill	6487	601	2726	10.8	2.4	20%	14%
	Douglas	1856	195	762	9.5	2.4	6%	4%
	Humboldt	5671	869	3537	6.5	1.6	17%	20%
	Lyon	6780	791	3371	8.6	2.0	20%	18%
	Mineral	0	10	20	0.0	0.0	0%	0%
	Pershing	2413	269	845	9.0	2.9	7%	6%
	Storey	449	103	454	4.4	1.0	1%	2%
	Washoe	7899	1211	4714	6.5	1.7	24%	27%
	Western Region Subtotals:	***31903***	***4162***	***16467***	***7.7***	***1.9***	***96%***	***94%***
EASTERN	Elko	230	64	337	3.6	0.7	1%	1%
	Eureka	34	15	20	0.0	0.0	0%	0%
	Lander	49	34	78	1.4	0.6	0%	1%
	White Pine	0	10	59	0.0	0.0	0%	0%
	Eastern Region Subtotals:	***313***	***122***	***493***	***2.6***	***0.6***	***1%***	***3%***
SOUTHERN	Clark	0	0	0	0.0	0.0	0%	0%
	Esmeralda	117	20	44	0.0	0.0	0%	0%
	Lincoln	0	0	0	0.0	0.0	0%	0%
	Nye	806	122	498	1.0	0.7	2%	3%
	Southern Region Subtotals:	***923***	***142***	***542***	***6.5***	***1.7***	***3%***	***3%***
	TOTALS:	**33139**	**4426**	**17502**	**7.5**	**1.9**	**100%**	**100%**

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY — **GAMBEL'S QUAIL**

Expanded Data

HUNTING SEASON: **2009-10**

Survey Type: Upland Game Stamp Holders

Harvest and Hunting Pressure by County of Kill

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Churchill	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Douglas	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Humboldt	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lyon	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Mineral	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Pershing	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Washoe	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Western Region Subtotals:	***0***	***0***	***0***	***0.0***	***0.0***	***0%***	***0%***
EASTERN	Elko	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Eureka	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lander	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	White Pine	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Eastern Region Subtotals:	***0***	***0***	***0***	***0.0***	***0.0***	***0%***	***0%***
SOUTHERN	Clark	16224	2427	10033	6.7	1.6	79%	74%
	Esmeralda	283	21	70	13.8	4.1	1%	1%
	Lincoln	3788	730	2784	5.2	1.4	18%	22%
	Nye	344	111	562	3.1	0.6	2%	3%
	Southern Region Subtotals	***20640***	***3288***	***13448***	***6.3***	***1.5***	***100%***	***100%***
	TOTALS:	**20640**	**3288**	**13448**	**6.3**	**1.5**	**100%**	**100%**

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY — **MOUNTAIN QUAIL**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders

Harvest and Hunting Pressure by County of Kill

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	15	21	35	0.7	0.4	1%	3%
	Churchill	223	73	285	3.0	0.8	13%	10%
	Douglas	144	70	182	2.0	0.8	8%	10%
	Humboldt	209	82	273	2.5	0.8	12%	12%
	Lyon	314	115	505	2.7	0.6	18%	16%
	Mineral	12	3	6	4.0	2.0	1%	0%
	Pershing	82	21	85	4.0	1.0	5%	3%
	Storey	32	15	50	2.2	0.6	2%	2%
	Washoe	596	250	1010	2.4	0.6	35%	35%
	Western Region Subtotals:	***1627***	***649***	***2432***	***2.5***	***0.7***	***96%***	***92%***
EASTERN	Elko	29	23	4	1.3	8.0	2%	3%
	Eureka	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lander	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	White Pine	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Eastern Region Subtotals:	***29***	***23***	***4***	***1.3***	***8.0***	***2%***	***3%***
SOUTHERN	Clark	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Esmeralda	0	6	9	0.0	0.0	0%	1%
	Lincoln	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Nye	44	26	85	1.7	0.5	3%	4%
	Southern Region Subtotals:	***44***	***32***	***94***	***1.4***	***0.5***	***3%***	***5%***
	TOTALS:	**1701**	**705**	**2530**	**2.4**	**0.7**	**100%**	**100%**

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY **PHEASANT**

HUNTING SEASON: **2009-10** *Raw Data*

Survey Type: Upland Game Stamp Holders

Harvest and Hunting Pressure by County of Kill

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Churchill	11	28	8	0.4	1.4	2%	4%
	Douglas	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Humboldt	515	470	156	1.1	3.3	69%	59%
	Lyon	11	85	39	0.1	0.3	2%	11%
	Mineral	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Pershing	91	96	45	0.9	2.0	12%	12%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Washoe	0	11	6	0.0	0.0	0%	1%
	Western Region Subtotals:	***628***	***690***	***254***	***0.9***	***2.5***	***85%***	***87%***
EASTERN	Elko	0	11	11	0.0	0.0	0%	1%
	Eureka	34	17	40	2.0	0.9	5%	2%
	Lander	40	40	68	1.0	0.6	5%	5%
	White Pine	0	6	28	0.0	0.0	0%	1%
	Eastern Region Subtotals:	***74***	***74***	***147***	***1.0***	***0.5***	***10%***	***9%***
SOUTHERN	Clark	11	17	40	0.7	0.3	2%	2%
	Esmeralda	0	6	11	0.0	0.0	0%	1%
	Lincoln	28	11	11	2.5	2.5	4%	1%
	Nye	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Southern Region Subtotals:	***40***	***34***	***62***	***1.2***	***0.6***	***5%***	***4%***
	TOTALS:	**741**	**798**	**463**	**0.9**	**1.6**	**100%**	**100%**

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY **RABBIT**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders

Harvest and Hunting Pressure by County of Kill

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	75	45	124	1.7	0.6	0%	1%
	Churchill	2100	254	1224	8.3	1.7	12%	7%
	Douglas	542	100	587	5.5	0.9	3%	3%
	Humboldt	2498	274	2517	9.1	1.0	14%	8%
	Lyon	672	199	761	3.4	0.9	4%	6%
	Mineral	25	10	30	2.5	0.8	0%	0%
	Pershing	498	104	612	4.8	0.8	3%	3%
	Storey	95	30	159	3.2	0.6	1%	1%
	Washoe	2274	622	3085	3.7	0.7	13%	18%
	Western Region Subtotals:	***8776***	***1637***	***9100***	***5.4***	***1.0***	***50%***	***47%***
EASTERN	Elko	2428	313	1841	7.7	1.3	14%	9%
	Eureka	129	35	174	3.7	0.7	1%	1%
	Lander	592	55	189	10.8	3.1	3%	2%
	White Pine	726	154	716	4.7	1.0	4%	4%
	Eastern Region Subtotals:	***3876***	***557***	***2920***	***7.0***	***1.3***	***22%***	***16%***
SOUTHERN	Clark	3139	751	3124	4.2	1.0	18%	22%
	Esmeralda	154	25	109	6.2	1.4	1%	1%
	Lincoln	756	289	851	2.6	0.9	4%	8%
	Nye	851	209	1070	4.1	0.8	5%	6%
	Southern Region Subtotals:	***4901***	***1274***	***5154***	***3.8***	***1.0***	***28%***	***37%***
	TOTALS:	**17553**	**3468**	**17175**	**5.1**	**1.0**	**100%**	**100%**

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY — **PYGMY RABBIT**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders — **Harvest and Hunting Pressure by County of Kill**

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Churchill	10	5	5	2.0	2.0	3%	4%
	Douglas	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Humboldt	5	5	10	1.0	0.5	2%	4%
	Lyon	31	15	88	2.0	0.4	9%	13%
	Mineral	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Pershing	26	5	10	5.0	2.5	8%	4%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Washoe	67	21	72	3.3	0.9	20%	17%
	Western Region Subtotals:	***139***	***52***	***186***	***2.7***	***0.8***	***42%***	***43%***
EASTERN	Elko	98	26	150	3.8	0.7	29%	22%
	Eureka	0	5	10	0.0	0.0	0%	4%
	Lander	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	White Pine	62	15	21	4.0	3.0	18%	13%
	Eastern Region Subtotals:	***160***	***46***	***180***	***3.4***	***0.9***	***48%***	***39%***
SOUTHERN	Clark	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lincoln	26	10	15	2.5	1.7	8%	9%
	Nye	10	10	160	1.0	0.1	3%	9%
	Southern Region Subtotals:	***36***	***21***	***175***	***1.8***	***0.2***	***11%***	***17%***
	TOTALS:	**335**	**119**	**541**	**2.8**	**0.6**	**100%**	**100%**

NEVADA DEPARTMENT OF WILDLIFE
Small Game Post-season Questionnaire

UPLAND GAME SURVEY — **WHITE-TAILED JACKRABBIT**

HUNTING SEASON: **2009-10** *Expanded Data*

Survey Type: Upland Game Stamp Holders — **Harvest and Hunting Pressure by County of Kill**

R	County of Kill	Total Harvest	# of Hunters	# of Hunter Days	Kill/ Hunter	Kill/ Day	% of total Kill	% of total Hunters
WESTERN	Carson City	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Churchill*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Douglas*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Humboldt	15	25	46	0.6	0.3	3%	14%
	Lyon*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Mineral*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Pershing*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Storey	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Washoe	193	56	360	3.5	0.5	38%	32%
	Western Region Subtotals:	***208***	***81***	***406***	***2.6***	***0.5***	***40%***	***46%***
EASTERN	Elko	264	76	228	3.5	1.2	51%	43%
	Eureka	5	10	20	0.5	0.3	1%	6%
	Lander	5	5	5	1.0	1.0	1%	3%
	White Pine**	32	3	43	10.7	0.7	6%	2%
	Eastern Region Subtotals:	***306***	***94***	***297***	***3.2***	***1.0***	***60%***	***54%***
SOUTHERN	Clark*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Esmeralda	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Lincoln*	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Nye	0	0	0	#DIV/0!	#DIV/0!	0%	0%
	Southern Region Subtotals:	***0***	***0***	***0***	***#DIV/0!***	***#DIV/0!***	***0%***	***0%***
TOTALS:		**514**	**175**	**702**	**2.9**	**0.7**	**100%**	**100%**

* Indicates reported harvest in raw data; however, the likelihood of harvesting the species within these counties is very remote and, in some cases, not possible (e.g. Clark County). These counties were zeroed out and the raw data discarded.

** Indicates reported harvest in raw data only. The expanded harvest data was not feasible for this county.