

**NEVADA DEPARTMENT OF WILDLIFE**

**2011**

**Upland and Migratory Game Bird, Rabbit and  
Furbearing Mammals**



**Harvest Data and Population Status Reports**

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**STATE OF NEVADA**  
**BRIAN SANDOVAL, GOVERNOR**

**DEPARTMENT OF WILDLIFE**  
**KENNETH E. MAYER, DIRECTOR**

**GAME DIVISION**  
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**ON THE COVER:** Dusky grouse photographed by retired Game Warden Steve Albert in northeastern Nevada.





## **DIRECTOR'S MESSAGE**

**KENNETH E. MAYER, DIRECTOR**  
**NEVADA DEPARTMENT OF WILDLIFE**

Dear Fellow Sportsmen:

I hope this letter finds you well and excited about hunting opportunities for the 2011 upland game and waterfowl seasons. By the time you read this, upland game hunting seasons will have already begun and early reports are encouraging for both upland game species and waterfowl.

As you peruse this document, please consider the time and effort spent collecting data, writing reports and organization that goes into developing such a detailed booklet. In today's world, time is money and there seems to be less and less of it. The demand for a biologist's time has increased to the point where some traditional activities will have to be scrutinized more thoroughly to determine their actual usefulness. This document may be one of those activities. The Upland Game, Waterfowl and Furbearer Status and Trend book is something that has been published by the Department since the 1950's. However, demand has waned for such a large document, especially since people have less time to read such lengthy affairs. In the near future, this document may look much different and be condensed to just a few pages.

Now, let's discuss some small game matters. As you know, Greater Sage-Grouse have been found to be warranted for listing under the Endangered Species Act by the U.S. Fish and Wildlife Service (Service), but are currently precluded by other higher priority species. The Service utilizes Listing Priority Numbers (LPN) to determine priority ranking. The lower a species is ranked, the more likely it is to actually be listed. The Greater Sage-Grouse currently has an LPN of 8, which is fairly high on the scale; however, the Bi-State population, which resides in Lyon and Mineral County in Nevada, has an LPN of 3. The likelihood of the Bi-State population actually being listed is much greater relatively. This being said, there is a small window of time for federal and state agencies to work together to establish policy, conservation measures and projects to address threats and avoid the need for an actual listing.

This year is shaping up to be one of the best chukar seasons since 2006. We expect harvest levels to increase after a good season last year. Chukar density surveys conducted using a helicopter have shown that bird numbers are up in 11 of 13 transects with 5 areas showing all time high numbers of birds per square mile. For those folks on the fence regarding whether or not to purchase the Upland Game Bird Stamp, this year is really a no brainer for chukar. California quail have also done well this year with above-average production levels. Look for drainage bottoms and substantial spring sources with cover to harbor some decent sized coveys for that added hunting opportunity while out chukar hunting. In southern Nevada, Gambel's Quail hunting should also be better this year. Traditional spots in the Mormon Mountains, Coyote

Springs Wash and Meadow Valley area in Lincoln County should provide sportsmen with fair to good numbers of birds this year.

Waterfowl hunters can expect to see a lot of ducks and geese migrating through Nevada this year. Continental breeding duck numbers this past spring were estimated to be an impressive 45.6 million birds. This is 35% above long-term averages and 11% higher than last year's estimate. Canvasback and redhead numbers continue to increase and many of the dabbling ducks are showing increases as well. Water was abundant this past year and most of Nevada's marshes and management areas are at or near capacity going into the hunting season. If the weather cooperates this season the only dilemma that waterfowl hunters will face is deciding which of Nevada's waters to hunt. With the establishment of a new hunt zone this year and the good conditions across the state, I hope to see many of you at the marshes this season.

For those trappers out there, the 2011-12 season should be a great year. Prey species have been on the increase following back-to-back years of good moisture. Furbearing species have responded favorable and production is on the increase. This is particularly evident in bobcat, which saw production increase 39% over the average for the last decade. The bobcat season returns to a full 120 days, which should provide plenty of opportunity. Prices on most species held steady last year but bobcat prices increased by 46%. With both production and prices up, it should prove to be a good trapping season.

I would encourage those of you with youngsters to get out during the youth hunts. They are excellent opportunities to get the younger generation involved with our beloved sport and away from the television or video games. They are also opportunities for you to scout your favorite spots. I also urge all you veteran hunters out there to participate in the Department's Mentor Program. Identify a candidate that you feel would enjoy the program and sign them up as an apprentice hunter. An "apprentice" license is valid for one year for persons 18 years of age and older and is free. We hope that this ultimately helps recruit new hunters.

On behalf of the Nevada Department of Wildlife, thank you for supporting wildlife management and conservation through the purchase of your hunting license and Upland Game or Waterfowl Stamp. Fees obtained from licenses, permits and stamps allow us to provide match for federal grant funding and conduct the type of work you see in this document as well as "on the ground" projects to benefit wildlife populations. We face many challenges in the future, but remain optimistic that those challenges can be met head on and addressed to improve wildlife populations and habitat for future generations.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth E. Mayer".

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# 2011 - 12 HUNTING SEASONS & BAG LIMIT REGULATIONS

## CR 07-07

*Dates are for the 2011 - 12 season, unless otherwise noted.*

Adoption on August 13, 2011 with Amendments #1, #2, #3, #4, #5, #6 and #7

### UPLAND GAME

(Units referenced are Game Management Units)

<b>YOUTH CHUKAR AND HUNGARIAN PARTRIDGE HUNT</b>	
OPEN AREAS:	Statewide
SPECIES ALLOWED:	Chukar and Hungarian partridge.
SEASON DATES:	September 24 – 25, 2011
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.

<b>YOUTH CALIFORNIA, GAMBEL'S AND SCALED QUAIL HUNT</b>	
OPEN AREAS:	Statewide
SPECIES ALLOWED:	California, Gambel's and scaled quail
SEASON DATES:	September 24 – 25, 2011
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.

<b>RABBIT YOUTH HUNT</b>	
OPEN AREAS:	Statewide
SPECIES ALLOWED:	Cottontail, pygmy and white-jackrabbits
SEASON DATES:	September 24 – 25, 2011
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.

<b>SAGE-GROUSE</b>	
OPEN AREAS:	Unit 184 of Churchill and Lander Counties
SEASON DATES:	October 1 - 2, 2011
LIMITS:	Daily bag limit 2. Possession limit 4.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	<b>Closed to nonresidents.</b>
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, 2011
LIMITS:	Daily bag limit 2. Possession limit 4.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	<b>Closed to nonresidents.</b>
OPEN AREAS:	<b>Unit 033 of Washoe and Humboldt Counties (Sheldon National Wildlife Refuge) excluding the Little Sheldon and other areas as posted.</b>
<b>HUNT PERIOD #1</b>	
SEASON DATES:	September 17 - 18, 2011
<b>HUNT PERIOD #2</b>	
SEASON DATES:	September 24 - 25, 2011
LIMITS:	Daily bag limit 2. Possession limit 4.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	<b>Open to nonresidents.</b> 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.

<b>BLUE AND RUFFED GROUSE</b>	
<b>OPEN AREAS:</b>	Statewide*
<b>SEASON DATES:</b>	September 1 – December 31, 2011
<b>LIMITS:</b>	Daily bag limit 3. Possession limit 6.
<b>SHOOTING HOURS:</b>	Sunrise to sunset daily.
<b>SPECIAL REGULATIONS:</b>	<p>Limit singly or in the aggregate.</p> <p>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.</p> <p>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.</p> <p>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</p>

<b>SNOWCOCK</b>	
<b>OPEN AREAS:</b>	Elko - Management Units 101,102, and 103, and that portion of White Pine County in Unit 103.
<b>SEASON DATES:</b>	September 1 - November 30, 2011
<b>LIMITS:</b>	Daily bag limit 2. Possession limit 2.
<b>SHOOTING HOURS:</b>	Sunrise to sunset daily.
<b>SPECIAL REGULATIONS:</b>	<p>Limit singly or in the aggregate.</p> <p>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.</p>

<b>CHUKAR AND HUNGARIAN PARTRIDGE</b>	
<b>OPEN AREAS:</b>	Statewide
<b>SEASON DATES:</b>	October 8, 2011 – February 6, 2012
<b>LIMITS:</b>	Daily bag limit 6. Possession limit 18.
<b>SHOOTING HOURS:</b>	Sunrise to sunset daily.
<b>SPECIAL REGULATIONS:</b>	Limit singly or in the aggregate.

<b>CALIFORNIA, GAMBEL'S, SCALED AND MOUNTAIN QUAIL</b>	
OPEN AREAS:	Statewide
SEASON DATES:	October 8, 2011 – February 5, 2012
LIMITS:	Daily bag limit 10. Possession limit 20.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate <b>except for mountain quail</b> where limits may not include more than <b>2 daily and 4 in possession</b> . 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.

<b>PHEASANT</b>	
OPEN AREAS:	Statewide
SEASON DATES:	November 1 – November 30, 2011
LIMITS:	Daily bag limit 2. Possession limit 4.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Cocks only

<b>COTTONTAIL, PYGMY AND WHITE-TAILED RABBITS</b>	
OPEN AREAS:	Statewide
SEASON DATES:	October 8, 2011 – February 28, 2012
LIMITS:	Daily bag limit 10. Possession limit 20.
SHOOTING HOURS:	Sunrise to sunset daily.
SPECIAL REGULATIONS:	Limit singly or in the aggregate.

## WILD TURKEY

<b>WILD TURKEY 2011 SPRING – LIMITED ENTRY – HUNTS 0131 &amp; 0132</b>			
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:	<b>Application Deadline 5:00 p.m. on the third Tuesday in February. Release date on the first Friday in March.</b>		
<b>UNIT 091 of ELKO COUNTY</b>			
	<b>Seasons</b>	<b>Tag Quota</b>	
		<b>Resident Hunt 0131</b>	<b>Nonresident Hunt 0132</b>
Hunt Periods:	March 25 – May 5	5	-
<b>UNIT 101 of ELKO COUNTY*</b>			
	<b>Seasons</b>	<b>Tag Quota</b>	
		<b>Resident Hunt 0131</b>	<b>Nonresident Hunt 0132</b>
Hunt Periods:	March 25 – May 5	5	-
<b>UNITS 102 &amp; 065 of ELKO COUNTY*</b>			
	<b>Seasons</b>	<b>Tag Quota</b>	
		<b>Resident Hunt 0131</b>	<b>Nonresident Hunt 0132</b>
Hunt Periods:	March 25 – May 5	15	2
<b>UNITS 151 and 152 of LANDER COUNTIES</b>			
	<b>Seasons</b>	<b>Tag Quota</b>	
		<b>Resident Hunt 0131</b>	<b>Nonresident Hunt 0132</b>
Hunt Periods:	March 25 – May 5	3	-
<b>UNITS 223, 231, 241, 242, 243 and 271 of LINCOLN COUNTY**</b>			
	<b>Seasons</b>	<b>Tag Quota</b>	
		<b>Resident Hunt 0131</b>	<b>Nonresident Hunt 0132</b>
Hunt Periods:	March 25 – April 3	10	1
	April 4 – April 13	10	1
	April 24 – May 3	10	1

<b>MASON VALLEY WILDLIFE MANAGEMENT AREA ONLY OF UNIT 203</b>			
	<b>Season</b>	<b>Tag Quota</b>	
		<b>Resident Hunt 0131</b>	<b>Nonresident Hunt 0132</b>
Hunt Periods:	March 25 – April 8	5	-
	April 9 – April 23	5	-
	April 24 – May 8	5	-
<b>MOAPA VALLEY PORTION OF UNITS 243, 244, 268, 271, &amp; 272 IN CLARK COUNTY*</b>			
	<b>Season</b>	<b>Tag Quota</b>	
		<b>Resident Hunt 0131</b>	<b>Nonresident Hunt 0132</b>
Hunt Periods:	March 25 – April 3	3	-
	April 4 – April 13	3	-
	April 14 – April 23	3	-
<b>PERSHING COUNTY*</b>			
	<b>Season</b>	<b>Tag Quota</b>	
		<b>Resident Hunt 0131</b>	<b>Nonresident Hunt 0132</b>
Hunt Periods:	March 25 – April 13	5	-
	April 14 – May 3	5	-
<b>UNIT 115 of WHITE PINE COUNTY***</b>			
Hunt Periods:	March 25 – May 5	14	1
<p><i>*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.</i></p> <p><i>** Applicants are advised that a portion of the turkey population occurs on private lands.</i></p> <p><i>***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.</i></p>			

## 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 17 <sup>th</sup> 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.**

### 2012 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](http://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](http://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.

**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:	<b>Resident Hunt 0135</b>	<b>Nonresident Hunt 0137</b>
	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.

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

<b>WILD TURKEY 2011 – 2012 SPRING HUNTS - 0135 &amp; 0137</b>		
<b>Units 181 &amp; 182 of Churchill County</b>		
PHYSICAL CHARACTERISTICS:	<b>Bearded Wild Turkey</b>	
LIMIT:	<b>1 by tag only.</b>	
SHOOTING HOURS:	<b>One half hour before sunrise to 4:00 p.m. daily.</b>	
SEASON DATES:	<b>March 25 – May 5</b>	
QUOTAS:	<b>Resident Hunt 0135</b>	<b>Nonresident Hunt 0137</b>
	Open	Open
SPECIAL REGULATIONS:		
<b>UNIT 181 AND 182 OF CHURCHILL COUNTY APPLICATION REGULATIONS:</b>		
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.		

<b>FALCONRY SEASONS FOR UPLAND GAME BIRDS &amp; RABBITS</b>	
OPEN AREAS:	<b>Statewide*</b>
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.
<b>Limits singly or in the aggregate.</b>	

## MIGRATORY WATERFOWL

**Note regarding Zone designations:**

**NORTHEAST ZONE:** Elko & White Pine Counties

**NORTHWEST ZONE:** Carson City, Churchill, Douglas, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Nye, Pershing, Storey & Washoe Counties

**SOUTHERN ZONE:** Lincoln & Clark Counties

<b>SPECIAL YOUTH WATERFOWL HUNT</b>	
<b>OPEN AREAS:</b>	<b>NORTHEAST ZONE</b>
<b>2011-12 SEASON:</b>	September 17, 2011 & January 14, 2012
<b>OPEN AREAS:</b>	<b>NORTHWEST ZONE</b>
<b>2011-12 SEASON:</b>	October 1, 2011 & February 4, 2012
<b>OPEN AREAS:</b>	<b>SOUTHERN ZONE</b>
<b>2011-12 SEASON:</b>	October 22, 2011 & February 4, 2012
<b>LIMITS:</b>	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.
<b>SHOOTING HOURS:</b>	½ hour before sunrise to sunset
<b>SPECIAL REGULATIONS:</b>	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.

<b>DUCKS AND MERGANSERS</b>	
OPEN AREAS:	<b>NORTHEAST ZONE</b>
2011-12 SEASON:	September 24, 2011 – January 6, 2012
OPEN AREAS:	<b>NORTHWEST ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>SOUTHERN ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>Moapa Valley portion of the Overton Wildlife Management Area.</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
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
Wood Duck	Included within the general duck limit, except in Churchill County where wood duck bag is not to exceed 1 daily and 2 in possession.
<b>SCAUP (Lesser and Greater)</b>	
OPEN AREAS:	<b>NORTHEAST ZONE</b>
2011-12 SEASON:	September 24, 2011 – December 16, 2011
OPEN AREAS:	<b>NORTHWEST ZONE</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
OPEN AREAS:	<b>SOUTHERN ZONE</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
OPEN AREAS:	<b>Moapa Valley portion of the Overton Wildlife Management Area.</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
LIMITS (daily/possession):	3 / 6, included within the general duck limit
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents

*\*bag limits are established by the USFWS in late July and are based upon latest available population data.*

<b>COOTS AND COMMON MOORHENS (Common Gallinules)</b>	
OPEN AREAS:	<b>NORTHEAST ZONE</b>
2011-12 SEASON:	September 24, 2011 – January 6, 2012
OPEN AREAS:	<b>NORTHWEST ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>SOUTHERN ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>Moapa Valley portion of the Overton Wildlife Management Area.</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
LIMITS (daily/possession):	25 / 25
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents

<b>COMMON SNIPE</b>	
OPEN AREAS:	<b>NORTHEAST ZONE</b>
2011-12 SEASON:	September 24, 2011 – January 6, 2012
OPEN AREAS:	<b>NORTHWEST ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>SOUTHERN ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>Moapa Valley portion of the Overton Wildlife Management Area.</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
LIMITS (daily/possession):	8 / 16
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents

<b>CANADA AND WHITE-FRONTED GEESE</b>	
OPEN AREAS:	<b>NORTHEAST ZONE</b>
2011-12 SEASON:	September 24, 2011 – January 6, 2012
OPEN AREAS:	<b>NORTHWEST ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>SOUTHERN ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>Moapa Valley portion of the Overton Wildlife Management Area.</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
Limits (daily/possession)	3 / 6
Shooting hours:	½ hour before sunrise to sunset
Special Regulations:	Open to Nonresidents

<b>SNOW AND ROSS' GEESE</b>	
OPEN AREAS:	<b>NORTHEAST ZONE</b>
2011-12 SEASON:	September 24, 2011 – January 6, 2012
OPEN AREAS:	<b>NORTHWEST ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>SOUTHERN ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>Moapa Valley portion of the Overton Wildlife Management Area.</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
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

<b>FALCONRY SEASONS FOR MIGRATORY GAME BIRDS</b>	
OPEN AREAS:	<b>NORTHEAST ZONE</b>
2011-12 SEASON:	September 24, 2011 – January 6, 2012
OPEN AREAS:	<b>NORTHWEST ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>SOUTHERN ZONE</b>
2011-12 SEASON:	October 15, 2011 – January 27, 2012
OPEN AREAS:	<b>Moapa Valley portion of the Overton Wildlife Management Area.</b>
2011-12 SEASON:	November 5, 2011 – January 27, 2012
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.

<b>SWAN</b>	
<b>OPEN AREAS:</b>	<b>Churchill, Lyon and Pershing counties</b>
<b>2011-12 Season:</b>	October 15, 2011 - January 8, 2012
<b>LIMITS:</b>	One swan per swan hunt permit Maximum two swan hunt permits per season One swan per day
<b>SHOOTING HOURS:</b>	½ hour before sunrise to sunset
<b>SPECIAL REGULATIONS:</b>	<p>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 <a href="http://www.ndow.org">www.ndow.org</a>. Permits are to be awarded through an initial drawing.</p> <p><b>Deadline:</b> Applications must be received by 5:00 p.m. by Friday September 16, 2011. <b>No hand delivered applications for the drawing.</b> Results of the initial drawing will be provided by 5pm Wednesday, October 5<sup>th</sup>, 2011.</p> <p>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 3, 2011. 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 3, 2011. 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.</p> <p><b>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.</b></p> <p><b>If a total harvest of five (5) trumpeter swans is reached, the swan season is closed for the remainder of the season.</b></p> <p>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.</p> <p>Open to Nonresidents who have a valid annual Nevada hunting license or a Nonresident Short-Term Permit to hunt Upland game &amp; Waterfowl and required waterfowl stamps.</p>

## FURBEARING ANIMALS

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

<b>OTTER</b>	
<b>OPEN AREAS:</b>	Elko, Eureka, Humboldt, Lander and Pershing Counties
<b>SEASON DATES:</b>	October 1 – March 31
<b>SPECIAL REGULATIONS:</b>	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.

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

<b>BOBCAT SEASON</b>	
<b>OPEN AREAS:</b>	Statewide
<b>SEASON DATES:</b>	November 1– Last Day in February
<b>SPECIAL REGULATIONS:</b>	<b>Closed to Nonresidents.</b>

<b>GRAY FOX SEASON</b>	
<b>OPEN AREAS:</b>	Statewide
<b>SEASON DATES:</b>	November 1 – Last Day in February
<b>SPECIAL REGULATIONS:</b>	<b>Closed to Nonresidents.</b>

## 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.

<b>BOBCAT PELT SEALING DATES FOR THE 2008-2012 SEASON</b>			
<b>City</b>	<b>Date</b>	<b>Time</b>	<b>Location</b>
<b>Elko</b>	January 24, February 14, March 9.	8 a.m.–5 p.m.	NDOW Elko Office
<b>Ely</b>	January 27, February 17, March 6.	8 a.m.–2 p.m.	NDOW Ely Office
<b>Eureka</b>	January 26, February 16, March 5.	12 p.m.–5 p.m.	NDOW Eureka Office
<b>Fallon</b>	January 26.	10 a.m.–3 p.m.	NDOW Fallon Office
	Annually scheduled to coincide with the NTA Fur Sale.	7 a.m.–11 a.m.	Nevada Trappers Association Fallon Fur Sale
	March 9.	10 a.m.–3 p.m.	NDOW Fallon Office
<b>Las Vegas</b>	January 10.	1 p.m.– 5 p.m.	NDOW Las Vegas Office
	February 16.	8 a.m.– 5 p.m.	
	March 9.	1 p.m.– 5 p.m.	
<b>Panaca</b>	February 16.	8 a.m.– 5 p.m.	Nevada State Parks - NDOW Office, Panaca
	March 9.	1 p.m.– 5 p.m.	
<b>Tonopah</b>	February 16.	8 a.m.– 5 p.m.	NDOW Tonopah Office
	March 9.	1 p.m.– 5 p.m.	
<b>Winnemucca</b>	January 24.	8 a.m.– 1 p.m.	NDOW Winnemucca Office

# **STATEWIDE SUMMARIES UPLAND GAME SPECIES**

**Report by: Shawn Espinosa, Upland Game Staff Specialist**

## **SAMPLING METHODS**

The Nevada Department of Wildlife (NDOW) mails out hunter harvest questionnaires each year in March once all hunting seasons have been completed. Questionnaires are sent to each individual hunter that purchased an Upland Game Stamp online. The online purchase of Upland Game Stamps allows NDOW to develop a database of names and addresses; whereas point of sale purchases do not allow for future contact.

As questionnaires are returned, the information is entered into a Microsoft Access database. Questionnaires were accepted until June 30, 2011. Once all data have been entered, it is separated by species and then by county and entered into Microsoft Excel spreadsheets for each species. These “raw” data, including harvest, number of hunters, and number of hunter days are then expanded based on the total number of Upland Game Stamps sold and the proportion of hunters that hunted that particular species. The data are then checked for quality assurance because of erroneous reporting. In some cases, erroneous data can be deleted because of reported harvest of certain species that do not occur in certain counties; however, some reporting error certainly occurs. These data are then provided to area biologists throughout Nevada for a second quality assurance check and subsequent report writing.

For the future, NDOW is exploring opportunities to allow sportsmen to enter their harvest information directly into an online database. This database would be developed with certain features that would provide better quality data. In other words, some reporting error would be eliminated because hunters would not be able to report the harvest of a species in a county that did not harbor that species. Some quality control and quality assurance procedures may still be necessary, but information would be available much more quickly. This actually would be a cost saving measure for NDOW by eliminating the need for an Administrative Assistant to enter the data.

## **GREATER SAGE-GROUSE**

### **Season Structure and Limits**

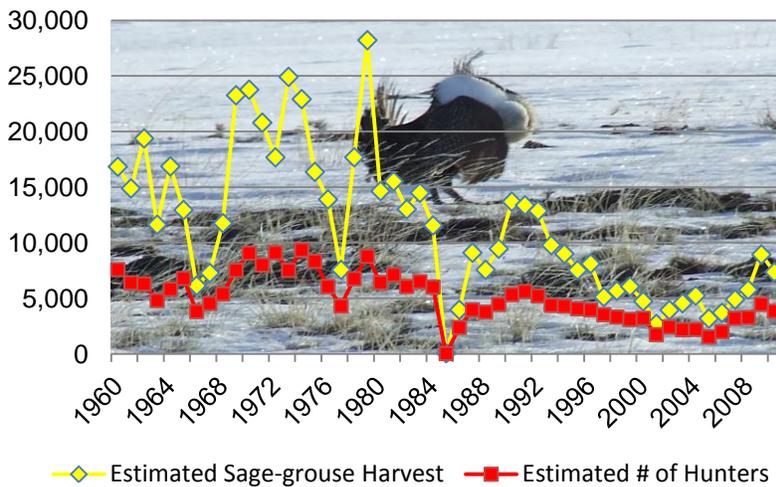
The 2010 Greater Sage-Grouse season was 15 days long and was held from September 25 through October 9, 2010. Separate, more conservative seasons were held for two hunt units during 2010, including the Desatoya PMU (Hunt Unit 184) and the Sheldon National Wildlife Refuge (Hunt Unit 033). A two day season was held in the Desatoya PMU from October 2 through 3 and two separate two-day seasons

were held on the Sheldon National Wildlife Refuge (SNWR) during the third and fourth weekends in September. The SNWR hunt is limited to 75 hunters for each hunt period and permits are issued through a random drawing. The daily and possession limits for all hunts were 2 and 4 respectively. All seasons continue to remain closed to nonresidents with the exception of the Sheldon National Wildlife Refuge Special Sage-Grouse Hunt.

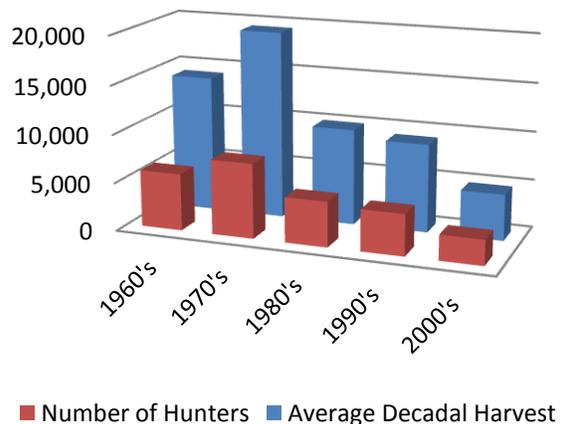
**Harvest and Effort**

An estimated 7,355 sage-grouse were taken during the 2010 hunting season. This represented an 18% decrease from the previous season's harvest of 8,944 which was the highest since 1994 (n=9,004 birds). However, the 2010 harvest was 54% higher than the ten-year average (n=4,766). Fourteen percent fewer hunters reported hunting sage-grouse in 2010 (n=3,832), which likely led to the decrease in harvest. Similar to the previous season, each hunter averaged 2.1 days in the field and took approximately 2 birds during their outing. Due to more restrictive hunting seasons, the closure of many counties and hunt units, and the shifting of sage-grouse seasons later in the year, the number of sage-grouse harvested and hunter participation have dwindled in each decade since the 1970's (Figure 2).

**Figure 1. Nevada Sage-Grouse Harvest Information**



**Figure 2. Decadal Sage-Grouse Harvest and Hunter Participation**



## Population Status

The most reliable data available to determine population trends remain those collected from monitoring sage-grouse leks. Over the last decade, personnel and volunteers have monitored an average of more than 700 leks annually. Of these, an average of 321 leks was considered active with at least 2 or more male sage-grouse in attendance. Annual wing classification data provide another important dataset. These data allow for an estimation of production and nest success from year to year.

Trends in lek attendance are beginning to show a slight population increase after fairly significant declines experienced during 2007 and 2008. Since 2007, production values that were obtained from the analyses of wings made available through hunter harvest indicate that a modest population increase should be sustained through 2011 and into 2012. Last year's production of 1.9 chicks per hen was 16% greater than the ten-year average and well above the all time low of 0.6 recorded in 2007 (Figure 3.) This coupled with good nest success values in 2009 and 2010 of 57.6% and 54.0% respectively should translate into a growing population.

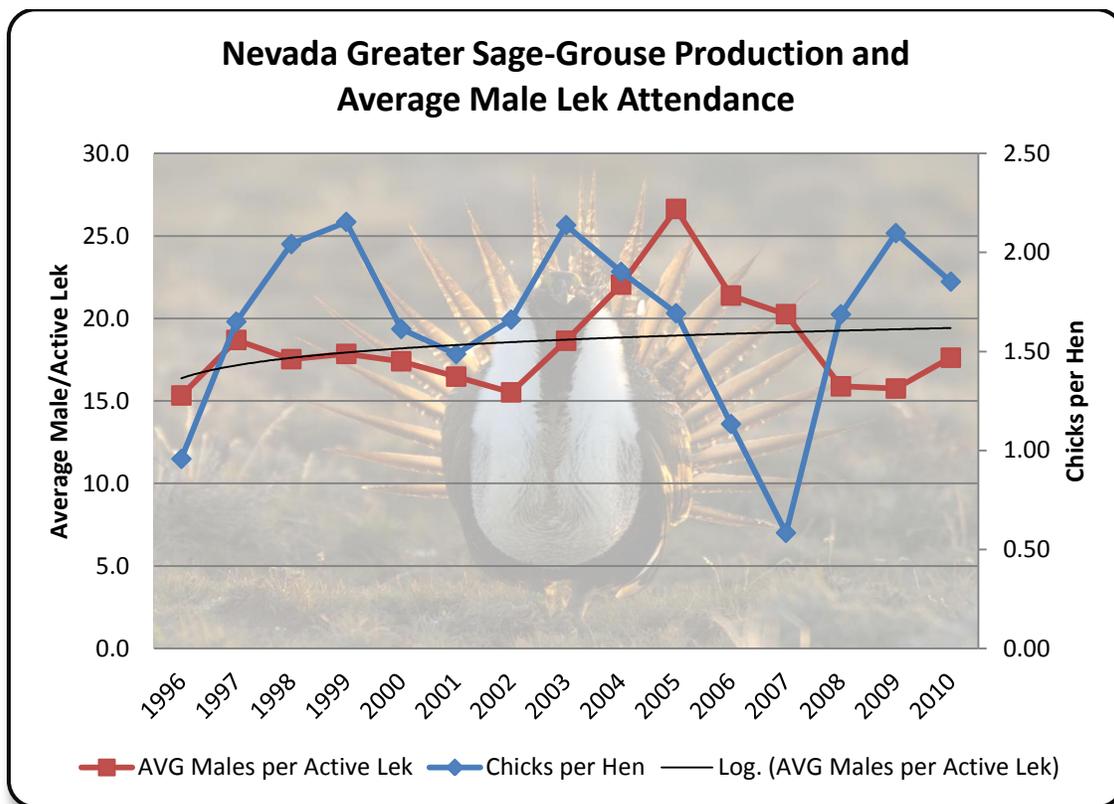


Figure 3. Sage-grouse production values in relation to lek count averages from 1996-2010.

Favorable habitat conditions have been experienced over the last two years. Excellent fall precipitation coupled with good winter moisture during 2010 and 2011 will likely lead to another good production year in 2011. As of this writing, only a couple fires of note have occurred in important sage-grouse habitats in Nevada. The Salmon Fire in the O'Neil Basin PMU (4,846 acres) and the Susie Fire in the Tuscarora PMU (6,741 acres) contributed some habitat loss for sage-grouse; however, these fires are of a manageable enough size that restoration should prove effective.

The forecast for the 2011 Greater Sage-Grouse season is favorable. Most populations have experienced population increases since 2008 and chick production and recruitment should be up this season. Hunters can expect good success depending on weather conditions. Under normal weather conditions, hunters should encounter similar to larger flocks of sage-grouse this season, distributed more evenly across the landscape due to more available water than during 2009. However, rain before or during the season could spread birds out over a much larger area, making bird location more difficult.

## **FOREST GROUSE**

### **(BLUE AND RUFFED GROUSE)**

#### **Season Structure and Limits**

The 2010 forest grouse season, which included Blue Grouse (Dusky and Sooty) and Ruffed Grouse, was once again 122 days long extending from September 1<sup>st</sup> through December 31<sup>st</sup>. 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 (6). Limits were for single species or in the aggregate.

#### ***Blue Grouse***

#### **Harvest and Effort**

An estimated 1,599 Blue Grouse were harvested by 1,375 hunters during the 2010-11 hunting season. These figures represent decreases of 43% and 27% respectively; however, the harvest estimate was a mere 4% lower than the overall 10-year average harvest. The reduction in harvest and fewer hunters in the field is somewhat surprising considering harvest and hunter participation from the previous season where harvest was estimated at 2,807 birds. As with many other upland game species, harvest is closely correlated with the estimated number of hunters that take to the field in pursuit of the species each year (Figure 4).

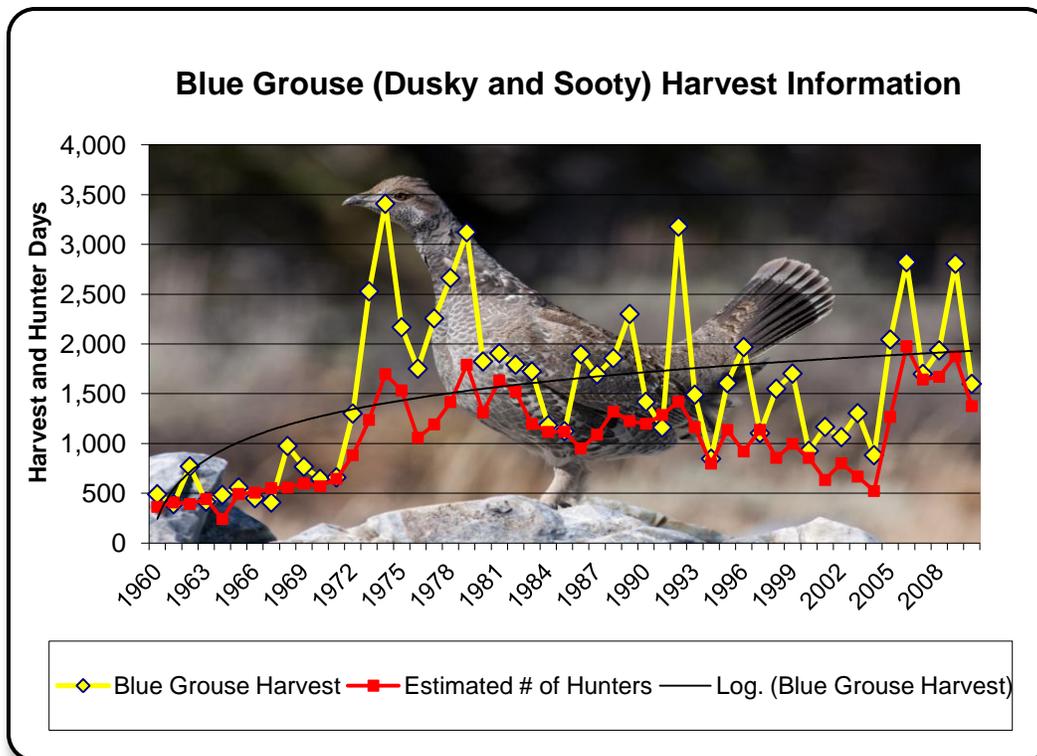


Figure 4. Estimated Blue Grouse harvest and number of hunters from 1960-2010.

Approximately 70% of the Blue Grouse harvest in Nevada is from the Eastern Region, mainly White Pine and Elko Counties. The Western Region contributes approximately 27% of the harvest with most harvest occurring in southern Washoe County. The Southern Region contributes little in the way of Blue Grouse harvest (~3%) even though there are sustainable and even robust populations of Blue Grouse located in Esmeralda and Nye Counties. These areas are not near any population base and it may be the case that most hunters are not willing to travel too far and out of the way to hunt Blue Grouse species.

### **Population Status**

NDOW does not conduct any formal or standard surveys for Dusky or Sooty Grouse. Some opportunistic brood surveys are conducted on occasion and records are kept of brood observations. 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.

Beginning in 2007, NDOW requested that wings from hunter harvested birds be retained from Dusky and Sooty Grouse for analysis. The wings allow for classification of age and sex and to monitor harvest locations. In 2010, 89 wings were collected from hunters. Analysis of these wings suggested that estimated recruitment was 3.9 chicks per hen (Figure 5). This was the highest production estimate observed since the inception of the wing collection effort. Wing collection is somewhat time consuming;

however, being that this is the only information gained on the species, it is considered valuable and worth the effort. Over time, it is felt that additional wings can be collected as sportsmen become more accustomed to providing wings for analysis.

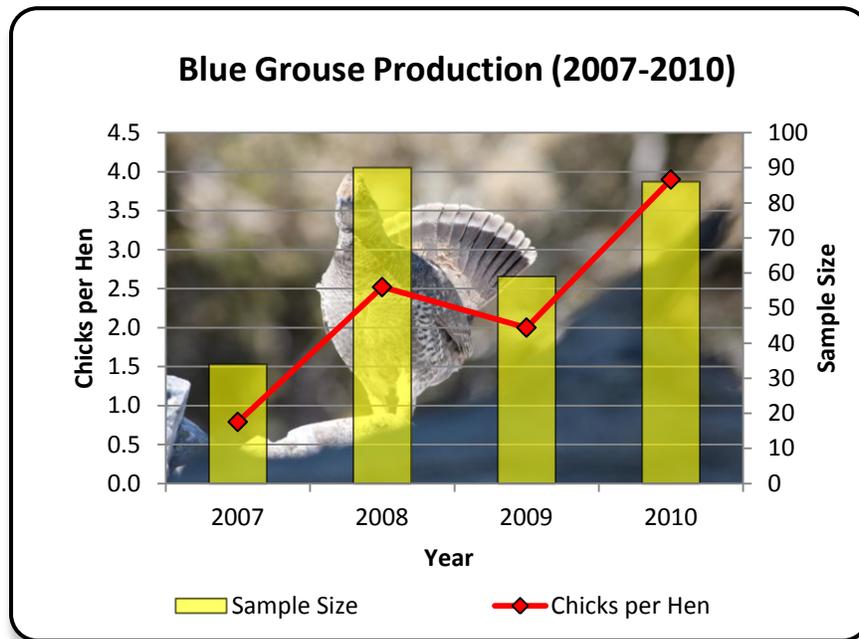


Figure 5. Blue Grouse production estimates and sample size of wings obtained from hunter harvest from 2007-2010.

## ***Ruffed Grouse***

### **Harvest and Effort**

The estimate Ruffed Grouse harvest for the 2010 hunting season was 177 birds taken by 244 hunters. This was a major decline (76%) from 2009 where an estimated 760 birds were harvested. Contributing to the decline in harvest was a 53% reduction in the number of hunters and a 58% reduction in the number of days spent in field in 2010 (n=663). Misidentification of these species continues to be an issue with Blue Grouse often mistaken for Ruffed Grouse and vice-versa.

### **Population Status**

The population strongholds for Ruffed Grouse continue to be Elko and Humboldt Counties; however, it appears that a release conducted in 2009 in the Toiyabe Range of Lander County was successful. Future augmentations of this population will likely lead to further establishment and expansion into suitable habitats within adjacent portions of the Toiyabe Range extending down into Nye County.

No formal brood surveys are conducted for Ruffed Grouse so production and recruitment rates are mostly speculation. Excellent fall and winter moisture was experienced throughout much of northern Nevada where Ruffed Grouse populations

occur; however, lingering cold temperatures may have had a negative impact on production. For successful hens, brood survival should have been good with excellent perennial forb and grass growth as well as associated insect productivity.

## CHUKAR PARTRIDGE

### Season Structure and Limits

The 2010-11 Chukar Partridge season was open statewide from October 9, 2010 through February 6, 2011 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 also held for one weekend from September 25-26, 2010. Daily and possession limits for the youth hunt were 6 and 12 respectively.

### Harvest and Effort

An estimated 83,660 chukar were harvested during the 2010-11 hunting season. This represented a 9.2% increase over the previous season and a 4.4% increase over the 10-year average (n=80,160). There were slight increases in the number of hunters (n=14,770 or 4%) and the number of hunter days (n=57,339 or 5%) in 2010 compared to 2009. That participation represented increases of 26.5% and 17.7% respectively from the 10-year average.

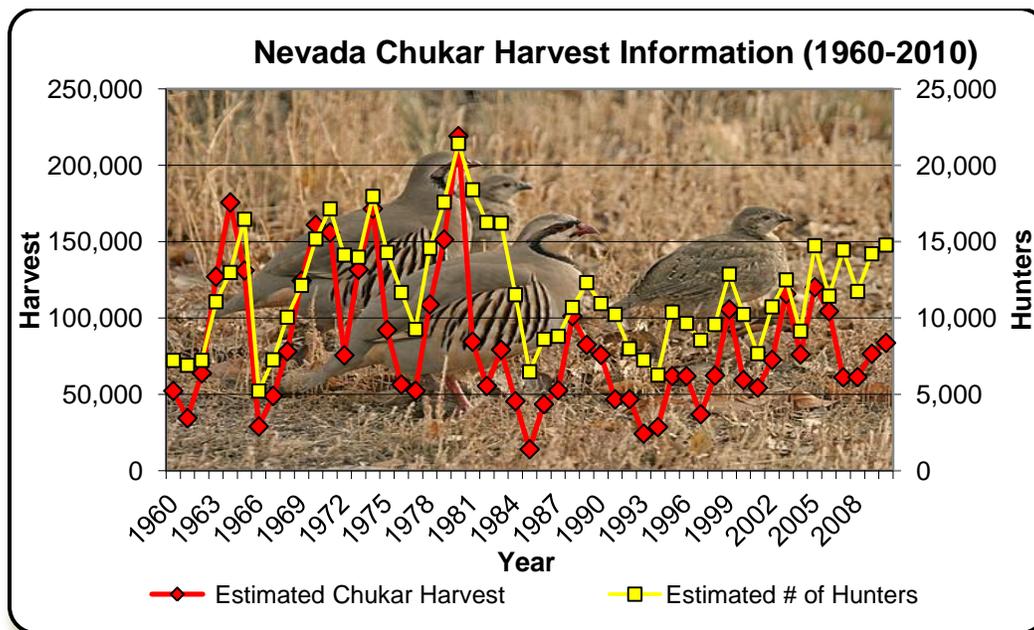


Figure 6. Estimate chukar harvest and number of hunters from 1960-2010.

## **Population Status**

The 2011-12 chukar hunting season is shaping up to be one of the best seasons since 2005. During the 2005 season, approximately 14,700 hunters took slightly over 120,000 chukars. Fall conditions during 2010 could not have been much better in terms of providing chukar with ample forage to sustain themselves during the winter months in most areas throughout Nevada. This coupled with well-above-average precipitation experienced throughout most of the central and northern portions of the state should lead to good or excellent production. Preliminary reports as of this writing suggest that most traditional areas will have more and larger coveys. However, there may be some exceptions in extreme northern Nevada where lingering rains and cold temperatures may have hampered production.

## **CALIFORNIA QUAIL**

### **Season Structure and Limits**

The 2010-11 hunting season for California, Gambel's, Scaled and Mountain Quail extended from October 9, 2010 through February 6, 2011 for a total season length of 121 days. Hunting seasons were open statewide for these species. 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 also held for one weekend from September 25-26, 2010. 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 who must 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 was 29,976 for the 2010-11 hunting season. This represented a 9.5% decrease from the previous year, but was 22.6% greater than the 10-year average of 24,443. The number of hunters (n=3,937) pursuing California Quail also experienced a decline of 11% from the previous year, but, like harvest, hunter numbers were approximately 22% greater than the 10-year average of 3,237. Hunters spent approximately 16,500 days in the field in 2010-11 which was 5.5% fewer than the previous season, but 36.4% greater than the 10-year average.

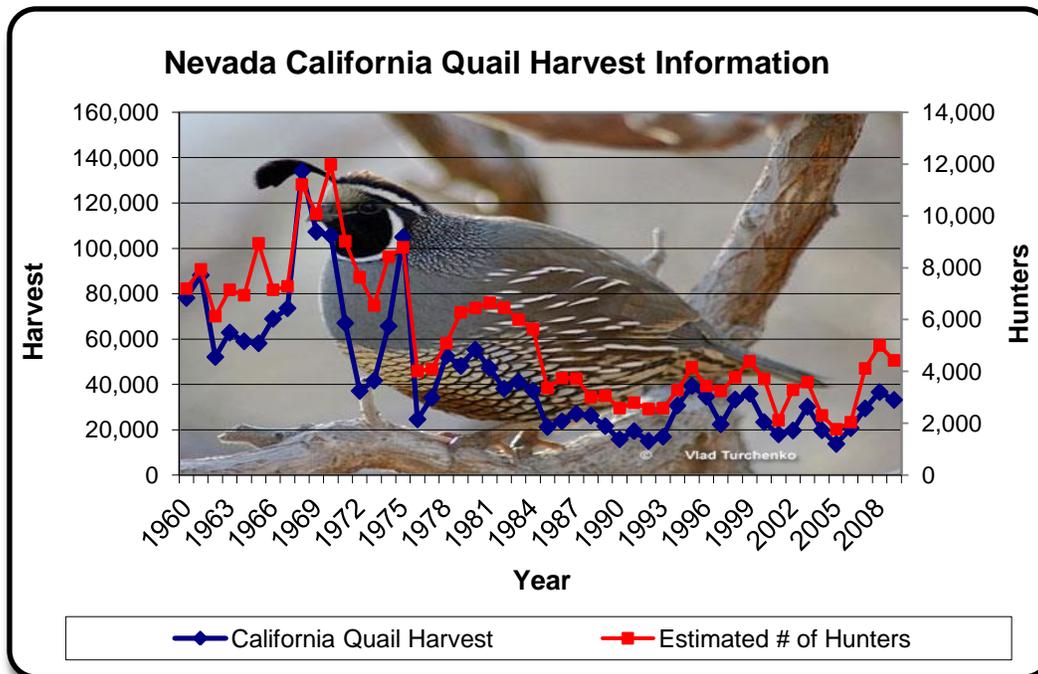


Figure 7. Estimated harvest of California Quail and number of hunters from 1960-2009.

The number of birds per hunter has remained relatively constant ( $n=7.6$ ) compared to the long-term average of 7.8; however, birds per hunter day ( $n=1.8$ ) has decreased by 12% from the 10-year average. California Quail hunting has now firmly supplanted Gambel's Quail as the second most popular game bird in Nevada aside from Chukar. For many years during the 1970's and 80's, Gambel's Quail hunting was the second most popular species to hunt in terms of days spent in the field and harvest; however, California Quail has supplanted Gambel's Quail with that distinction. However, the overall trend for both harvest and hunter numbers is declining from 1960 through present (Figure 7).

### Population Status

Long-term harvest data provides the only standard for which to gage California Quail populations. Recent figures suggest that California Quail populations are expanding in both population size and area as 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 provide hunters with easy access, in other words, hunters don't have to drive far to be able to hunt quail, in many cases. Also, 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 2010-11 hunting season for California, Gambel's, Scaled and Mountain Quail extended from October 9, 2010 through February 6, 2011 for a total season length of 121 days. Hunting seasons were open statewide for these species, allowing hunters to pursue these species 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 also held for one weekend from September 25-26, 2010. Daily and possession limits for this hunt were 10 and 20 respectively.

## Harvest and Effort

The 2010-11 Gambel's Quail harvest was estimated at 18,863. This estimate is 8.6% below the previous year's harvest, but almost 17% above the 10-year average of 16,184. The number of hunters and number of days was down 18.7% and 21% respectively from the previous year. Even though most figures are down from the previous year, the number of birds per hunter ( $n=7.1$ ) and birds per hunter day ( $n=1.8$ ) were both up from the previous season with increases of 12.5% and 15.7% respectively. The number of birds per hunter and birds per hunter day has steadily increased since 2007. As is evident with California Quail, the long-term harvest and hunter number trends are declining (Figure 8).

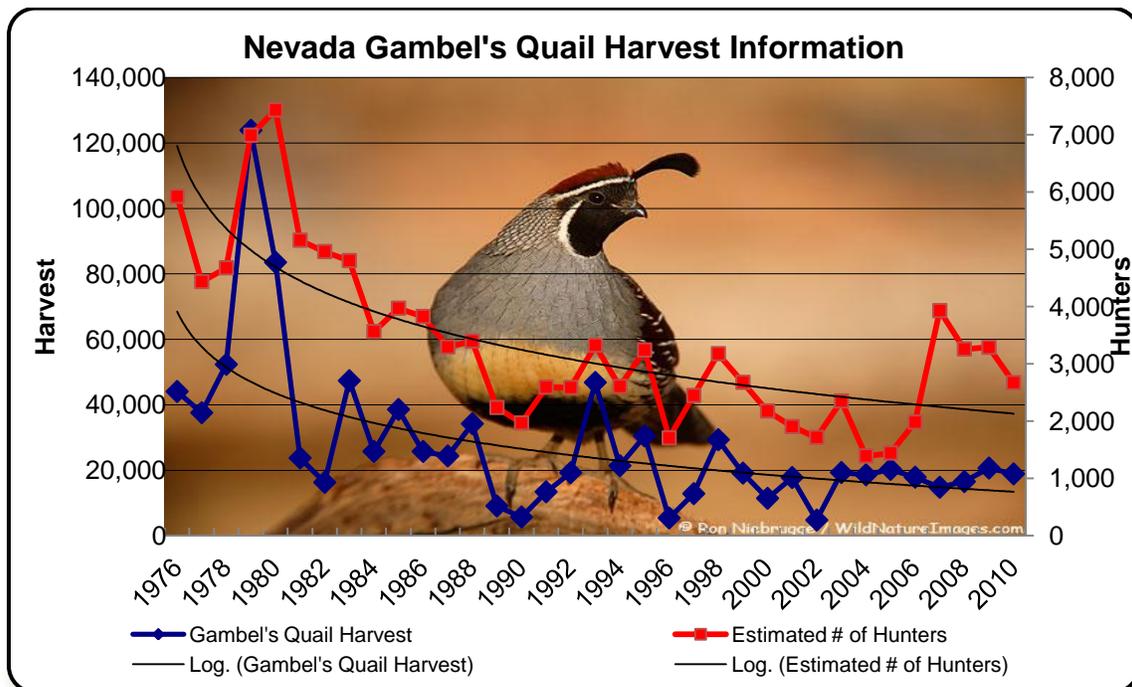


Figure 8. Gambel's Quail harvest and hunter participation from 1960 through 2010.

## **Population Status**

The “boom or bust” cycle of Gambel’s Quail has been noted for decades; however, recent changes in weather patterns (prolonged drought), large wildfire within the Mojave Desert and anthropogenic influences could result in diminished “booms”. When comparing decades, the 1980’s represented a period where the greatest amount of harvest occurred along with hunter participation (average annual harvest of 32,838 and 4,264 hunters). The long-term average annual harvest for the 30-year period from 1980-2009 was approximately 23,000 birds, placing the 2010 harvest of 18,863 at 18% below this average. This represents the twelfth year in a row that annual harvest of Gambel’s Quail has been below the long-term average and the prognosis does not suggest a positive change.

For most of southern Nevada, fall and winter moisture receipts were well above average. This effectively put birds in good condition to survive through the winter months; however, spring moisture receipts were average at best and production throughout most of Gambel’s Quail range was mostly just that. Over the last decade, it appears that the “perfect storm” of weather events to induce above average or good production has escaped Nevada. Regardless, even when there are years when production appears favorable, the number of hunters continues to decline and hunters may not be taking advantage of the available resource.

Limited brood surveys were conducted in the Southern Region during 2011. Brood surveys showed an average of 7.6 chicks per adult. These surveys indicate a slightly increasing trend for Gambel’s Quail across the Southern Region. Although dry conditions existed during the early summer, mid-summer moisture should provide increased forage in the form of green grasses, forbs, and insects. Gambel’s Quail populations are at moderate levels, with most areas experiencing moderate production that will likely lead to slight increases in harvest from the previous year.

## **RABBIT**

### **Season Structure and Limits**

The rabbit season for 2010-11 extended from October 9, 2010 through February 28, 2011. Rabbit species that are included under this season include cottontail, pygmy, and white-tailed jackrabbit. 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. Black-tailed jackrabbits are not considered a protected species.

### **Harvest and Effort**

The estimated total rabbit harvest for the 2010-11 hunting season was 11,805, approximately 33% below the previous year’s harvest of 17,553. Likewise, the number of hunters (-25.4%) and number of days spent in the field (-30.8%) were both well below

the previous year's averages. However, each of these parameters was up 16.5% over the 10-year average. Questionnaires are also designed to track white-tailed jackrabbit and pygmy rabbit harvest separately. However, raw return data suggest hunters commonly misidentify rabbit species. The estimated harvest for white-tailed jackrabbit was 482, which was 6% less than the previous year's harvest of 514. The estimated number of hunters pursuing the species was 188, which was very similar to last year's estimate of 175. For pygmy rabbit, an estimated 522 rabbits were harvested by 131 hunters. A fair amount of misidentification is thought to occur with pygmy rabbit vs. cottontail.

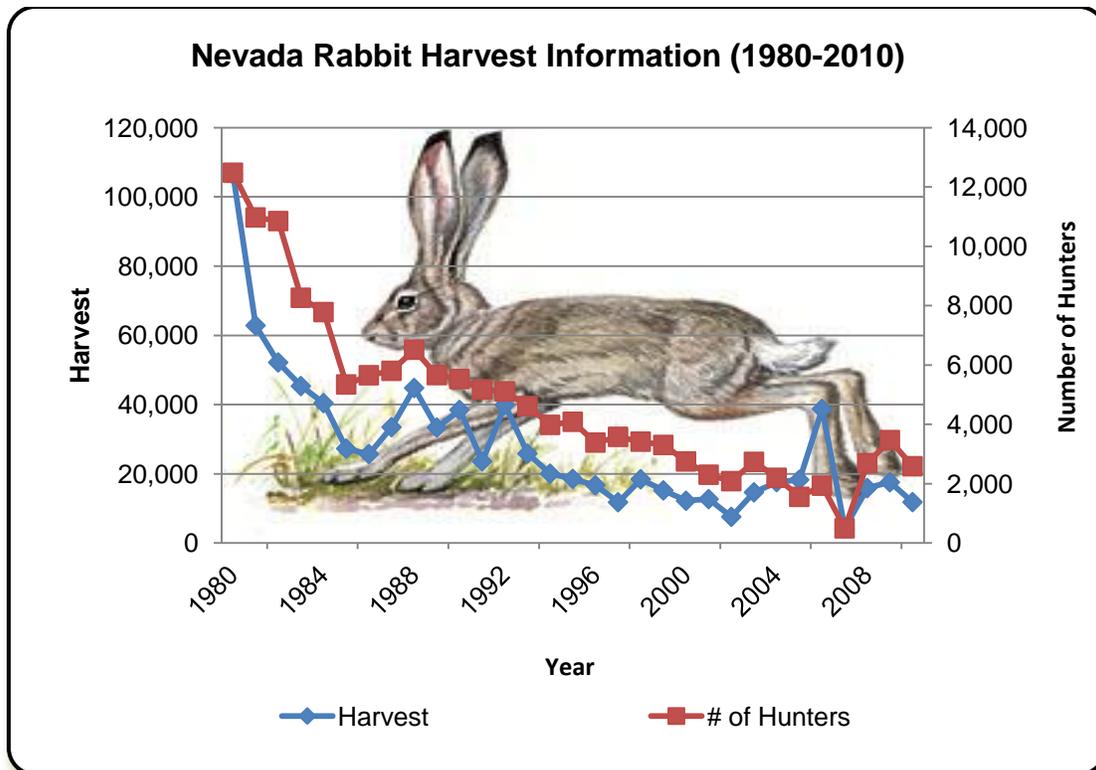


Figure 9. Rabbit harvest and hunter participation from 1980-2010.

### Population Status

The long-term average (1960-2009) for rabbit harvest was 38,849. Last season's harvest of 11,805 was roughly 70% below the long-term average. Hunter numbers over that same time frame average 6,215 and the number of hunters pursuing rabbits last season was 58% lower than that average. As with most other upland game populations, harvest is closely tracked by the number of hunters that participate in a given season. A more comparable measure of population size from year to year is the number of rabbits per hunter day. The long-term average of rabbits per hunter day is 1.5 and last year's average of 1 was 33% below that average.

These data suggest rabbit populations have likely declined from historic levels, but to what degree is largely unknown. Concern remains over species such as white-tailed jackrabbit and pygmy rabbit. Hunter harvest was 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 SUMMARIES MIGRATORY GAME BIRDS

Report by: Russell Woolstenhulme, Migratory Game Bird Staff Specialist

## WATERFOWL

### Season Structure and Limits

Pursuant to the guidelines of Adaptive Harvest Management (AHM), the frameworks established by the United States Fish & Wildlife Service (FWS) for the 2010-11 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.

Nevada's 2010-11 duck hunting season began on October 16<sup>th</sup> for the entire state and extended to Saturday, January 28<sup>th</sup>, 2011 in Northern Nevada and Friday January 28<sup>th</sup>, 2011 in Southern Nevada. These closures accommodated days set aside for youth waterfowl hunting, which was a single day in the Northern Zone (October 2, 2010) and two days in the Southern Zone (February 5 - 6, 2011). The Commission adopted a later opening date (November 6, 2010) for the Moapa Valley portion of the Overton Wildlife Management Area.

Species restrictions continue to be in place. Hunters allowed to take no more than two hen mallards, two redheads, two pintail and 1 canvasback of either sex. Scaup limits were three daily and 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 6<sup>th</sup> to the end of the general season.

### Harvest and Effort

Data obtained through the NDOW's Post-season Questionnaire is reported in table 1 and the Appendix. 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<sup>1</sup>.

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<sup>1</sup> Raftovich, R.V., et.al. 2011. Migratory bird hunting activity and harvest during the 2010 and 2011 hunting seasons: Preliminary Estimates. U.S. Fish and Wildlife Service. Laurel, Maryland. USA

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

Year	Estimated Duck Hunters			Estimated Total Duck Harvest		
	HIP <sup>(1)</sup>	NV Questionnaire <sup>(2)</sup>	% Diff.	HIP	NV Questionnaire	% Diff.
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%
<b>2010</b>	<b>3,600</b>	<b>5,944</b>	<b>65%</b>	<b>48,200</b>	<b>76,984</b>	<b>60%</b>

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

## DUCKS & MERGANSERS

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

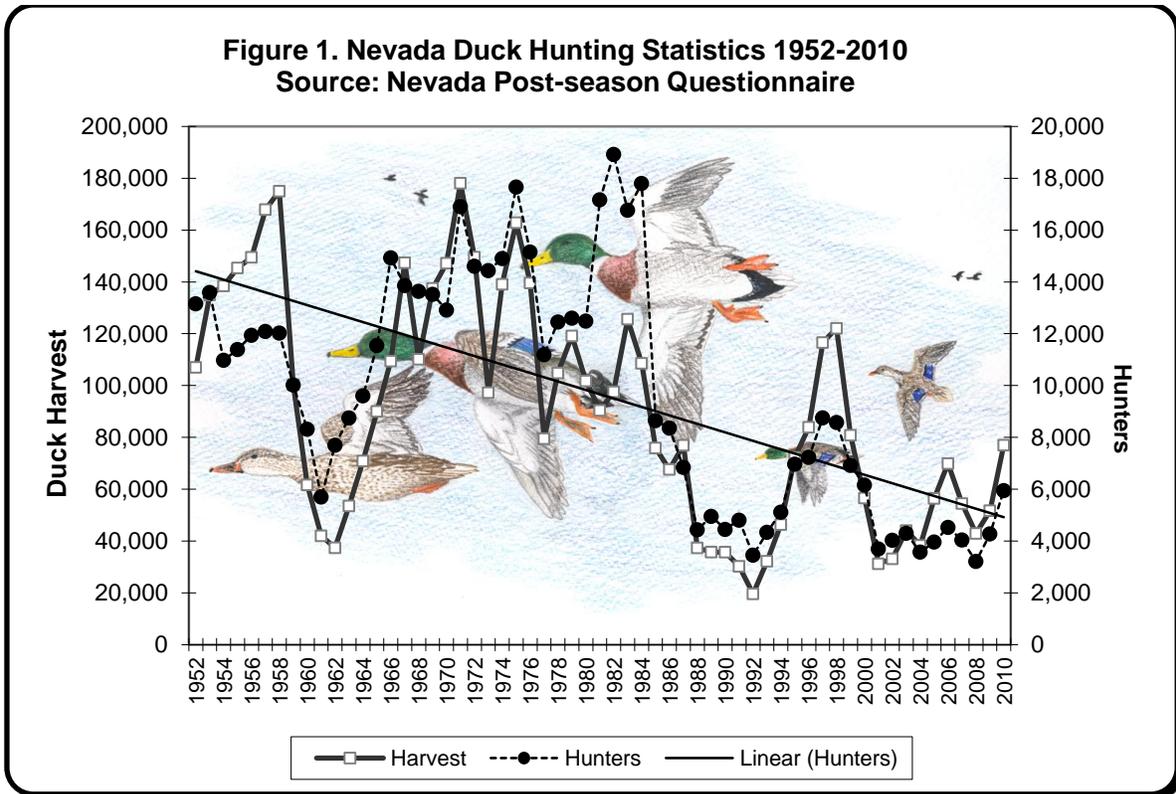
**Table 2. Statewide duck & merganser harvest - from post-season questionnaire.**

	STATEWIDE TOTALS:			Percent Change	
	2009	2010	10-Yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Ducks &amp; Mergs.</b>	51,834	<b>76,987</b>	47,496	60.8%	62.1%
<b>No. of Hunters*</b>	4,984	<b>6,323</b>	4,703	21.0%	26.4%
<b>No. of Days</b>	27,939	<b>41,475</b>	25,846	59.0%	60.5%
<b>Birds / Hunter</b>	10.40	<b>8.98</b>	10.04	-7.8%	-10.6%
<b>Birds/Hunter Day</b>	1.86	<b>1.86</b>	1.82	1.4%	2.0%
<b>Individual Hunters**</b>	4,273	<b>5,944</b>	--	39.1%	--

\* number of hunters from questionnaire data

\*\* number of hunters based on electronic duck stamp and paper duck stamp sales, minus stamp collectors

Figure 1 describes the trends for duck harvest and hunter numbers in Nevada based on 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 some years with good precipitation in the late 1980's. However, without the migration from northerly breeding grounds, hunters had lots of water for hunting, but low densities of available waterfowl to hunt. Since 1990, Nevada has seen a few peaks in harvest and hunter participation. Peaks are principally attributed to short-term precipitation-driven habitat enhancement but Nevada's habitat is not necessarily linked to continental duck numbers.



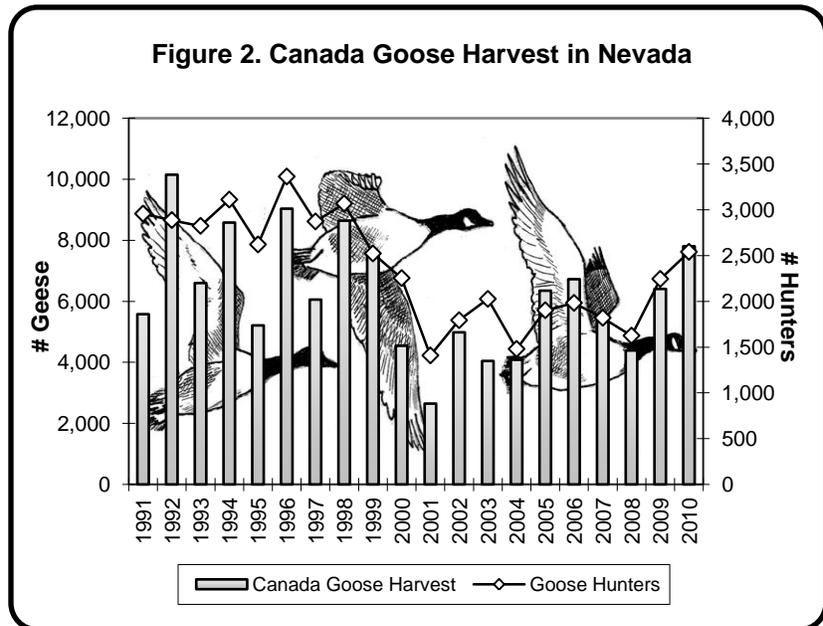
## GEESE

Nevada's 2010-11 goose hunting season began on October 16<sup>th</sup> for the entire state and extended to Saturday, January 29<sup>th</sup>, 2011 in Northern Nevada and Friday January 28<sup>th</sup>, 2011 in Southern Nevada. These closures accommodated days set aside for youth waterfowl hunting, which was a single day in the Northern Zone (October 2, 2010) and two days in the Southern Zone (February 5-6, 2010). The Commission adopted a later opening date (November 6, 2010) for the Moapa Valley portion of the Overton Wildlife Management Area. Limits for 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	
	2009	2010	10 Yr. Avg.	Prev. Yr.	vs. Avg.
<b>Dark Geese Harvest</b>	<b>6,400</b>	<b>7,798</b>	<b>4,947</b>	21.8%	57.6%
<b>No. of Hunters</b>	<b>2,243</b>	<b>2,538</b>	<b>1,852</b>	13.2%	37%
<b>Light Geese Harvest</b>	<b>718</b>	<b>1,675</b>	<b>537</b>	133.3%	211.9%
<b>No. of Hunters</b>	<b>580</b>	<b>903</b>	<b>812</b>	55.7%	11.2%
<b>TOTAL GEESE:</b>	<b>7,118</b>	<b>9,473</b>	<b>5,484</b>	33.1%	72.7%

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 in Nevada's wetlands and translocated nuisance adult geese and goslings that contribute to the harvest totals but these sources pale compared to numerical tide of migratory geese that bred and hatched elsewhere. Most of Nevada's Canada Goose harvest occurs in western Nevada within those counties with large amounts of cultivated fields or pastures that support the greatest abundance of geese. 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.



### TUNDRA SWAN

Last year's swan season commenced on October 16<sup>th</sup> and concluded on January 2<sup>nd</sup>, 2011. Permits were available during an initial draw period which had an application deadline of September 18<sup>th</sup>, 2009. Only 172 applications for the 650 permits (26%) were posted for the initial draw. Remaining permits were available online, over the counter or through the mail after October 5<sup>th</sup> through the last Friday of the hunting season. An additional 297 permits were sold after the initial draw bringing the total permit sales to 469. This total included 74 second permits, thus there were 395

individual permittees last year. Total sales for the 2010-11 season were slightly lower than the previous year. 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.**

<b>Year</b>	<b>Tags / Permits Purchased</b>	<b>Percent Participating</b>	<b>Reported Harvest</b>	<b>Expanded Hunter Days</b>
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
2010	469	75%	118	1,831
<b>'01-'09 Avg.</b>	<b>431</b>	<b>72%</b>	<b>98</b>	<b>1,355</b>

Last year juveniles made up 31% of the total swan harvest (n=36), a figure that is below the long-term average of 36%. No Trumpeter Swans were taken in the 2010-11 season. Seventy-five percent of permittees hunted last year, higher than the 72% average. Hunters reported taking 56% of swans at Stillwater NWR, lower than the long-term average of 61%.

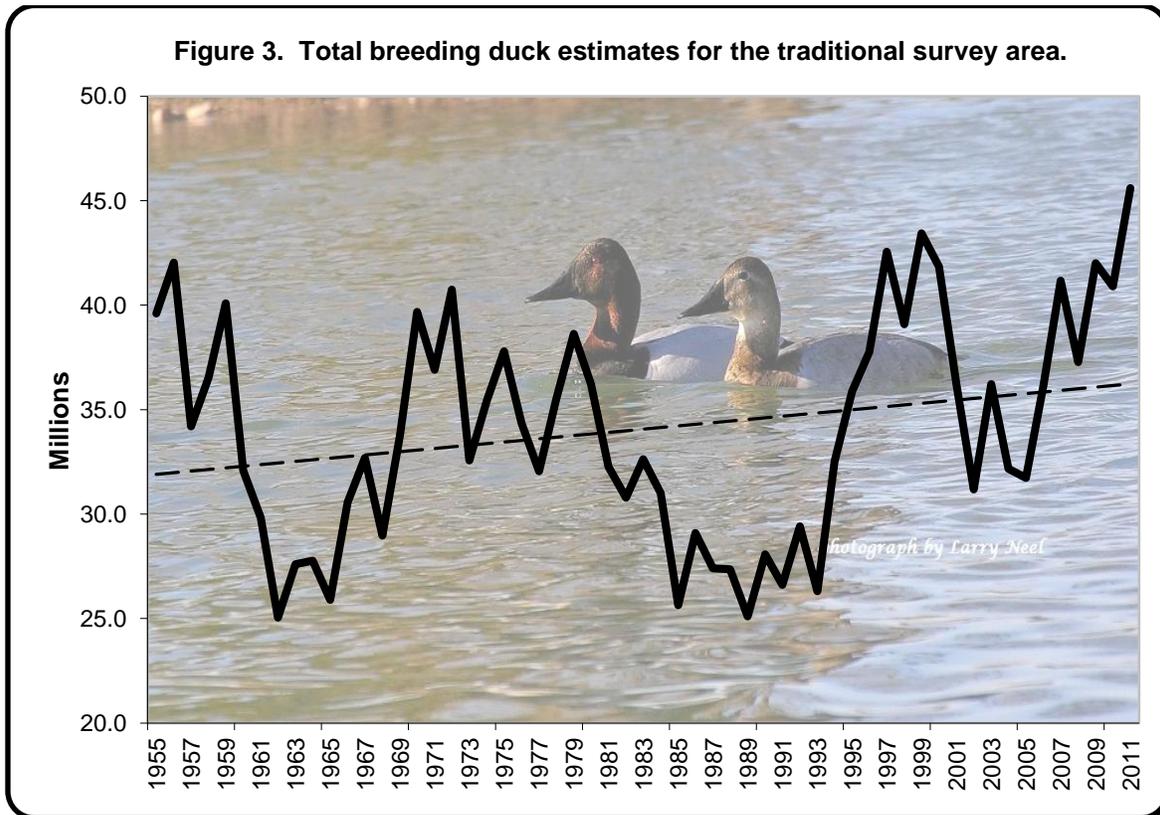
Nonresidents accounted for 8% of all individual swan permittees last year. Seventy-six percent of those were California residents.

### **Waterfowl Population Status**

Each year the U.S. Fish and Wildlife Service (FWS) conducts a continental assessment of the status of waterfowl<sup>2</sup>. 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.

<sup>2</sup> U. S. Fish and Wildlife Service. 2011. *Waterfowl population status, 2011*. U.S Dept. of the Interior, Washington, D.C. USA. 79pp.

Biologists estimated this spring's breeding duck population (BPOP) within the traditional survey area at 45.6 million birds (Figure 3). This total represents an increase (11%) compared to the 2010 estimate and is a 35% increase over the long-term average. The Nevada Breeding pair populations estimate for 2011 was 11,718 birds. This number was down significantly from last year's estimate of 68,900 birds. It was likely that the 2011 count was down because of cold weather that lasted well into the spring and may have delayed breeding.



For the traditional survey areas, most species showed good increases in estimated numbers compared to the previous year, and, most were still above the long-term average (Table 5). Most impressive to managers was the continued increase in pintails, a species which is heavily dependent upon prairie potholes.

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

Species	2007	2008	2009	2010	2011	LTA	% change	
							v.2010	v LTA
Mallard	8307.3	7723.8	8512.4	8430.1	9182.6	<b>7529</b>	8.9%	22%
Gadwall	3335.3	2612.8	3053.5	2976.7	3256.9	<b>1787</b>	9.4%	82.3%
Pintail	3335.3	2612.8	3225	3508.6	4428.6	<b>4041</b>	26.2%	9.6%
BW Teal	6707.6	6640.1	7383.8	6328.5	8948.5	<b>4657</b>	41.4%	92.2%
GW Teal	2890.3	2979.7	3443.6	3475.9	2900.1	<b>1948</b>	-16.6%	48.9%
Wigeon	2806.8	2486.6	2468.6	2424.6	2084.0	<b>2607</b>	-14.0%	-20.1%
Shoveler	4552.8	3507.8	4376.3	4057.4	4641.0	<b>2312</b>	14.4%	100.7%
Scaup	3452.2	3738.3	4172.1	4244.4	4319.3	<b>5073</b>	1.8%	-14.9%
Redhead	1009	1056	1044.1	1064.2	1356.1	<b>652</b>	27.4%	108.0%
Canvasback	864.9	488.7	662.1	585.2	691.6	<b>570</b>	18.2%	21.3%

Redheads exceeded the million bird mark for the fifth 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 87,420 waterfowl in Nevada's portion of the Mid-winter Waterfowl Survey (MWS) last January (see appendix). This represents an increase of 50% compared to the previous year's results. The observed total was 33% above the long-term average. 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.

Dark and light geese seen during this survey were 18,557 (16,364 western Canada's, 1,701 lesser Canada's, 5 White-Fronted Geese, 486 Lesser Snow Geese & 1 Ross' Goose). Total observed goose numbers were 13% below the five-year average. However, total geese counted on Nevada MWS surveys remains above the long-term average (15,244).

The total number of swans encountered during survey efforts was 606 Tundra's and 28 Trumpeters. Trumpeter Swan numbers observed this year mirror their long-term average. All Trumpeter Swans were observed on Ruby Lake NWR. The number of Tundra Swans counted during this survey remains well below its respective five-year and long-term averages. These lower than average count numbers can be attributed to wetlands in the Lahontan Valley that became iced-over and limited foraging opportunities. Furthermore, Humboldt WMA continues to remain dry. Humboldt WMA when wet has the ability to grow phenomenal sago, which helps to sustain these birds throughout the winter from December to February.

## MOURNING AND WHITE-WINGED DOVE

### Harvest

Nevada's traditional dove season comprised the 30 days of September 2010. 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 6 describes the findings of the two survey approaches:

**Table 6. Comparisons Between Estimated Dove Harvest Statistics for Nevada.**

Year	Estd. Hunter Numbers			Estimated Hunter Days			Estimated Dove Harvest		
	HIP <sup>(1)</sup>	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 <sup>(2)</sup>	--	10,000	14,580	46%	47,700	50,364	6%
2006	4,100	4,325 <sup>(2)</sup>	5%	9,400	13,650	45%	38,900	53,850	38%
2007	2,800	3,214 <sup>(2)</sup>	15%	9,600	14,135	47%	38,500	48,629	26%
2008	4,900	4,215 <sup>(2)</sup>	-14%	12,200	14,840	24%	45,000	51,785	15%
2009	4,600	4,184 <sup>(2)</sup>	-16%	11,600	13,652	-18%	41,500	45,954	11%
<b>2010</b>	<b>4,500</b>	<b>4,681<sup>(2)</sup></b>	<b>4%</b>	<b>12,700</b>	<b>15,069</b>	<b>18%</b>	<b>60,300</b>	<b>54,405</b>	<b>-10%</b>

(1) Expressed as "Active Adult Hunters" within the HIP survey.

(2) Figures in 2005 - 2010 are *individual* hunters

Hunter numbers estimated through Both the HIP process and NDOW's surveys show a slight increase in hunter numbers, harvest and hunter days for 2010. Dove harvest data obtained through the *2010-11 Nevada Post-season Harvest Questionnaire* were as follows:

**Table 7. Nevada Mourning Dove harvest - from Post-season Questionnaire.**

	STATE TOTALS:			Percent Change	
	2009	2010	00-09 avg.	Prev. yr.	vs. avg.
<b>No. of Birds</b>	<b>45,954</b>	<b>54,405</b>	<b>44,802</b>	18.4%	21.4%
<b>No. of Hunters<sup>(3)</sup></b>	<b>4,184</b>	<b>4,681</b>	<b>4,062</b>	11.9%	15.2%
<b>No. of Days</b>	<b>13,652</b>	<b>15,069</b>	<b>12,213</b>	10.4%	23.4%
<b>Birds / Hunter</b>	<b>11.71</b>	<b>12.26</b>	<b>10.97</b>	4.7%	11.8%
<b>Birds/Hunter Day</b>	<b>3.42</b>	<b>3.81</b>	<b>3.66</b>	11.4%	4.1%

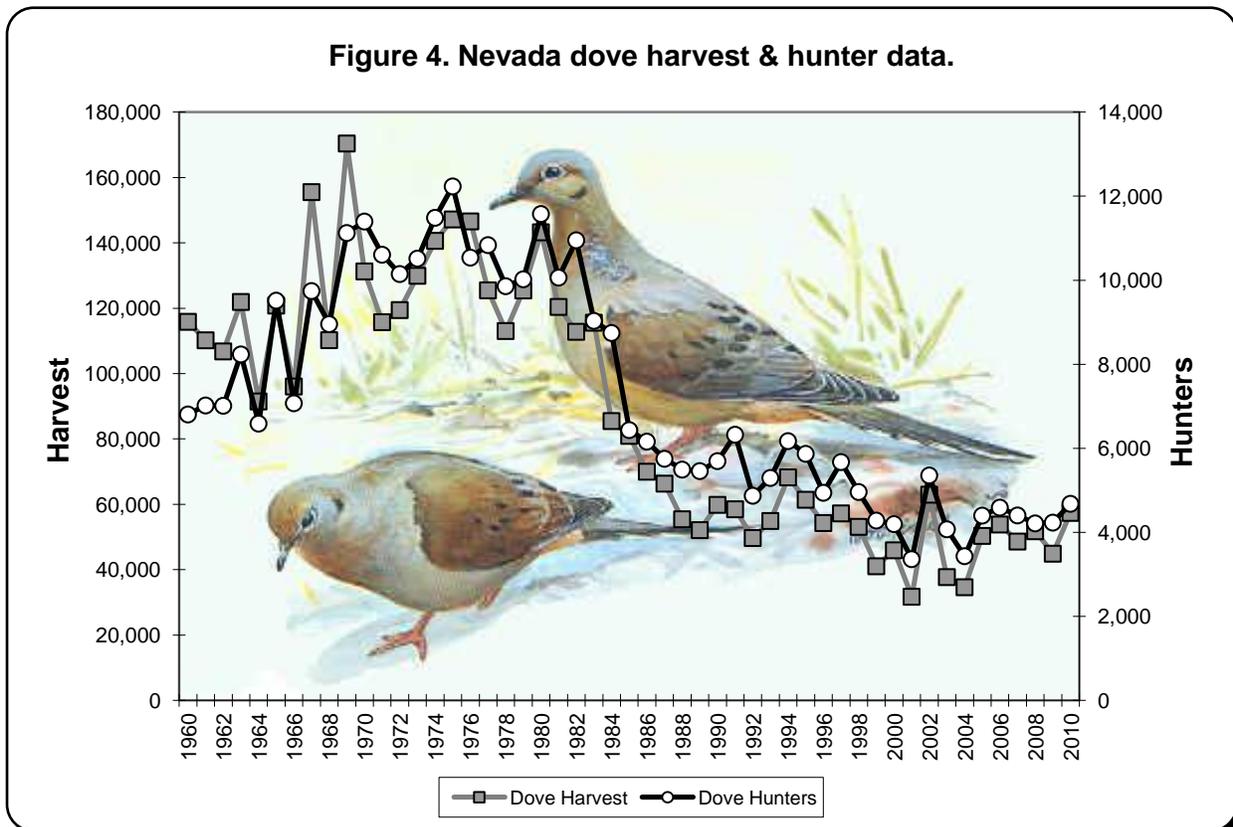
(3) Figures in the row represent cumulative hunters.

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. It was obvious that some dove hunters actively hunted in more than one county. Individual hunter total calculations were only estimated for the past three seasons.

**Table 8. Mourning Dove harvest by region - from Post-season Questionnaire.**

	WESTERN			EASTERN			SOUTHERN		
	2009	2010	AVG.*	2009	2010	AVG.	2009	2010	AVG.
<b>No. of Birds</b>	30,312	<b>38,948</b>	31,467	3,610	<b>2,401</b>	4,105	<b>12,031</b>	<b>13,056</b>	13,401
<b>No. of Hunters</b>	2,589	<b>3,051</b>	2,649	466	<b>397</b>	547	<b>1,129</b>	<b>1,233</b>	1,200
<b>No. of Days</b>	8,873	<b>9,994</b>	9,220	1,169	<b>931</b>	1,346	<b>3,610</b>	<b>4,144</b>	3,944
<b>Birds / Hunter</b>	11.71	<b>12.77</b>	11.73	7.75	<b>13.6</b>	7.43	<b>10.66</b>	<b>10.59</b>	11.32
<b>Birds/Hunter Day</b>	3.42	<b>3.90</b>	3.62	3.09	<b>5.80</b>	3.07	<b>3.33</b>	<b>3.15</b>	3.43

\*average is 2000-2009



**White-winged Dove** – This year 1,987 (23% increase over 2009-10) individual questionnaire respondents indicated that they hunted migratory game birds other than waterfowl during the 2010-11 hunting season. Of these, 58 indicated they hunted White-Winged Dove in Clark and Nye counties during the 2010 hunting season. These data were sufficient to perform an extrapolation of harvest. Those harvest figures are depicted on page Q-6. NDOW cannot do any comparisons between years because 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 began asking questionnaire recipients to indicate whether or not they shot Eurasian Collared Doves (ECD) in 2007-08. This is a bird that is expanding its distribution and abundance throughout the nation and in Nevada. Three Hundred nine individual questionnaire respondents reported ECD harvest in all of Nevada’s 17 counties. Those numbers were down from 480 hunters harvesting in all but two counties in 2009. Data indicated an estimated statewide harvest of 2,404 in 2010, compared to 3,938 in 2009 and 1,906 birds in 2008. The species is unprotected and the questionnaire did not ask in which month the birds were shot. However, it was suspected that most were taken incidental to Mourning Dove hunting. Managers continue to attempt to gain an understanding of the bird’s ecological role.

**Table 9. Nevada Eurasian collared dove harvest - from Post-season Questionnaire.**

	STATE TOTALS:				Percent Change	
	2008	2009	2010	08-09 avg.	Prev. yr.	vs. avg.
<b>No. of Birds</b>	<b>1,906</b>	<b>3,938</b>	<b>2,404</b>	<b>2,922</b>	-39.0%	-17.7%
<b>No. of Hunters<sup>(3)</sup></b>	<b>298</b>	<b>480</b>	<b>309</b>	<b>389</b>	-35.6%	-20.6%
<b>Birds / Hunter</b>	<b>6.4</b>	<b>8.2</b>	<b>7.78</b>	<b>7.30</b>	-5.2%	6.6%

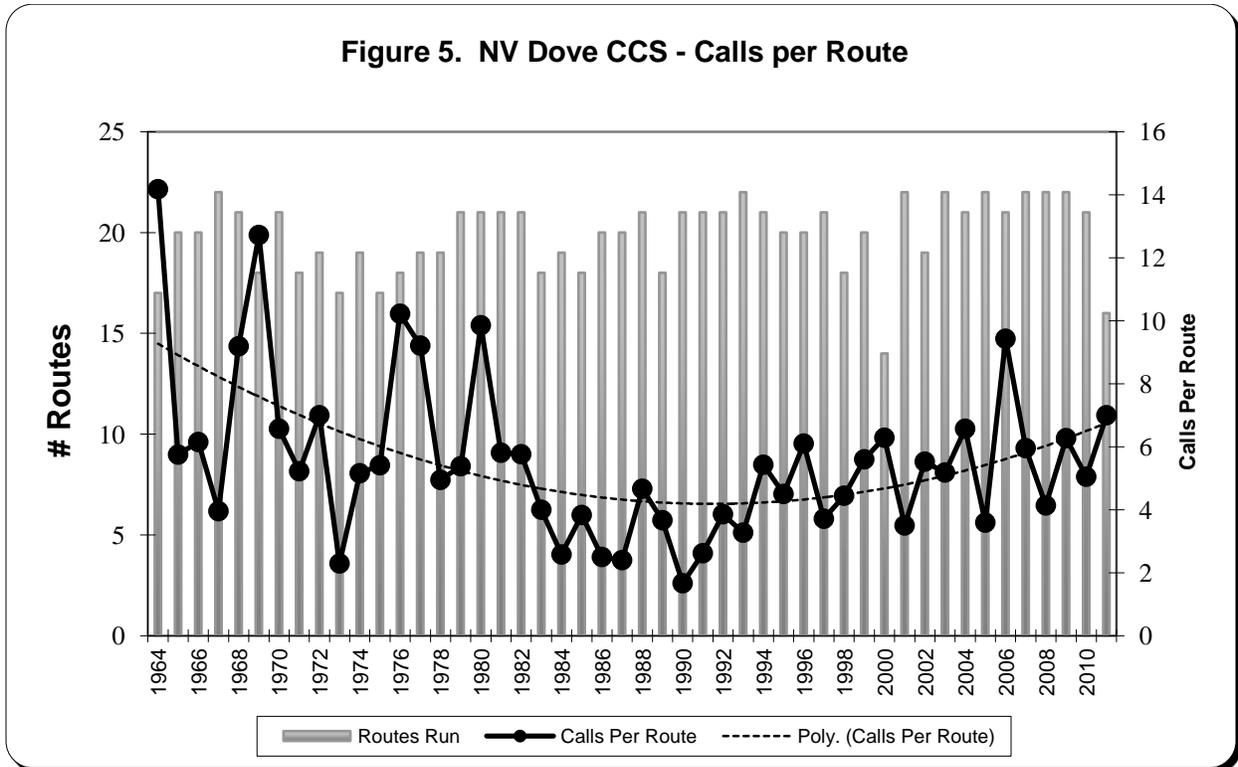
**Population Status**

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 16 of the established survey routes this spring. This year route-runners observed 86 birds compared to 53 last year and considerably less than the long-term average of 166. Documented calls amounted to 112, compared to 106 in 2010 and the long-term average of 110. These data are subject to a number of biases, therefore the rules for establishing or moving established routes are very strict. Managers have been somewhat critical of the inclusion of these 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 management unit 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 1000 dove at two 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 1<sup>st</sup> to November 17<sup>th</sup>, 2010 and the spring hunt extended from March 1<sup>st</sup> to April 15<sup>th</sup>, 2011. The limit was 10 daily and 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 support an estimated harvest (see page Q-8). This year, 61 of 1,987 (3.1%) individual respondents that hunted migratory birds also reported harvesting crows. Table 10 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 suspect the majority of crow harvest occurs in the fall hunt.

**Table 10. – Reported American Crow harvest in Nevada.**

	C C	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
2010	--	21	--	82	36	23	--	--	75	40	--	55	47	49	1	15	8

Since the sample size is still relatively small, some variation in data can be quite significant between years. The 2010-11 harvest estimates were based on data provided by a total of 75 questionnaire respondents. Last year, there were 85 respondents that indicated they hunted crows. A greater distribution of questionnaires among small game hunters to provide 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 the population status. NDOW does not conduct any population analysis other than an analysis of harvest data. The extent of the effects of West Nile Virus is not known, although it is recognized that corvids are particularly susceptible to the disease. The species is ubiquitous and since it is lightly hunted within a broad statewide distribution, managers feel harvest data is not indicative of crow population trends.

# **STATEWIDE SUMMARY FURBEARER ANIMALS**

**Report by: Russell Woolstenhulme, Furbearer Staff Specialist**

## **Season Structure**

The 2009-10 trapping season for most of Nevada's furbearer species (beaver, muskrat, mink, otter and kit and red fox) began October 1, 2010. The seasons extended through March 31, 2011 for all of these species except kit and red fox which ran until February 28, 2011. The 2010-11 gray fox season began on November 1, 2010 and ran for 120 days ending February 28, 2011. The bobcat season for 2009-10 was a truncated season for the second straight year. Running for 82 days, the season opened on December 1, 2010 and continued through February 20, 2011.

## **Harvest and Prices**

Overall statewide harvest of furbearing animals during the 2009-10 season was 46% below long-term averages. Harvest of all furbearing species increased 61.5% when compared to the 2009-10 season. Bobcat harvest for the 2010-11 season, statewide was 2,527. This was a 104% increase from the 2009-10 season, and 14% above the 30-year average of 2,213 cats per season. Kitten production increased for the second straight year to 0.75 kittens per adult female, an increase of 39% over 2009-10 production rate of 0.54 kittens/ adult female. Bobcat production for 2010-11 was also above 10 year (+39%) and long-term (+10%) averages. Coyote harvest during the 2010-11 season increased 42% from the previous season. The USDA-Wildlife Services reported that coyote numbers continue to be high in many areas of the State in 2010-11. Red fox harvest, which had increased to a record 18 in 2007-08, has dropped off the last two years. The 2010-11 red fox harvest of 6 foxes was a slight increase from the 2009-10 harvest of just 4 foxes. The number of licensed trappers during the 2010-11 season decreased by 5% to 868 licenses sold. This number was still above the 30 year average of 738 trappers, but below the average numbers sold (1,256 licenses) through the high years of the 1980's. Fur prices for the past season were similar to 2009-10 with some prices rising while other dropped slightly. The big exception was bobcat prices which increased 46% in average price compared to the 2009-10 season.

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. Various data from harvest and age characteristics of harvested bobcats are used to assess population trends and status.



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# REGIONAL SPECIES SUMMARIES

## GREATER SAGE-GROUSE

### WESTERN REGION

#### Harvest

During the 2010 general season in Humboldt and Washoe Counties, a fifteen-day standardized season was held for sage-grouse from September 25<sup>th</sup> through October 9<sup>th</sup>. In Humboldt and Washoe counties areas 1, 3, and 5 were open for harvest excluding certain units. These closed areas included units 032, 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 this year with a two day season on October 2<sup>nd</sup> and 3<sup>rd</sup>. Bag limits remained the same as the previous year with two daily and four in possession limits. The Sheldon National Wildlife Refuge had the usual two weekend hunts which occurred in September with no major changes to quotas or permits issued. 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	
	2009	2010	10-Yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Birds</b>	4,317	3,071	2,285	-28.9%	34.4%
<b>No. of Hunters</b>	2,023	1,704	1,185	-15.8%	43.8%
<b>No. of Days</b>	4,310	3,336	2,434	-22.6%	37.1%
<b>Birds / Hunter</b>	2.13	1.8	2.0	-15.6%	-8.8%
<b>Birds/Hunter Day</b>	1.0	.9	1.0	-10.1%	-5.9%

Questionnaire data show a short-term decline in both the number of birds harvested and the number of participating hunters. Despite these declines both categories are still above the long-term trend.

#### Population Status

Major factors influencing sage-grouse populations in the Western Region include urbanization, grazing management, mining, PJ encroachment, energy development and wildland fires that have changed vegetation types. Most recently the Ruby Pipeline corridor has traversed through what were the most undisturbed areas of sage-grouse habitat within Humboldt and Washoe Counties. Future monitoring will determine what effect the construction of this pipeline corridor has on these populations.

Department biologists continue to monitor sage-grouse population trends throughout the region. Monitoring continues on both hunted and non-hunted populations. Spring lek

counts and brood surveys are conducted annually in all PMU's within the Western Region. Lek counts this year were conducted from both the ground and air. From these lek counts and brood surveys, population estimates have been established for most sage-grouse populations.

During November 2010, 1,107 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	15	28	36	50	129	3.07
Buffalo/Skedaddle	6	11	4	7	28	1.0
Total Massacre PMU	12	60	42	55	169	1.62
Unit 012	3	10	11	14	38	2.50
Unit 013	6	30	19	32	87	1.70
Unit 014	3	20	12	9	44	1.05
Vya PMU	4	5	7	4	20	2.20
Other Washoe	0	2	1	1	4	1.0
<b>Total WA Co.</b>	<b>37</b>	<b>106</b>	<b>90</b>	<b>117</b>	<b>350</b>	<b>1.95</b>
Santa Rosa PMU	29	60	29	41	159	1.17
Lone Willow PMU	53	105	153	132	443	2.71
Pine Forest PMU	No Hunt					
Black Rock PMU	10	4	7	6	27	3.25
<b>Total HU Co.</b>	<b>92</b>	<b>169</b>	<b>189</b>	<b>179</b>	<b>629</b>	<b>2.18</b>
Desatoya	30	31	32	35	182	2.16
<b>Total Churchill</b>	<b>30</b>	<b>31</b>	<b>32</b>	<b>35</b>	<b>182</b>	<b>2.16</b>
<b>Total Western Region</b>	<b>159</b>	<b>306</b>	<b>311</b>	<b>331</b>	<b>1,107</b>	<b>2.10</b>

Production is measured by the young/hen ratio which is acquired from hunter harvested wings. Production values ranged from a high of 3.25 in Humboldt County to 1.0 in Washoe County. Overall production for the Western Region shows a relatively static trend.

In 2011, 213 leks were counted in Humboldt County of which 89 were active. Lek observation yielded an average of 16.6 males per active lek. This represented an improvement of 4% over the 2010 average of 16.0 males per active lek and indicates short-term population trends are stable. Over the last ten years, sage-grouse populations in Humboldt County appear to be experiencing an upward trend.

Lek counts conducted during the spring of 2011 in Washoe County resulted in a total of 1,910 sage-grouse observed on 65 active leks for an average of 29.4 sage-grouse per active lek. A total of 99 leks were surveyed utilizing both helicopter aerial surveys and ground counts. The total number of birds counted this past spring represents a 9%

increase compared with the previous year's total. Sage-grouse populations have shown an increasing trend over the past few years but generally remain below the high counts that were observed over the last decade. However, other factors such as the number of leks counted per year and the methodology used has also changed. Weather and road conditions in any given year also have a bearing on the number of leks visited and total number of birds counted.

In Churchill County, 11 leks were counted within the Desatoya PMU of which 8 were active. A total of 209 males were observed on those 8 leks resulting in an average of 26.1 males per active lek. Compared with 2010 figures, this year's numbers represented an increase of 48% in terms of males per active lek. Over the last ten years, sage-grouse in Churchill County appear to be experiencing an upward trend.

### **Productivity Potential**

As of this reporting period production levels were good in most sage-grouse areas. The late spring seemed to delay some of the broods and the number of sage-grouse is expected to be slightly better than what was observed last year.

### **Fall Prediction**

With above average precipitation received this year ample water should be available throughout the year for to meet the needs of sage-grouse. Forage conditions have been exceptional with good forb production. Early brood counts have indicated good production in certain areas while others may be relatively the same as last year. Current range conditions are starting to dry in the lower elevations with plenty of green forage still available in the higher summer use areas. Production rates are expected to be near average and hunters should see bird numbers comparable to last year.

## **EASTERN REGION**

### **Harvest**

The Eastern Region (Elko, Eureka, Lander and White Pine counties) 2010 sage-grouse season was 15 days long and ran from September 25 through October 9, 2010. Bag limits were 2 daily and 4 in possession. Game Management Units, 079, 091, 106, 114, 115, 132 and 151 were closed to sage-grouse hunting based on low population levels.

**Table 3. Eastern Region Sage-Grouse Harvest by County  
Post-season Questionnaire Data**

	COUNTY TOTALS:			Percent Change	
	2009	2010	10-yr. avg.	Prev. yr.	vs. 10-yr. avg.
Elko	2,505	2,088	1,387	-17%	51%
Eureka	553	649	387	17%	68%
Lander	700	567	325	-19%	75%
White Pine	537	524	288	-2%	82%
Eastern Region	4,295	3,828	2,387	-11%	60%

**Table 4. Eastern Region Sage-Grouse Harvest Post-season Questionnaire Data**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-yr. avg.	Prev. yr.	vs. 10-yr. avg.
No. of Birds	4,295	3,828	2,387	-11%	60%
No. of Hunters	2,231	1,846	1,312	-17%	41%
No. of Days	5,010	4,042	2,890	-19%	40%
Birds / Hunter	1.9	2.1	2.0	8%	15%
Birds/Hunter Day	0.9	0.9	1.0	0%	15%

The 2010 sage-grouse harvest decreased in 3 of 4 Eastern Region counties but was only down by 11% region wide. The harvest in all 4 counties was above the previous 10-year-average and the Eastern Region harvest totals were 60% above the 10-year average. The number of birds per hunter increased slightly in 2010 while the birds per day were unchanged compared to 2009. Both were above the previous ten-year average by 15%.

**Population Status**

Summer brood survey sample sizes in 2010 remained low for the Eastern Region. The lack of an adequate sample of summer broods is not an indication of population size but reflects available effort expended to collect data. Wings collected from hunters in 2010 were assessed to determine male/female ratios and production. This important indicator of production is summarized for the Eastern Region in Table 5.

**Table 5. Eastern Region Sage-Grouse Wing Data- 2010**

County	Total Wings	Adult Males	Adult Females	Juvenile Males	Juvenile Females	Ratios	
						Juv./ Ad Hen	Juv./ Adult
Elko	520	65	163	139	153	1.79	1.28
Eureka	183	36	67	38	42	1.19	0.78
Lander	116	14	35	21	46	1.91	1.37
White Pine	107	11	41	23	32	1.34	1.06
<b>2010 Reg. Totals</b>	<b>926</b>	<b>126</b>	<b>306</b>	<b>221</b>	<b>273</b>	<b>1.61</b>	<b>1.14</b>
2009 Reg. Totals	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*). There were 926 wings collected, down from 1,000 wings in 2009. Wing analysis indicated survival of young birds into October declined from 2009 to 2010 with a 16% decrease in the juvenile/adult hen ratio and an 18% decrease in the juvenile/adult ratio.

Lek count data on comparable leks in the Eastern Region for 2011 were summarized as follows:

- +4% in Elko County;
- +21% in Eureka County;
- +11% in Lander County; and
- -1% 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 and 2011 in 3 of the 4 counties.

In Elko County during the spring of 2011, NDOW personnel monitored 17 trend leks. They counted 736 males with an average of 43 males/lek. This represented a 4% increase from 2010 when 706 birds were counted on leks. A continued effort will be made in Elko County to ground-truth questionable leks. Recently burned leks will continue to be monitored to evaluate whether they persist or are abandoned. Abandoned leks will continue to be surveyed to determine if they become occupied sometime in the future.

In Eureka County, 207 males were counted on 10 comparable leks in 2011 for an average of 21 males per ground. This resulted in a 21% increase from 2010 when 170 males were counted. The largest increase occurred in Antelope and Kobeh Valleys in the southern portions of the county. In addition to trend counts, there were 8 additional leks surveyed by NDOW and UNR graduate students in 2011 for a total of 18 leks to compare. These 18 leks had 307 males in attendance in 2011 compared to 288 males in 2010 for a 6 % increase.

In Lander County 4 of 5 trend leks were monitored and 138 cocks were observed in 2011 for an average of 35 cocks/lek compared to 124 cocks and 31 cocks/lek in 2010. This accounts for an 11% increase of male attendance on trend leks compared to the 2010 counts. There was a total of 29 leks monitored in 2011 with 25 of those leks active. A total of 449 cocks was observed for an average of 16 cocks/lek or 18 cocks/active lek.

In White Pine County, an excellent effort by many cooperators resulted in 105 leks checked in 2011 compared to 67 in 2010. A total of 944 cocks was observed for an average of 9 birds/lek or 16 birds/active lek. Grouse were not observed on 40 of the leks checked. In the second year of a long-term study along the SWIP corridor, USGS gathered trend-level data on 24 leks within the Schell/Antelope and Butte/Buck/White Pine PMUs. Data from a few of these leks was included in this year's trend assessment to fill some geographical holes in trend lek distribution. Overall, 34 comparable leks were monitored in 2011 with 554 cocks observed for 16.3 birds/lek. This compares to 561 cocks counted on those same leks in 2010 for 16.5 birds/lek. The result is a 1% decrease in lek attendance. Lek trend increased in some southern portions of the county while the biggest decreases occurred in northern areas. Bright spots included south Spring Valley and Snake Valley where increases were observed after several years of low numbers.

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.

There are approved projects for geothermal plants in Lander County and Elko County, both in crucial sage-grouse habitat. There are 18 known leks within a 6-mile buffer of the proposed McGinness Hills geothermal plant in Lander County. This is some of the most important nesting habitat found within the Toiyabe PMU. A geothermal plant is being constructed on private property in Independence Valley of Elko County. Five sage-grouse leks are located within 2.5 miles of the project site, of which 3 are less than 1 mile from project site. In addition to the geothermal plant, an access road and above ground power line will be constructed on BLM administered land. In the spring of 2011, 6 sage-grouse were collared near the project site and additional birds will be collared next year. The China Mountain wind energy project along the Idaho border is also being proposed in important sage-grouse habitat. These projects and other energy projects and mining activities throughout the region are potentially damaging to sage-grouse and their habitats.

## **Productivity Potential**

The productivity potential is high for the Eastern Region in 2011. The precipitation data for the current water year October 1<sup>st</sup> to August 1, 2011 from the National Weather Service stations in Elko, Ely and Eureka are a combined 152% of normal. The SNOTEL precipitation data for Elko County range from the Snake River basin at 135%, the Owyhee River basin at 138% to the Upper Humboldt River Basin at 147% of normal. White Pine County had the highest totals with the Berry Creek SNOTEL site at 170 % and the Ward Mountain site at 167 % of normal. Eureka County had the lowest precipitation totals with the Diamond Peak SNOTEL site at 112% of normal while the National Weather Service site at the Eureka Airport was 141% of normal. In addition to the above average snowfall during the winter and spring of 2011 there has been precipitation from monsoon rains received in June and July adding to the already moist conditions and keeping conditions green late into the summer. These excellent range conditions provided good cover with abundant forb components for brooding sage-grouse in the Eastern Region. Successful nesting hens had excellent conditions to raise their broods.

## **Fall Prediction**

The chick per hen ratio from wing data and harvest of sage-grouse both decreased slightly in the Eastern Region in 2010. The increase in trend lek counts in 2011 indicates a stable to slight increase in the base population of sage-grouse in the short-term. The high production potential should provide a large number of young birds this fall. Bird availability in the Eastern Region is predicted to be good 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. The excellent range conditions that presently exist and any measurable precipitation occurring immediately prior to and during the hunting 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 2011.

## **SOUTHERN REGION**

### **Harvest**

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

The 2010 sage-grouse season in Nye County was 15 days in length, running from September 25<sup>th</sup> to October 9<sup>th</sup>. This season structure has been in effect since 2007. Daily bag and possession limits remained unchanged at two daily and four in possession. Harvest data indicate a total harvest of 453 sage-grouse by 277 hunters in

the Southern Region during the 2010 season. In comparison, the Southern Region saw a harvest of 326 sage-grouse by 200 hunters in 2009. This noticeable increase in harvest can be explained, for the most part, by an increase in the total number of hunters, as well as the number of days sportsmen spent in the field this past season.

According to post-season questionnaire data, interest in sage-grouse hunting in Nye County waned during the early 2000's. This was likely due to a comparatively short nine day season in effect during that time, as well as the fact that the mid-October timing of the season made birds more difficult to locate due to generally cooler, wetter weather. However, for the past four 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 similar to those seen in the 1990's. In fact, 2010 saw the fourth highest total harvest of sage-grouse seen in the southern Region in the past 20 years. Not only has hunter participation increased since the change in season structure, sportsmen appear to be having better success locating birds during this earlier season.

Questionnaire data indicate a few sportsmen continue to report pursuing sage-grouse in Esmeralda, Clark, and Lincoln counties. Although harvest numbers reported are very low, these counties are closed to sage-grouse hunting. These 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 questionnaire data provide important information regarding overall harvest and hunter pressure trends; small sample sizes may produce biased results. See Table 6 for short- and long-term perspectives of harvest.

**Table 6. Southern Region (Nye County) Sage-Grouse Harvest Post-season Questionnaire Data**

	<b>REGIONAL TOTALS:</b>			<b>Percent Change</b>	
	2009	2010	10yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Birds</b>	326	453	<b>200</b>	39%	127%
<b>No. of Hunters</b>	200	277	<b>135</b>	39%	105%
<b>No. of Days</b>	432	762	<b>266</b>	76%	186%
<b>Birds / Hunter</b>	1.9	1.6	<b>1.4</b>	-16%	14%
<b>Birds/Hunter Day</b>	1.1	0.59	<b>0.7</b>	-46%	-16%

### 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 efforts 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 2011, a total of 23 leks was visited in central Nevada, resulting in a maximum count of 763 sage-grouse, of which 678 were cocks. During the previous spring, 2010, a total of 22 leks was visited in central Nevada resulting in a maximum count of 592 sage-grouse, of which 493 were cocks. Lek data gathered on strutting grounds surveyed both in 2010 and 2011 reflect an overall increase in cock attendance of 17 percent. An average of 31 cocks per active lek was observed in both 2011 and 2010, based upon leks surveyed in both years.

Of 13 trend grounds surveyed in both 2010 and 2011, five showed decreases in cock attendance from 2010, six showed increases in cock attendance, and two showed no change. 2011 trend lek survey data indicate overall cock attendance was up eight percent from 2010. While this increase is encouraging, it may not actually reflect a commensurate increase in overall sage-grouse numbers. Above normal spring snowpack conditions at higher elevation strutting grounds may have forced some birds, which typically strut in areas inaccessible to surveyors, to use lower elevation leks where they could be observed.

Sage-grouse wings collected from hunter harvested birds each fall provide important information to NDOW biologists. Wings were used to determine male/female harvest ratios, nesting success, and young of the year recruitment rates. A total of 166 wings was collected in central Nevada in 2010. Data obtained from assessing these wings indicate that the juvenile per adult hen ratio during the fall of 2010 was approximately 1.82 juveniles/adult hen. This level of recruitment was nearly equal to the ten-year average, and the highest recruitment recorded since 2006. 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 were still very small when compared to the rest of the state. Wing data for central Nevada are summarized in Table 7.

**Table 7. 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
2010	166	25	50	38	53	1.82
<b>Average</b>	<b>103</b>	<b>15</b>	<b>34</b>	<b>25</b>	<b>30</b>	<b>1.80</b>

## **Productivity Potential**

Due to above average moisture receipts and cool temperatures during the spring of 2011, central Nevada experienced a prolonged spring green-up period and good production of grasses and forbs. These conditions benefited not only sage-grouse, but upland game species of all types. Although cold, wet conditions during late spring can cause high chick mortality, it appears that the timing of the precipitation and cooler temperatures during the spring of 2011 was such that chick survival was not appreciably affected in most areas.

Due to the unusually moist, cool conditions, the appearance of sage-grouse near riparian areas was delayed, which resulted in difficulty obtaining sufficient brood data for inclusion in this report. Despite the lack of formal survey data, anecdotal observations received from local sportsmen and landowners indicate sage-grouse production was likely comparatively good throughout much of central Nevada. In addition, lush vegetation and moist conditions should continue to benefit sage-grouse as the summer progresses.

Although brood survey data provide important information to wildlife managers, the data are of minimal value in predicting actual recruitment rates due to many factors that can affect chick survival through the summer and early fall. Wings collected in the fall from hunter harvested sage-grouse are presently the most effective method of determining recruitment. Unfortunately, in areas where sage-grouse hunting does not occur, as in Lincoln and Esmeralda Counties, this source of data is unavailable.

## **Fall Prediction**

Although central Nevada experienced large snow accumulations during the early part of the 2010-11 winter, January and February saw a spell of warm, dry conditions. This timely break allowed for good forage availability in the lower elevation benches and valley bottoms, which should have allowed good overwinter survival of adult sage-grouse. 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.

Due to lush vegetation, and good insect numbers brought about by the moist spring and early summer, chick survival into fall is expected to be good, resulting in good bird availability this season. The late September/early October season structure should again allow sportsmen to more easily locate birds near water. It is important to note however, that even with good bird availability, 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 1<sup>st</sup> and ending on December 31<sup>st</sup>. During this time period 544 hunters partook in the hunt, harvesting 474 birds. Blue grouse make up the majority of the forest grouse harvest with most of these killed in the Carson Range of the Sierra Nevada above Reno and Gardnerville. Limits for forest grouse were three daily and six in possession. Harvest figures for the 2010 season are presented in Table 1 for Blue Grouse (Sooty) and Table 2 for Ruffed Grouse.

**Table 1. Western Region Sooty Grouse harvest. Post season questionnaire data.**

	<b>REGIONAL TOTALS:</b>			<b>Percent Change:</b>	
	<b>2009</b>	<b>2010</b>	<b>10-Yr Avg.</b>	<b>Prev. yr.</b>	<b>vs. Avg.</b>
<b>No. of Birds</b>	588	<b>436</b>	351	-25.9%	24.3%
<b>No. of Hunters</b>	623	<b>532</b>	388	-14.6%	37.1%
<b>No. of Days</b>	1359	<b>1169</b>	898	-14.0%	30.1%
<b>Birds / Hunter</b>	0.9	<b>0.82</b>	1.0	-13.2%	-19.0%
<b>Birds/Hunter Day</b>	0.4	<b>0.37</b>	0.4	-13.8%	-16.9%

**Table 2. Western Region Ruffed Grouse harvest**

	<b>REGIONAL TOTALS:</b>			<b>Percent Change:</b>	
	<b>2009</b>	<b>2010</b>	<b>Avg. 05-10</b>	<b>Prev. yr.</b>	<b>vs. Avg.</b>
<b>No. of Birds</b>	110*	<b>38</b>	<b>36</b>	-65.5%	5.6%
<b>No. of Hunters</b>	110*	<b>12</b>	<b>50</b>	-89.1%	-75.9%
<b>No. of Days</b>	204*	<b>110</b>	<b>105</b>	-46.1%	4.9%
<b>Birds / Hunter</b>	1.0	<b>1.20</b>	<b>1</b>	20.0%	88.3%
<b>Birds/Hunter Day</b>	0.5	<b>0.30</b>	<b>0.3</b>	-40.0%	5.5%

\*expanded data appears over inflated

#### **Population Status and Productivity Potential**

Forest grouse populations are believed to be stable at moderate levels in most areas. Climatic conditions including a very wet spring in 2011 should allow for good production and recruitment. The limited information available for the past few years indicates 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 during 2009 and 2010 may increase this population.

## Fall Prediction

The western part of the state received record amounts of precipitation in the spring of 2011, 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 adequate hunter participation.

## **EASTERN REGION**

### Harvest

Blue Grouse make up the majority of forest grouse harvest. Ruffed Grouse harvest is limited to Elko County and to a much lesser extent Lander County. Prior to 2007, reported Ruffed Grouse harvest was very minimal (25 estimated in 2006). In 2007, the hunter questionnaire was changed to obtain a better sample of ruffed grouse hunters by separating the 2 forest grouse species. Reported Ruffed Grouse harvest was 223 birds taken by 254 hunters in 2007, 268 birds taken by 245 hunters in 2008, 649 birds taken by 413 hunters in 2009, and 140 birds taken by 212 hunters in 2010. The first year Ruffed Grouse were reported to be harvested from Lander County was in 2010.

The 2010 Blue Grouse harvest decreased 48% from 2009 and was 13% below the 10-year-average (2000-2009). Following six consecutive years in which White Pine County led the Eastern Region in Blue Grouse harvest, Elko County Blue Grouse harvest has surpassed the other 3 counties since 2007. Elko County provided 50% of the region's harvest in 2010 while White Pine County provided 34%. The 2010 Eureka County Blue Grouse harvest was significantly higher than last year's harvest but still 33% below the 10-year-average. Lander County's 2010 Blue Grouse harvest decreased 31% from 2009 but it was 111% above the 10-year-average. Harvest data suggest Blue Grouse populations experienced below average production throughout the region. For more specific harvest data please refer to the upland game harvest tables in the appendix.

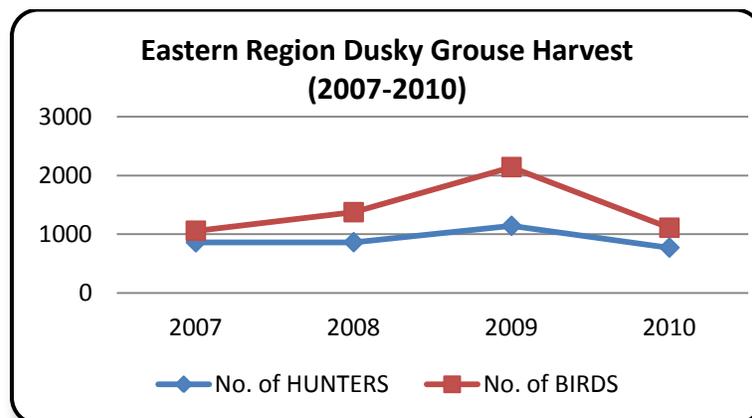


Figure 1. Eastern Region Dusky Grouse Harvest (2007-2010)

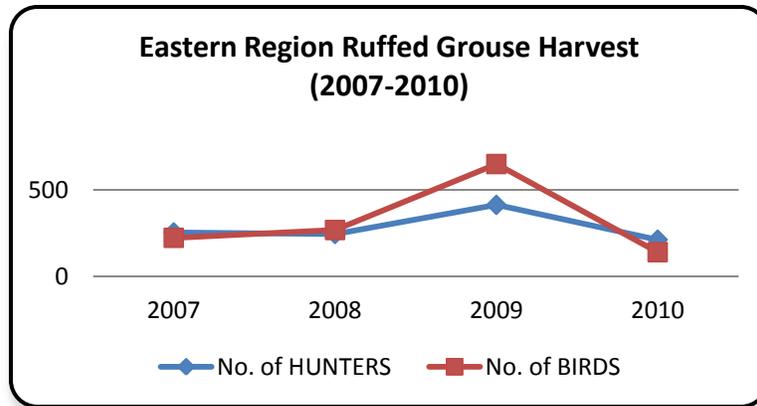


Figure 2. Eastern Region Ruffed Grouse harvest (2007-2010)

### **Population Status**

No brood data was collected for either forest grouse species during the summer of 2010.

With brood and wing data being limited, harvest levels remain the most reliable indicator of population status. Overall, 2010 forest grouse populations were below average throughout the eastern region.

### **Productivity Potential**

The major impact to brooding forest grouse is 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 above-average throughout the region. Nesting and escape cover for early brooding in the Eastern Region was good to excellent. The excellent range conditions observed during the summer of 2011 should allow for good production of forest grouse.

It is important to note the observed decline of Limber Pine and Whitebark Pine in the Eastern Region, particularly the Ruby Mountains. The decline is of a particular concern as 5 needle pines provide winter habitat in the form of food and shelter for Blue Grouse. The lack of adequate winter range is thought to be the major limiting factor of Blue Grouse in the Eastern Region. If the observed loss of 5 needle pines continues, Blue Grouse populations could be negatively affected.

### **Fall Prediction**

Forest grouse availability in 2011 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. Forest grouse hunting in 2011 should be better than 2010 throughout the region.

## SOUTHERN REGION

### Harvest

The 2010, Nevada forest grouse season ran for 122 days, starting on September 1<sup>st</sup>, and ending on December 31<sup>st</sup>. 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 2010. 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 54 Blue Grouse was harvested by 72 hunters during the 2010 Southern Region forest grouse season. In comparison, 2009 saw a harvest of 79 Blue Grouse by 114 hunters. 100% of the reported harvest came from Nye County. Blue Grouse harvest can be greatly affected in some years, regardless of overall numbers of birds available, by snow accumulations as the fall progresses, which can make access to grouse habitat difficult for sportsmen. This was the case in 2010, although despite challenging access, harvest remained above average.

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 3. Southern Region Forest Grouse Harvest Post-season Questionnaire Data**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Birds</b>	79	54	<b>33</b>	-32%	64%
<b>No. of Hunters</b>	114	72	<b>54</b>	-37%	33%
<b>No. of Days</b>	262	272	<b>140</b>	4%	94%
<b>Birds / Hunter</b>	0.7	0.8	<b>0.7</b>	14%	14%
<b>Birds/Hunter Day</b>	0.3	0.2	<b>0.3</b>	-33%	-33%

### Population Status and Productivity Potential

Favorable climatic conditions experienced since the fall of 2010 have benefited wildlife habitats throughout central Nevada, which has aided in improving the condition and productivity of many species of wildlife, including forest grouse.

While snow accumulations during the first half of the 2010-11 winter were considerably greater than any seen in the past several years, 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. As a result, overwinter adult Blue Grouse mortality is expected to have been low.

Due to favorable precipitation patterns, and also cooler than normal temperatures, the spring and early summer of 2011 saw a lush and long lasting green-up period. This not only allowed for an increased 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 2011 was such that chick survival should not have been appreciably affected.

### **Fall Prediction**

In regard to forest grouse, even more so than with other species of upland game, small sample sizes can make post-season questionnaire data somewhat difficult to analyze. Consequently, the data that may be most helpful in making predictions in regard to Blue Grouse are birds per hunter and birds per hunter day. These data indicate that while the 2010 Blue Grouse season saw a decrease in participation and total harvest when compared to 2009, it was still an above average season in these regards. When compared to the 10-year and long-term averages, data indicate central Nevada Blue Grouse populations remain stable at moderate levels. With the improvement in climatic conditions and resultant improvements to grouse habitat likely stimulating production, the Blue Grouse season in the Southern Region is expected to once again be comparatively good for 2011. 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**

For the 2010 Snowcock hunting season, 89 questionnaires were received from 120 known permits issued (74%). Of those 89 received, 66 (74%) indicated that they did not hunt. The 23 hunters who reported spending time in the field harvested 2 birds with no wounding loss reported. Hunters reported seeing 102 snowcocks during 36 days of hunting. Reported snowcock harvest in the past has ranged between 2 and 23 birds

annually and has averaged approximately 8 birds/year since 1980. Changes in permitting and reporting requirements should facilitate harvest data collection.

### **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 summer helicopter mountain goat/bighorn sheep surveys. Beginning in 2005, these surveys were scheduled for late winter in an attempt to better assess lamb and kid recruitment. Unfortunately, this has resulted in a cessation of summer snowcock survey data.

### **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 2010 breeding and nesting periods, above-average snowpack was present and spring moisture was well above normal, potentially impacting early nest success. However, ideal conditions likely presented the opportunity for later nest success and brood survival.

The current snowcock population appears to be at low to moderate levels based on limited observations from hunters and incidental helicopter surveys. More intensive survey work would be needed to adequately assess snowcock population condition and trend.

### **Fall Prediction**

Climatic conditions, habitat preference, the snowcocks wary nature, and the current low-moderate population level are expected to keep harvest levels low. In 2010, 525 fewer birds were observed by hunters; however, the observed decreases were made in 86 less hunter days than in 2009. Birds observed per hunter day were approximately 2.8 in 2010 as compared to 5.1 in 2009. Bird availability for the 2011 season is expected to be fair and harvest is expected to remain well below 10 percent.

## **CHUKAR AND HUNGARIAN PARTRIDGE**

### **WESTERN REGION**

## Harvest

Junior upland game hunters enjoyed a two day season on September 25<sup>th</sup> and 26<sup>th</sup>, 2010. Youth hunters had to be 15 years old and younger to participate in the hunt. They were also required to be accompanied by an adult 18 years or older. Game species that were allowed to be taken during the two day hunt included: Chukar, Hungarian Partridge, quail and rabbit.

The 2010 Chukar and Hungarian Partridge hunting season began on October 9, 2010 and ended on February 6, 2011. Daily bag and possession limits were similar to past hunting seasons at 6 birds per day and 18 in possession. Limits were singly or in aggregate for the two species. The 10% hunter questionnaire data from the 2010-11 chukar hunting season is depicted in the table below:

**Table 1. Western Region Chukar Harvest Post-season Questionnaire Data**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-Yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Birds</b>	55,293	64,634	56,531	16.9%	14.3%
<b>No. of Hunters</b>	9,684	10,045	7,553	3.7%	33.0%
<b>No. of Days</b>	38,495	40,506	32,392	5.2%	25.0%
<b>Birds / Hunter</b>	5.7	6.4	7.6	12.7%	-15.4%
<b>Birds/Hunter Day</b>	1.44	1.6	1.8	11.1%	-10.3%

Total chukar harvest within the Western Region has increased every year since the 2008 hunting season. One of the better hunting seasons in recent memory for Chukar Partridge was back in 2005 when an estimated 85,323 birds were harvested. In 2010, hunters harvested a total of 64,634 birds which was an increase of 17% from the previous year. This past year's harvest was over 8,000 birds above the ten-year average. The total number of hunters who participated in chukar hunting rose slightly this past year but participation was well above (33%) the long-term average. Overall, chukar hunters were more successful this past year and had the best hunting since the 2006 season.

The Western Region supplied hunters with approximately 77% of all chukar harvested within the state during the 2010 hunting season. As is generally the case, over 80% of the birds harvested within the Western Region were taken from Humboldt and Washoe Counties. Hunters enjoyed the best hunting in Humboldt County as the hunters killed an average of 8.3 birds and harvested an average of 1.8 birds per day.

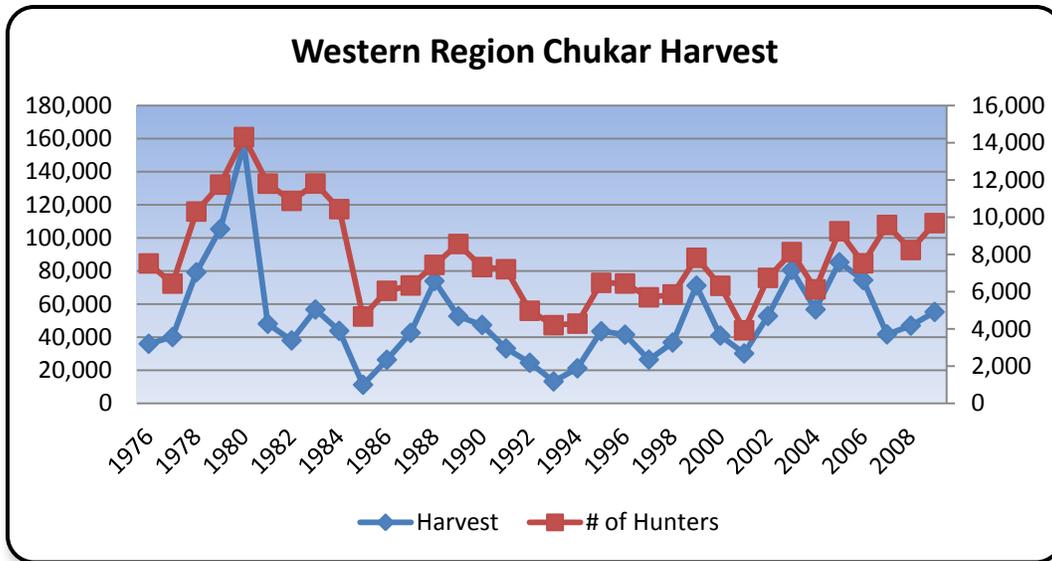


Figure 1. Western Region chukar harvest from 1976-2010.

Brood surveys conducted this past summer by NDOW biologists indicated that chukar production and recruitment were excellent. Biologists reported chicks per hen ratios between 8 and 12 with a few individual brood sightings as high as 16 chicks per hen. Nesting appeared to have been delayed in many areas of Washoe, Humboldt and Pershing Counties. Many of the broods observed during the surveys were made up of very young class I and II chicks. The drier or milder areas to the south of highway 50 may not have experienced a delay in nesting as was indicated by the observation of many older class IV chicks. The heavy winter and wet spring that provided much needed moisture to western Nevada was thought to be the reason for the delayed nesting. The excellent recruitment observed this year will result in increasing trends for chukar populations in the Western Region.

Table 2. Western Region Hungarian Partridge Harvest Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-Yr Avg.	Prev. yr.	vs. Avg.
<b>Number of Birds</b>	1,059	2,083	1,295	96.7%	60.9%
<b>Number of Hunters</b>	752	551	539	-26.7%	2.3%
<b>Number of Days</b>	3,295	2,442	2,067	-25.9%	18.1%
<b>Birds/Hunter</b>	1.41	3.8	2.5	168.4%	54.1%
<b>Birds/Hunter Day</b>	0.32	0.9	0.7	165.4%	15.6%

Hunters enjoyed fair to good hunting this past year while hunting for Hungarian Partridge. Overall the harvest of “Huns” almost doubled when compared with the 2009 hunting season. However, both the total number of Hungarian partridge hunters and the average number of days spent in the field chasing them dropped in 2010. Those hunters who chose to pursue the species this past year had good success. Both the

number of Birds/Hunter and the Birds per Hunter Day categories showed an increase from both the previous year and the long-term averages. Overall, Hungarian partridge hunting was much improved in 2010. Generally speaking, when chukar harvest increases the harvest of Hungarian Partridge also increases.

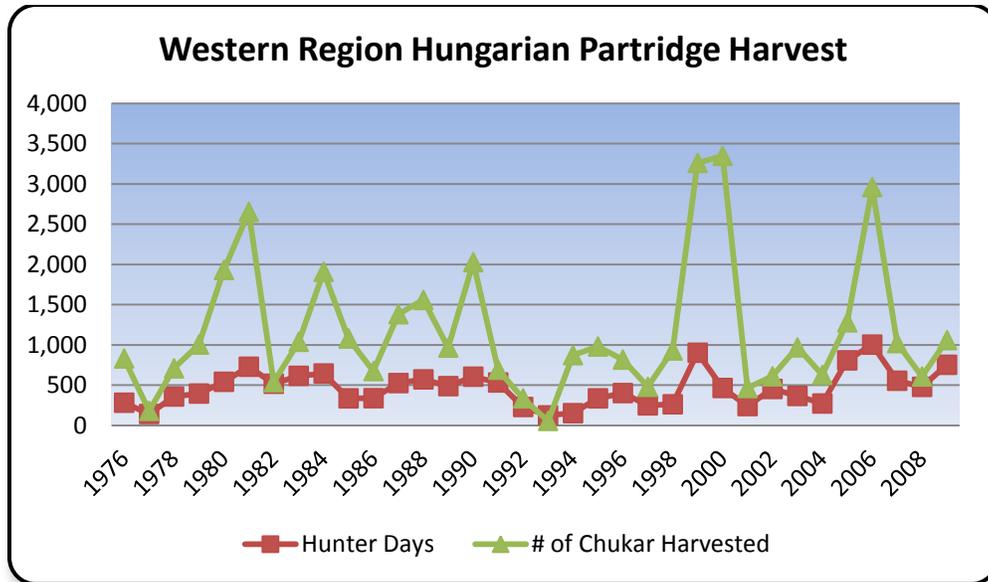


Figure 2. Western Region Hungarian partridge harvest from 1976-2010.

### Productivity Potential

The winter and spring of 2010-11 provided much needed moisture to northwestern Nevada. The moisture will help to offset several consecutive years of drought that had reduced forage quality and water availability. The moisture continued into the spring allowing for excellent native grass and forb growth. The improved habitat conditions provided good cover for nesting hens and the rearing of young broods. Survival of the broods was excellent and certainly above average. The impressive chick to hen ratios observed this past summer was proof that habitat conditions were excellent for chukar production and recruitment. The abundant green forage and cover allows hens with young broods to be less reliant on water sources, which disperses birds over larger areas and increases survival. However, by August drier conditions will most certainly return and most birds will once again be heavily dependent on areas within a mile of water sources.

## Population Status

The excellent recruitment observed throughout much of western Nevada will result in a strong increasing trend for chukar populations within the Western Region. Chukar populations have been on the increase since 2008. Current population levels are estimated to be at moderate to moderately high levels. The highest chukar population levels within the Western Region were believed to have occurred between 1978 and 1980. Chukar harvest within the Western Region was estimated at over 150,000 birds in 1980.

## Fall Prediction

Chukar hunting this coming fall should be very good due to the increase in overall bird numbers and the fact that more young birds will be available for harvest. Early season hunting should be excellent when birds are concentrated near water sources. Even mid and late season hunting should be better this coming season. The total number of chukar harvested within the Western Region is predicted to continue to increase in 2011 and is expected to be above the harvest levels from the 2009 and 2010 hunting seasons.

## **EASTERN REGION**

### Harvest

The 2010 Chukar and Hungarian Partridge season was 121 days in length running from October 9, 2010 through February 6, 2011. 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 2 days during a special youth season (September 25-26, 2010).

**Table 3. Eastern Region Chukar Harvest Post-season Questionnaire Data**

	<b>REGIONAL TOTALS:</b>			<b>Percent Change</b>	
	2009	<b>2010</b>	10-yr.-avg.	Prev. yr.	vs. 10-year-avg.
<b>No. of Birds</b>	15,172	<b>14,103</b>	20,041	-7	-30
<b>No. of Hunters</b>	2,758	<b>3,105</b>	2,944	13	5
<b>No. of Days</b>	11,472	<b>12,629</b>	12,046	10	5
<b>Birds / Hunter</b>	5.5	<b>4.5</b>	6.7	-17	-32
<b>Birds/Hunter Day</b>	1.3	<b>1.1</b>	1.7	-16	-33

The 2010 Eastern-Region harvest of 14,103 chukars was down from the previous year's harvest of 15,172 and 30% below the previous 10-year average.

**Table 4. Eastern Region Hungarian Partridge Harvest Post-season Questionnaire Data**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-yr. avg.	Prev. yr.	vs. 10-year avg.
<b>No. of Birds</b>	1,187	<b>1,572</b>	1,171	32	34
<b>No. of Hunters</b>	675	<b>750</b>	555	11	35
<b>No. of Days</b>	1,960	<b>3,752</b>	1,983	91	89
<b>Birds / Hunter</b>	1.8	<b>2.1</b>	2	17	-8
<b>Birds/Hunter Day</b>	.6	<b>0.4</b>	1	-33	43

Regional Hungarian Partridge harvest was reported to be 1,572 birds in 2010 which was 34% above the previous 10-year average of 1,171 partridge.

### **Population Status**

In the Eastern Region, chukar brood data was only collected in Lander County. The total Lander County chukar sample for 2010 was 128 including 7 broods with 109 chicks for 8.7 chicks/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. Hungarian Partridge populations appear to be on the rise with a 32% increase in harvest over last year's harvest of 1,187 birds and is 34% higher than the 10-year average.

### **Productivity Potential**

The 2007 production year was the poorest on record and this was reflected in bird availability for the last 3 years. However, the Eastern Region has received above average precipitation since 2008. The Lower Humboldt River Water Basin, the Eastern Nevada Water Basin and the Owyhee River Water Basin which accounts for the majority of the Region's partridge habitat all reported over 140% of average for precipitation to date. This above average moisture created ideal nesting and brood rearing conditions for Chukar and Hungarian Partridge throughout the Eastern Region.

For the third time since 2001, 4 helicopter chukar density surveys were conducted in the Eastern Region in 2010. A total of 1,338 chukars was observed on these 4 surveys covering 41.2 square miles for 32.4 chukars/square mile. In comparison the 2009 survey yielded a total of 872 chukars for a density of 17.8 chukar/square mile. All 4 survey areas have been completely or partially burned, so no completely "intact" areas were surveyed for comparison in the Eastern Region.

## Fall Prediction

Chukar hunters are expected to experience good hunting in the Eastern Region in 2011. Hungarian Partridge hunting is expected to be fair to good and mostly incidental to Chukar Partridge hunting. Large brood numbers of 10-15 chicks per hen have been documented this summer in Lander and Elko Counties. With the great nesting conditions experienced this spring, the fall prediction looks good for partridge hunters.

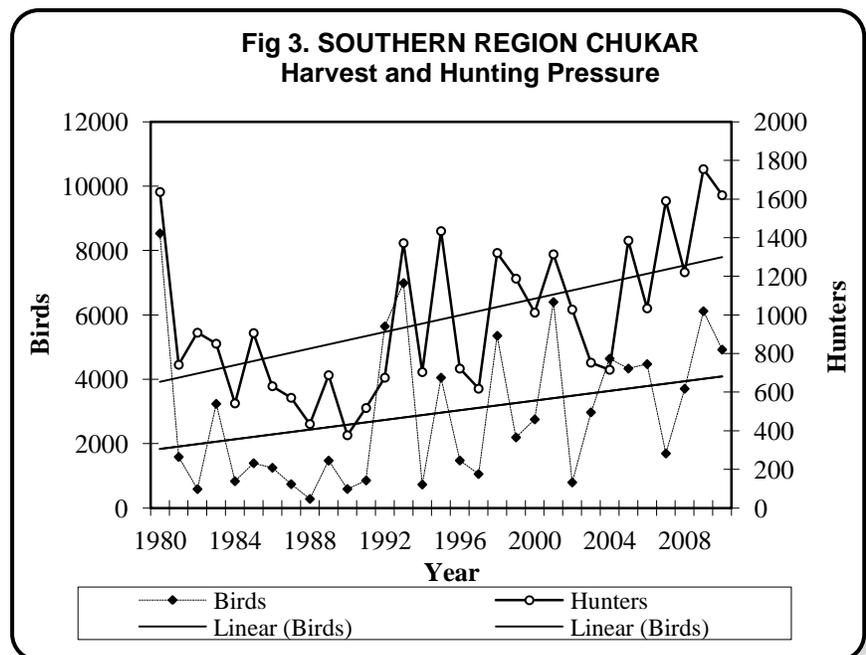
## **SOUTHERN REGION**

### Harvest

The 2010-11 general Chukar and Hungarian Partridge season was 121 days in length beginning on October 9th, 2010, and ending on February 6<sup>th</sup>, 2011. 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 3 illustrates chukar harvest and hunting pressure trends for the Southern Region based upon post-season questionnaire data for the period 1980-2010. Although the actual numbers can vary greatly year to year, the trend lines make it apparent that overall hunter participation and the total number of birds harvested has been showing an increasing trend over the past 20 years in the Southern Region. The rapid population growth in Clark County is almost certainly the reason behind this trend. Although the chukar possession limit was increased from 12 to 18 in 2006, this change does not appear to have affected overall harvest levels in the Southern Region to date. As more years of harvest data are gathered, it will be easier to determine if the change has made any difference at all.



Currently, bird availability, hunter numbers, and weather conditions during the season still appear to be the driving factors of overall harvest levels.

A total of 1,620 hunters expended 4,204 days of effort, and harvested 4,923 chukar during the 2010-11 Southern Region season. Although this reflects a decrease in hunter participation, effort, and overall harvest when compared to the 2009-10 season, it was still an above-average season in regard to total number of hunters and total harvest. Following three consecutive years of leading the Southern Region, Clark County saw a noticeable drop in chukar harvest during this past season. Nye County led the region with a total reported harvest of 2,289 birds.

Table 5. Southern Region Chukar Harvest Post-season Questionnaire Data

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Birds</b>	6,116	4,923	<b>3789</b>	-20%	30%
<b>No. of Hunters</b>	1,755	1,620	<b>1181</b>	-8%	37%
<b>No. of Days</b>	4,645	4,204	<b>4277</b>	-9%	-2%
<b>Birds / Hunter</b>	3.5	3.0	<b>3.4</b>	-14%	-12%
<b>Birds/Hunter Day</b>	1.3	1.2	<b>0.9</b>	-8%	33%

### Population Status and Productivity Potential

Due to above average moisture receipts and cool temperatures during the spring of 2011, central Nevada experienced a prolonged spring green-up period and good production of grasses and forbs. These types of vegetation are not only important for forage, but also provide critical cover for chukar nests and chicks. Likely in response to the moist and cool conditions, the appearance of chukar broods in many areas of central Nevada was delayed this spring causing some initial concern. However, once broods began showing up in some traditional brood rearing areas, numbers appeared fair to good overall. Cold, wet conditions during late spring can cause high chick mortality. It appears that spring storms were spotty throughout central Nevada causing some areas to suffer very poor production, while others experienced very good production.

For Lincoln County, favorable winter precipitation, as well as above average precipitation during the month of May likely resulted in improved habitat conditions in many areas. Although dry conditions existed during the early summer, mid-summer moisture should provide increased forage in the form of green grasses, forbs, and insects. Limited brood surveys indicate that production varied greatly across the landscape, with some areas experiencing very good production, while others saw very little.

Extreme southern Nevada has suffered from drought conditions consistently since 2006. Fortunately, the winter of 2010-11 was a very wet one, which greatly benefited

habitat conditions throughout much of Clark County. The spring of 2011 saw a continuation of above average moisture receipts and cooler than normal temperatures, which allowed for a comparatively lush and long lasting spring green-up period. Insects are an important source of nutrition for young chukar broods, and the favorable climatic conditions should have resulted in good insect availability as well. Clark County also saw good monsoonal moisture patterns during the month of July, which will continue to benefit all species of wildlife and their habitats.

### **Fall Prediction**

In central Nevada, a healthy base of adult chukar, along with fair to good production and improved habitat conditions, should once again result in decent numbers of chukar being available for harvest during the 2011-12 season. Although chukar numbers in central Nevada remain comparatively high, fall precipitation patterns can affect overall hunter success in any given year. Overall, the chukar outlook for central Nevada is fair to good, and hunters should experience another favorable season.

Overall, chukar production in Lincoln County can be categorized as fair for this past spring. Although overall densities of chukar are expected to be comparatively low, some localized areas of high densities do exist. With chukar populations at moderate levels, the outlook is for a fair season this fall.

Despite starting with a somewhat low base population of adult chukar, increased production resulting from very favorable climatic conditions should allow for improved availability of chukar this fall in southern Nevada. Generally speaking, the Southern Region chukar season is anticipated to be fair to good, with some localized areas of very good bird availability.

## **CALIFORNIA QUAIL**

### **WESTERN REGION**

#### **Harvest**

The 2010-11 California and Mountain Quail season was 120 days in length running from October 9, 2010 through February 6, 2011. 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 1. Western Region California Quail Harvest**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-Yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Birds</b>	31,903	27,298	23,933	-14.4	14.0
<b>No. of Hunters</b>	4,162	3,402	3,093	-18.2	9.9
<b>No. of Days</b>	16,467	14,235	11,656	-13.6	22.1
<b>Birds / Hunter</b>	7.7	8.0	7.7	0.4	3.8
<b>Birds/Hunter Day</b>	1.9	1.9	2.0	0.0	-5.0

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**Table 2. Western Region Mountain Quail Harvest**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	3-Yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Birds</b>	1,627	1,026	1,342	-37.0	-23.5
<b>No. of Hunters</b>	649	320	458	-50.1	-3.0
<b>No. of Days</b>	2,432	1,335	1,857	-45.1	-28.1
<b>Birds / Hunter</b>	2.5	3.2	2.9	2.8	10.3
<b>Birds/Hunter Day</b>	0.7	0.8	.72	1.4	11.1

California Quail harvest data indicates a slight decline in both hunter participation and subsequent harvest from what was reported in 2009 but harvest and participation levels for 2010 remain above the long-term trend. Harvest data for Mountain Quail indicate declines 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 94% of the harvest occurring in the Western Region. Washoe, Lyon and Churchill Counties provide for most of the harvest. The majority of California Quail hunting also takes place in the Western Region with hunters reporting they harvested 91 percent of the birds in the northwestern portion of the state.

### **Population Status**

Northwestern Nevada offers opportunities for knowledgeable quail hunters to pursue both California Quail and Mountain Quail within the same day and sometimes on the same mountain range. Overall, Mountain Quail make up a very small portion of the total quail harvest within the Western Region as populations are well below historic highs and remain difficult to hunt. Recent trapping and transplanting efforts in portions of Churchill County and most recently Humboldt County are beginning to produce huntable populations of birds.

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 above average precipitation receipts but there were no major snow events that would have reduced quail survival over the winter. Spring and early summer rain storms also produced above average amounts of moisture. 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 at or above average. During recent aerial chukar density surveys above average numbers of quail were noted in a number of the areas flown.

**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 2010-11 quail season was 120 days in length running from October 9, 2010 through February 6, 2011. It was concurrent with the Chukar and Hungarian Partridge season. There was also a youth hunt offered that ran 2 days, September 25 and 26, 2010. Bag limits were 10 daily and 20 in possession 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 3. Eastern Region Quail Harvest - Post-season Questionnaire Data**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-yr.-avg.	Prev. yr.	10-yr.-avg.
<b>No. of Birds</b>	313	268	406	-14.4%	-34.0%
<b>No. of Hunters</b>	122	112	90	-8.2%	24.4%
<b>No. of Days</b>	493	303	286	-38.5%	5.9%
<b>Birds / Hunter</b>	2.6	2.4	4.5	-7.7%	-46.7%
<b>Birds/Hunter Day</b>	0.6	0.9	1.4	50.0%	-35.7%

Quail harvest in 2010 decreased 14% over the previous year in the Eastern Region and was 34% below the long-term average. Thirty-two Mountain Quail were reported harvested in the Eastern Region from Elko County compared to 29 last year.

### **Population Status**

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. Severe winter conditions most likely limit quail populations in this part of the state.

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**

For the second year in a row the Eastern Region experienced a long cool wet spring with temperatures above freezing during the critical nesting periods. Range conditions were excellent for nesting and brooding habitat. Little brood data is collected for quail, but the productivity potential for quail was estimated to be good in the Eastern Region.

### **Fall Prediction**

Eastern Region quail populations are low compared to most of the State. Small relatively isolated quail populations in the region will provide limited hunting opportunities during the 2011 season. Quail are normally harvested in the Eastern Region by hunters pursuing other species such as rabbits and chukar. Given the excellent range conditions this year quail harvest is expected to be higher than last year in the Eastern Region.

## **GAMBEL'S QUAIL**

### **SOUTHERN REGION**

#### **Harvest**

The 2010-2011 quail season began October 9<sup>th</sup>, 2010 and extended through February 6<sup>th</sup>, 2011 (121 days). Limits were ten daily and 20 in possession. Based on hunter questionnaire data for the Southern Region, 2,672 hunters harvested 18,863 quail during the 2010-2011 season. This total represents an 8.6% decrease in harvest from the 2009-2010 quail season.

**Table 1. Southern Region Gambel's Quail Harvest - Post-season Questionnaire Data**

	REGIONAL TOTALS:			Percent Change	
	2009-10	2010-11	01-10 AVG.	PRE. YR.	10 YR. AVG.
<b>No. of Birds</b>	20,640	18,863	<b>16,906</b>	-8.6%	11.6%
<b>No. of Hunters</b>	3,288	2,672	<b>2,393</b>	-18.7%	11.6%
<b>No. of Days</b>	13,448	10,625	<b>9,913</b>	-21.0%	7.2%
<b>Birds / Hunter</b>	6.28	7.06	<b>7.88</b>	12.5%	-10.4%
<b>Birds/Hunter Day</b>	1.53	1.78	<b>1.86</b>	15.7%	-4.6%

Quail harvest, birds per hunter, and the number of hunter days all decreased compared to the 2009-2010 season, while birds per hunter, and birds per hunter day both increased compared to the 2009-10 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 2. Southern Region Quail Harvest by County - Post-season Questionnaire Data**

	2009-10	2010-11	% Difference
Clark	16,224	15,142	-6.6%
Esmeralda	283	100	-65%
Lincoln	3,788	3,134	-17%
Nye	344	487	+42%
<b>Total</b>	<b>20,640</b>	<b>18,863</b>	<b>-8.6%</b>

Clark County supported the highest percentage of the Gambel's Quail harvest for the Southern Region – 80%. Lincoln County was next with approximately 16.6%, followed by Nye at 2.5% and Esmeralda County with .05%.

### **Population Status**

Above average precipitation during the winter of 2010-11 resulted in favorable habitat conditions during the spring of 2011. Above average precipitation during the month of May should have resulted in favorable nesting and brood-rearing conditions. Hot, dry conditions during the summer of 2011 have likely taken a toll on young birds, but many areas still appear to be carrying relatively high densities of quail. Densities of birds will be quite varied across the Southern Region, but traditional areas where quail have been found should be holding moderate densities of birds.

### **Productivity Potential**

Limited brood surveys were conducted in the Southern Region during 2011. Brood surveys showed an average of 7.6 chicks per adult. These surveys indicate a slightly increasing trend for Gambel's Quail across the Southern Region. Good winter precipitation followed by above average precipitation during the month of May likely resulted in improved nesting and brood-rearing conditions. Although dry conditions

existed during the early summer, mid-summer moisture should provide increased forage in the form of green grasses, forbs, and insects.

### **Fall Prediction**

According to the DOE-CEMP, precipitation in southeastern Nevada is 107% of average. Lower than average precipitation fell during much of the spring but higher than average precipitation fell during the month of May and resulted in good habitat conditions that should allow for increased quail production. Gambel's Quail populations are at moderate levels, with most areas experiencing moderate production that will likely lead to slight increases in harvest from the previous year.

### **Mountain Quail**

Brood surveys were not conducted in the Southern Region during the reporting period; however, favorable precipitation patterns combined with moderate temperatures during the spring of 2011 should result in conditions 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 2011 was such that chick survival was not appreciably affected in most areas. This means that the production should have been good enough to result in moderate increases in Mountain Quail numbers.

## **PHEASANT**

### **WESTERN REGION**

#### **Harvest**

Post-season questionnaire data from the 2010-2011 hunting season for the Western Region estimates that 653 pheasants were harvested by 492 hunters who spent 254 days hunting (1.3 pheasants/hunter and 2.6 pheasants/hunter day). Pheasant harvest, number of hunters participating and pheasants/hunter are near their respective 10-year averages.

**Table 1. Western Region Pheasant Harvest Post-season Questionnaire Data**

	<b>REGIONAL TOTALS:</b>			<b>Percent Change</b>	
	<b>2009</b>	<b>2010</b>	<b>10-Yr Avg.</b>	<b>Prev. yr.</b>	<b>vs. Avg.</b>
<b>No. of Birds</b>	628	653	668	4%	-2%
<b>No. of Hunters</b>	690	492	480	-29%	3%
<b>No. of Days</b>	254	254	939	0%	-73%
<b>Birds / Hunter</b>	0.9	1.3	1.4	43%	-9%
<b>Birds/Hunter Day</b>	2.5	2.6	0.8	5%	211%

## **Population Status and Productivity Potential**

Pheasant populations in the Western Region reside in Paradise, Quinn River and King's River Valleys in Humboldt County, Lovelock Valley in Pershing County, Mason and Smith Valleys in Lyon County and Lahontan Valley in Churchill County. Based on harvest data, these pheasant populations are stable at low levels.

Humboldt County maintains the largest population in the State. Recent harvest data indicates that 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 just below average levels.

Lyon County's pheasant population currently remains at low levels based on harvest data. However, the pheasant population at Mason Valley Wildlife Management Area (MVWMA) is showing improvement based on pheasant crow count data that is recorded in the spring for a six week period. These counts resulted in an average of 8.4 calls/week. Results from the 2011 counts were above the 10-year average of 7.3 but below the long-term average of 13.8 calls/week. MVWMA is in its third year of raising pheasant chicks and releasing them into the wild. Wildlife Services continues to perform predator control on the area to facilitate pheasant survival. This year Wildlife Service's removed 1 bobcat, 11 coyotes, 2 raccoons, 21 ravens, 2 skunks, 4 mink and 1 muskrat. In 2010 they removed 30 coyotes, 16 raccoons, 2 gray foxes, 42 ravens, 1 skunk, 3 bobcats and 10 beavers.

Harvest data from Pershing County suggests that the 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 been exhibiting a slight increasing trend since 2008 and is presently thought to be at average levels. However, this population is significantly lower than the pheasant numbers witnessed in the 1970's and 1980's. Biologists believe that the many pheasant hunting clubs around Lovelock Valley have aided in providing the wild population with food, water, escape and thermal cover. This year, farmers have elected to grow more cereal crops in Lovelock Valley which should benefit pheasant. The Lovelock Valley also received 100% water right allocation this year, which means more agricultural fields in production that will provide increased pheasant habitat within the valley.

The Lahontan Valley pheasant population in Churchill County continues to remain at extremely low levels. Agricultural practices that favor alfalfa combined with increased urbanization have reduced available habitat in this Valley.

### **Fall Prediction**

Since 1999 Humboldt County has enjoyed the majority of the statewide harvest. The 2011 harvest level was 69% and Humboldt County is expected to continue to provide the bulk of statewide harvest for the upcoming hunting season. Pershing County produced 9% of statewide harvest last year and should continue to provide harvest opportunities on private land. Harvest opportunities will again be limited in Lyon County even though hunter effort remains high. Surprisingly, Washoe County exhibited 10% of the statewide harvest last year, which was second next to Humboldt County. Pheasant

hunting opportunities throughout the rest of the Western Region will continue to depend upon pen raised birds.

## **SOUTHERN REGION**

### **Harvest**

In 2010, hunter questionnaire data indicate 14 pheasants were harvested by 34 hunters. Collectively, hunters expended 164 days afield. The Southern Region accounted for 2% of the statewide pheasant harvest and 6% 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 2011. 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 Pahrangat Valley, Lincoln County. No releases of pheasants in Lincoln County have been authorized by NDOW.

## **WILD TURKEY**

### **WESTERN REGION**

Spring 2011

The spring 2011 season for Mason Valley Wildlife Management Area (MVWMA) consisted of three consecutive seasons with limited entry drawing periods; the first beginning on March 25<sup>th</sup>, 2011 and the last concluding on May 8, 2011. The various hunt periods included 15 resident tags. Churchill and Lyon Counties and Paradise

Valley opened on March 25<sup>th</sup>, 2011 and ran till May 5<sup>th</sup>, 2011. Persons wishing to participate in these hunts had to obtain permission from a private landowner and submit a form provided by the landowner. This tag process provides hunters the opportunity to access private land prior to applying for the tag. In the past, with an open quota system, hundreds of sportsmen would obtain a tag with no guarantee of a place to hunt.

**Table 1. Spring 2011 Turkey Harvest – Post-Season Questionnaires data (Resident and Non-Resident)**

Hunt Area	# Tags Issued	# Questionnaires Returned	DNH	Number Successful	Percent Success*	
<b>Mason Valley WMA</b>	15	15	1	9	64%	
<b>Lovelock Valley</b>	10	10	0	6	60%	
Permission slip	<b>Lyon County</b>	4	4	0	4	100%
	<b>Paradise Valley</b>	4	4	1	1	33%
	<b>Churchill County</b>	0	0	0	0	0%
<b>Western Region Totals:</b>	<b>33</b>	<b>33</b>	<b>2</b>	<b>20</b>	<b>64%</b>	

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

There were dramatic increases in hunter success rates on the MVWMA, as well as the surrounding Lyon County private lands in 2011. Historically the MVWMA has averaged around 30 – 45 % hunter success rates. This year’s hunter success rate of 64% was significantly higher than the 16% success reported the previous year. Increased success rates indicate the turkey population is starting to recover from previous low levels. The majority of the harvest consisted of jakes, indicating the 2010 nesting period was very productive. The 2012 spring hunt should provide an abundance of older mature toms for harvest.

Under the new land owner permission slip system, Lyon County issued four tags compared to 181 tags the previous year; a decrease of 98% in available tags. The four hunters that hunted Lyon County reported 100% success rate in 2011. As production increases more tags may be available for the 2012 season.

There was no participation in the Churchill County hunt for the 2011 season.

Paradise Valley hunter success for 2011 was 33% with four tags being issued and three hunters choosing to hunt. The 2011 tag allocation was an 83% decrease in tags compared to the previous year.

Pershing County hunter success for the 2011 season was 60% and mirrors the last five seasons. Hunter opportunity was split into two seasons; the first season started on March 25<sup>th</sup>, 2011 and concluded on April 13<sup>th</sup>, 2011 while the second season started on April 14<sup>th</sup>, 2011 and concluded on May 3<sup>rd</sup>, 2011. Reducing tag numbers and splitting the season appears to have aided hunters in accessing private property, therefore increasing hunter success. Of the six turkeys harvested 83% were toms indicating a healthy adult segment.

## **Population Status**

Overall hunter success was excellent in the Western Region during the 2011 season. Increased observations of jakes and toms indicated there was excellent production in 2010. Increased precipitation in 2011 should allow the population on the MVWMA and in Lyon County to rebound from a sustained period of drought that has been experienced for several years now.

Predation can play a major role in affecting wild turkey populations within their occupied habitats. In 2011, a government trapper removed predatory species on the MVWMA to help facilitate a faster recovery of game species on the management area. Agricultural practices that occur on the management area are also important to hen and brood survival. In 2011, alfalfa and legume crops returned to the management area. Over the years the management area has reduced the amount of alfalfa because it requires more water to raise it. The increase in alfalfa production will aid turkeys in gaining access to nesting cover and food resources. The MVWMA allows outside farmers to cultivate crops on the management area for the benefit of wildlife species.

Surveys conducted in July on the MVWMA found 8 jakes and 3 toms. The brush and grass canopy cover was extensive, making it difficult to locate broods of turkeys. Excellent quail production was also noted. It is believed turkey production will be excellent because of increased insect levels and abundant cover. Management area personnel indicate seeing 6-8 poults per hen earlier in the year, indicating a successful nesting season. The Rio Grande subspecies is noted for large clutch sizes and can produce large numbers of young when environmental conditions are right. The MVWMA wild turkey populations seem to be increasing at this time. In 2010, a portion of the management area burned but is recovering well with new growth of buffalo berry and cottonwood sprouting everywhere. Desert shrub communities provide needed cover and protection in and around agricultural fields. The Western Region turkey populations continue to exist at low densities, while some areas hold higher concentrations of birds associated with the best available habitat. The increased precipitation experienced throughout the Western Region will enable turkey populations to rebound substantially from previous low production years. The outlook for the 2012 season is promising and should provide excellent hunting opportunities.

## **EASTERN REGION**

### **Harvest**

There were 5 turkey hunt choices in 7 units located in 3 counties in the Eastern Region that were open for turkey hunting during the 2011 spring season. These hunts included Hunt Unit 091 in Elko County, Hunt Unit 101 in Elko County, Hunt Units 102 and 065 in Elko County, Hunt Unit 115 in White Pine County, and Hunt Units 151 and 152 in Lander County along the Humboldt River.

There were 45 tags available in the Eastern Region during the 2011 spring turkey season. Thirty six hunters reported spending 54 days scouting and 170 days hunting.

Sixteen hunters were successful in harvesting a turkey, 17 were unsuccessful, and 3 reported that they did not hunt. The success rate for these units decreased from 63% in 2010, to 48% in 2011. Of the birds that were harvested 88% were reported as toms, with an average beard length of 7.69 inches.

**Table 2. Eastern Region Turkey Harvest.**

Hunt Area	Tag	# Qstr.	Effort					Harvest			Chose Not to Harvest
	Quota	Rtnd	# Succ.	%Succ.	Hunter Days	Scout	DNH	Tom	Jake	Lost	
Unit 091	5	3	1	33%	28	4	0	1	0	1	0
Unit 101	5	4	3	100%	9	4	1	2	1	0	0
Units 102 & 065	17	15	5	38%	50	24	2	4	1	1	1
Units 151 & 152	3	3	2	67%	18	0	0	2	0	0	0
Unit 115	15	11	5	45%	65	22	0	5	0	1	2
Eastern Region Totals	45	36	16	48%	170	54	3	14	2	3	3

### **Population Status**

During 2006, the Utah Division of Wildlife released Rio Grande Turkeys on the Utah (east) side of Pilot Peak. Surveys of turkey habitat on the Nevada side have documented extensive use by turkeys. A new hunt was established for the Nevada portion of Pilot Peak (Unit 091) beginning in 2010. Biologist observations and reports from hunters indicate that turkeys are well dispersed throughout the area and tend to congregate around the more productive springs and riparian areas. This hunt unit is comprised of large tracts of public land.

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 2010. Turkeys in this unit have become habituated to intentional and/or incidental landowner feeding and tend to congregate on a few select ranches. 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 2010-11 and both of these populations are gradually spreading out 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.

The Lander County hunt (Units 151 & 152) continues to see excellent hunt success on mature birds. Turkeys are spreading along the Humboldt River and annual production remains good. Biologists and hunters have both reported seeing numerous mature toms during and after the 2011 hunter season. A majority of the turkeys in these units reside on private land and hunters need to secure landowner permission prior to the hunting season.

### **Productivity Potential**

Reported observations of turkeys in the Region indicate that they are expanding from original release sites. Brood surveys have been extremely difficult this summer due to exceptional water availability and vegetative growth. The persistent moisture and cooler temperatures of this spring may have made nesting in many areas difficult, especially in the Lander County hunt area which was flooded for much of the spring. Those hens that were successful in hatching a brood should have found excellent brood rearing conditions, with an abundance of both insect life and vegetative growth.

### **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 that will allow spring hunts to continue. The Lander County turkey population is expanding with a great age structure of large amounts of both mature and juvenile male birds. Hunting should be good again in Lander County. The future potential for hunts in the Eastern Region looks promising.

## **SOUTHERN REGION**

### **Harvest**

#### *Lincoln County*

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 14<sup>th</sup> – April 23<sup>rd</sup>. The spring limited entry drawing in Lincoln County involved three seasons that ran consecutively: March 25<sup>th</sup> – April 3<sup>rd</sup>, April 4<sup>th</sup> – April 13<sup>th</sup>, and April 24<sup>th</sup> – May 3<sup>rd</sup>. Ten resident tags and one nonresident tag were allotted for each hunt.

Return card information from Lincoln County wild turkey hunters demonstrated a 49% decrease in turkey tags available for the 2011 season. The number of birds harvested reflected a 47% decrease from the previous year, and a 53% decrease relative to the long-term average. In view of spring turkey hunting opportunity statewide, seasons in Lincoln County accounted for 39.7% of total tags issued and 20% of total harvest. Current Lincoln County harvest figures as well as short- and long-term perspectives are presented in table 3.

Table 3: Lincoln County Turkey Harvest

	REGIONAL TOTALS:						Percent Change	
	2007	2008	2009	2010	2011	2002-11 AVG	PRE. YR.	10-YR. AVG.
Number of Tags Issued	295	117	140	130	66	85	-7%	34%
Total Birds Harvested	48	18	10	19	10	16	+90%	+16%
Percent Success	16%	15%	7%	14.6%	15.1%	17%	+7.6%	-13%

Three hunters reported that they had opportunities to harvest turkeys, but chose not to. Lower quotas in 2011 helped to reduce hunter congestion conflicts, however, hunters still congregated in the areas of public land known to hold higher densities of wild turkeys.

*Clark County (Moapa Valley)*

The spring limited entry drawing in Moapa Valley involved three consecutive ten-day seasons: March 25<sup>th</sup> – April 3<sup>rd</sup>, April 4<sup>th</sup> – April 13<sup>th</sup>, and April 14<sup>th</sup> – April 23<sup>rd</sup>. Three resident tags were allotted in each of the three seasons.

Based on questionnaire data submitted by eight hunters, three toms and one jake were harvested. In 2010, four toms and two jakes were harvested. One respondent in 2011 did not hunt. Hunter success among seven reporting hunters equated to 57%, and reflected a decrease relative to the 67% reported last year. Overall, hunters expended nine days scouting and 15 days hunting. On average, hunters scouted fractionally more than one day and hunted two days. In comparison, hunters averaged four days scouting and fractionally less than four days hunting in 2010.

**Population Status**

*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. No turkeys were released during this reporting period. Additional release sites remain in Lincoln County and releases will be done when birds become available.

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

Brood surveys conducted in Lincoln County did not result in any meaningful data being collected, however, anecdotal reports indicate that turkey production may exceed previous years. Above-average precipitation combined with good habitat conditions should result in modest increases in turkey production. Turkeys still appear to be dispersed in relatively low densities across Lincoln County, although certain areas appear to hold higher densities of birds. Turkeys may still be found associated with private lands. It is likely that the number of wild turkeys has decreased in Lincoln County and future quotas and management will reflect that and attempt to reverse that trend.

### *Moapa Valley (Moapa Valley)*

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, predation, harassment and illegal take coupled with an inevitable no-shooting ordinance will likely result in a reduced turkey population and restriction to hunting.

Nevertheless, hunters should experience little difficulty in locating turkeys on private lands and the Overton Wildlife Management Area during the spring wild turkey seasons. 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.

Overall, 2010 was marked by above average precipitation. Environmental conditions in Moapa Valley are favorable due to precipitation-producing storms in late fall and early winter 2010, early spring 2011 and summer 2011 (monsoon events).

Vegetative abundance and vigor and insect availability have increased from poor-to-fair to fair-to-good. No turkey surveys were conducted in 2010-11. 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.

# RABBIT

## WESTERN REGION

### Harvest

Expanded harvest data from the 2010-2011 hunting season indicated that 1,265 hunters harvested 6,447 cottontail rabbits in the Western Region. Those figures resulted in 5.1 rabbits/hunter and approximately 1 rabbit harvested/day. All 2010 post-season questionnaire data for cottontail rabbits were greater than previous 10-year averages except rabbits/hunter and rabbits/hunter day, which continued to remain below respective 10-year averages since 2007.

**Table 1. Western Region Rabbit Harvest - Post-season Questionnaire Data**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-Yr Avg.	Prev. yr.	vs. Avg.
<b>No. of Rabbits</b>	8,776	6,447	5,174	-27%	25%
<b>No. of Hunters</b>	1,637	1,265	874	-23%	45%
<b>No. of Days</b>	9,100	5,783	4,167	-37%	39%
<b>Rabbits / Hunter</b>	5.4	5.1	6.29	-5%	-19%
<b>Rabbits/Hunter Day</b>	1.0	1.1	1.27	15%	-13%

NDOW is in its fourth year of estimating pygmy rabbit harvest levels using upland game harvest questionnaire data. 2010-2011 data estimated harvest levels at 201 pygmy rabbits by 62 hunters who spent 197 days in the field (3.3 pygmy rabbits/hunter and 1 pygmy rabbit/hunter day). Average harvest data from 2007-2009 is 141 pygmy rabbits harvested by 41 hunters with 234 days expended (4 pygmy rabbits/hunter and 0.66 pygmy rabbit/hunter day). Currently, pygmy rabbit harvest data suggest the western region population is stable.

### Population Status and Production Potential

Post-season harvest data for the Western Region implies that the rabbit population reached high levels between 2005 through 2007 then gradually declined. Currently, the Western Region's rabbit population is thought to be stable at moderate levels. NDOW biologists believe the population may be on the rise this year due to excellent habitat conditions which should have allowed for increased production. Excellent habitat conditions were the result of above average precipitation from this past winter and spring. No formal surveys were conducted in the Western Region; however, biologists have reported an increase in rabbit sightings this year while conducting other field activities.

## Fall Prediction

Harvest results from last season showed that the Western Region recorded 55% of the statewide harvest on rabbits. Counties with the highest harvest were Washoe (21% statewide harvest), Humboldt (10% statewide harvest), Lyon (9% statewide harvest) and Churchill (7% statewide harvest). These four counties should provide good harvest opportunities for the 2011-2012 hunting season.

## **EASTERN REGION**

### Harvest

The 2010-11 rabbit season was 143 days long compared to 142 days last year, extending from October 9, 2010 to February 28, 2011. 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.

**Table 2. Eastern Region Rabbit Harvest - Post-season Questionnaire Data**

	REGIONAL TOTALS:			Percent Change	
	2009	2010	10-yr.-avg.	Prev. yr.	10-yr. avg
No. of Rabbits	3,876	2,992	6,587	-22.8%	-54.6%
No. of Hunters	557	625	388	12.2%	61.1%
No. of Days	2,920	2,483	2,030	-15.0%	22.3%
Rabbits / Hunter	7.0	4.8	17.0	-31.4%	-71.8%
Rabbits /Hunter Day	1.3	1.2	3.2	-7.7%	-62.5%

There was a 23% decrease in the regional rabbit harvest from the previous year's total, as well as a 55% decrease from the long-term-average. The number of hunters in 2010 was up 12% from the previous year. The reported harvest of pygmy rabbits was higher this year, however the reported harvest of white-tailed jackrabbits decreased in the Eastern Region counties compared to the previous year.

### Population Status

Eastern Region rabbit populations appear to be at lower than average levels. Biologist observations and the number of road-killed rabbits have been less in recent years. Many rabbit populations are cyclic however and appear to be on their way back up in response to favorable precipitation this past spring.

### 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 was excellent during the 2010 and 2011 summers. The productivity potential remains good throughout most of the Eastern Region in 2011.

## Fall Prediction

Rabbit populations are expected to increase throughout most of the Eastern Region. Due to the expected response of rabbit populations to excellent range conditions, harvest is expected to be above average.

## **SOUTHERN REGION**

### Harvest

The 2009-2010 rabbit season ran from October 9th, 2010 to February 28th, 2011, for a total of 143 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 875 hunters harvested a total of 2,889 rabbits during 4,176 days of hunting. The number of rabbits harvested, number of hunters, number of days hunted, and rabbits per hunter, and rabbits per hunter day all decreased compared to the previous year. The number of rabbits harvested, rabbits per hunter, and rabbits per hunter day were all lower than the ten-year average, while the number of hunters and the number of hunter days were above the ten-year average. The Southern Region accounted for approximately 24% of the statewide rabbit harvest during the 2010-11 rabbit season.

**Table 3. Southern Region Rabbit Harvest - Post-season Questionnaire Data**

	<b>REGIONAL TOTALS:</b>			<b>Percent Change</b>	
	<b>2009-10</b>	<b>2010-11</b>	<b>AVG.</b>	<b>PRE. YR.</b>	<b>10-YR. AVG.</b>
<b>No. of Rabbits</b>	4,901	2,889	<b>4,803</b>	-41.1%	-39.9%
<b>No. of Hunters</b>	1,274	875	<b>812</b>	-31.3%	7.7%
<b>No. of Days</b>	5,154	4,176	<b>4,153</b>	-19.0%	0.5%
<b>Rabbits / Hunter</b>	3.80	3.30	<b>6.96</b>	-13.2%	-52.6%
<b>Rabbits /Hunter Day</b>	1.00	0.70	<b>1.36</b>	-30.0%	-48.7%

**Table 3. Southern Region Rabbit Harvest by County – Post-season Questionnaire Data**

	<b>2009-10</b>	<b>2010-11</b>	<b>2010-11 % of harvest</b>	<b>% Difference Short-term</b>
<b>Clark</b>	3,139	1,675	57.9%	-46.6%
<b>Esmeralda</b>	154	26	.9%	-83.1%
<b>Lincoln</b>	756	595	20.6%	-21.3%
<b>Nye</b>	851	593	20.6%	-30.3%
<b>Total</b>	<b>4,901</b>	<b>2,889</b>	<b>100%</b>	<b>-41%</b>

## **Population Status**

The Southern Region rabbit population appears to stable at low population levels. One rabbit transect was driven in 2011 and resulted in 5 rabbits being observed along the 21 mile transect. This resulted in 0.24 rabbits observed per mile, which suggests rabbits are at low population levels. Lagomorph populations are generally subject to normal cyclical changes and are expected to increase in the near future.

## **Fall Prediction**

According to the WRCC Weather Data, precipitation in southeastern Nevada is 107% of average. Above-average precipitation during the winter of 2010-11 combined with above average precipitation in May of 2011 should have resulted in favorable habitat conditions for rabbits. 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. Most areas should be experiencing low-to-moderate production which will likely lead to little change in harvest from the previous year.

# FURBEARERS

## WESTERN REGION

### Harvest

Harvest figures for all furbearing animals except bobcat were obtained through a post-season questionnaire sent out to all licensed trappers. These sample figures were expanded to represent total harvest. Additional data on bobcats were derived from information turned in by trappers at the time of pelt sealing.

In the Western Region, 5,136 furbearing animals were harvested. Western Region trappers recorded 56% of the state's total fur harvest of just over 9,100 animals. Access was good and favorable trapping conditions persisted throughout the latter part of the season. Table 1 represents the furbearer and predator harvest in the Western Region for the 2010-2011 trapping season, indicating the seven most sought after species.

Table 1. Western Region Furbearer Harvest.

Species:	2009-10	2010-11	10 yr Average	Percent Change	
				Prev. Year	10 Year Avg.
<b>Bobcat</b>	428	1165	805	172%	45%
<b>Coyote</b>	875	966	985	10%	-2%
<b>Gray Fox</b>	83	173	183	108%	-5%
<b>Kit Fox</b>	110	312	234	184%	33%
<b>Beaver</b>	392	232	411	-41%	-44%
<b>Muskrat</b>	711	1972	1642	177%	20%
<b>Mink</b>	56	61	47	9%	29%

### Bobcat

Bobcat harvest data are collected annually from information reported by the trappers on bobcat harvest report forms. Additional data are 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 removed to determine juvenile or adult.

Bobcat harvest for the Western Region increased considerably from the previous year and was somewhat higher than the 10-year average (Table 2). The number of trappers increased by 58% which can account for some of the increased harvest, however early season predictions of higher pelt prices probably resulted in more trapping effort, as noted in the number of trapping days. Trap effort per trapper and the number of cats harvested per trapper are both indications of favorable field conditions and an adequate supply of animals on the landscape. The same trend was seen with many other species

Table 2. Western Region Bobcat Harvest.

	2009-10	2010-11	10 yr Average	Percent Change	
				Prev. Year	10 Year Avg.
<b>Bobcat Harvest</b>	428	1165	805	172%	45%
<b>Bobcat Trappers</b>	103	163	107	58%	52%
<b>Trap Days</b>	93902	180128	146442	92%	23%
<b>Trap Days / Cat</b>	228	156	187	-32%	-17%
<b>Bobcats / Trapper</b>	4.2	7.1	7.5	69%	-5%
<b>Season Length</b>	82 days	82 days	113	0%	-27%
<b>Kitten/Adult Female</b>	0.63	0.97	0.54	54%	80%
<b>Adult Male/ Adult Female</b>	1.51	1.63	1.56	8%	5%

of furbearers (Table 1). Recruitment, whether it is 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 1.6, was indicative of a healthy bobcat population.

### **Population Status and Analysis**

Furbearer populations in northwestern Nevada appear healthy and at sufficient numbers to maintain population viability. Two consecutive years of wet springtime conditions should equate to higher production levels, enhanced survival and improved recruitment for the Region’s furbearers. Over the long term, the bobcat population has shown 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 for bobcats.

Gray fox and kit fox populations were 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, fluctuate around annual climatic conditions and the resulting local water levels. Beaver numbers are thought to be substantial in the Carson, Truckee and Walker watersheds, but this analysis may be biased by increased complaints, which are influenced by climatic conditions, and the resultant water flows.

Some furbearers are trapped year-round to alleviate depredation and nuisance issues. There are several private companies doing this work, mainly along the Carson Front, assuaging NDOW personnel from responding to non-emergency calls and reducing costs to NDOW by thousands of dollars. Per the depredation permits that are issued, these companies must report annual take of furbearing mammals. In 2010, these companies reported the take of 42 beaver and 28 muskrat.

## EASTERN REGION

### Harvest

During the 2010-11 season, 1,974 furbearers were taken in the Eastern Region. Furbearer harvest for the two previous years was 884 in 2009-10 and 1,732 in 2008-09. This year's harvest represents a 123% increase over last year's fur harvest and a 14% increase over the harvest from 2 years ago. More trappers were afield during 2010-11 than the previous year. Comparisons of current and historic Eastern Region furbearer and predator harvest for several species are presented in Table 1. For a complete list please see furbearer tables in the appendix.

Table 1. Eastern Region Furbearer Harvest.

Species:	AVERAGE	2009-10	2010-11	Percent Change	
	2000-10			Prev. Year	10-year-avg.
Beaver	152	217	279	28.57%	83.55%
Muskrat	23	20	168	740.00%	630.43%
Coyote	719	265	682	157.36%	-5.15%
Gray Fox	88	18	96	433.33%	9.09%
Kit Fox	22	3	12	300.00%	-45.45%
Red Fox	6	4	4	0.00%	-33.33%
Otter	7	4	28	600.00%	300.00%

During the 2010-11 trapping season, fur values were approximately the same as the 2009-10 season, with the exception of bobcats. Trapper interest remained elevated largely due to bobcat prices (average \$415.25) which represented a 46% increase from the previous year and well above (+60%) the 10-year-average (\$260). Prices and trapper interest are expected to remain high in the coming trapping season.

### Population Status

Prey base populations (rodents and lagomorphs) appear to be rebounding throughout the Region from the low population levels of the last several years. The exceptional precipitation levels of the past winter and spring should aid in the continued recovery of these prey populations.

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 harvest increased substantially from the 2009-10 season, although the rate of harvest was comparable to the long-term average. 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 widespread with populations present in most valleys. Kit fox harvest increased during the past season, but harvest information indicates trapping interest is relatively low.

Coyote harvest increased by 157% during the past season but was still below the 10-year average. The average price for coyote pelts stayed approximately the same as in 2009-10, but was still below the long-term average. In addition to sport harvest, Wildlife Service's personnel removed coyotes in response to livestock depredation complaints and the Department's predator management program.

The 2010-11 Eastern Region beaver harvest increased over the previous year, and was above the long-term average. 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. 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 relatively 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.

The number of bobcats harvested in the Eastern Region during the 2010-11 season was more than double that of the 2009-2010 season (table 2). The number of trap days required to catch a cat slightly increased from the previous year but was well below the long-term average. Juvenile production was up significantly (0.81) from the previous season (0.50) and well above the long-term average (0.51). The number of cats per trapper (5.3) was the more than last year and above the long-term average as well. Bobcat pelt prices rose dramatically (46%) in 2010-11.

Table 2. Eastern Region Bobcat Harvest.

	2009-10	2010-11	10 yr Average	Percent Change	
				Prev. Year	10 Year Avg.
<b>Bobcat Harvest</b>	277	575	786	108%	-27%
<b>Bobcat Trappers</b>	82	105	128	28%	-18%
<b>Trap Days</b>	37,042	79,016	130,190	113%	-39%
<b>Trap Days / Cat</b>	136	143	177	5.1%	-19%
<b>Bobcats / Trapper</b>	3.4	5.5	6.1	62%	-10%
<b>Season Length</b>	81	82	113	1%	-27%

### **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 two consecutive years of low juvenile production, the bobcat season was reduced from 120 days to 81 days for the 2009-10 season, and 82 days for the 2010-11 season. Production was 0.50 during the 2009-10 year, and 0.81 for the 2010-11 season. This year's production represents a 54% increase over the ten-year-average and a 11% increase over the long-term average. Following good production of the past 2 years, the Commission approved a longer season for the upcoming 2011-12 trapping season. Bobcat populations are healthy and stable in the Eastern Region.

Beaver harvest in the Eastern Region increased in 2010-11, and was well 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.

While otter harvest was up significantly in the 2010-11 season, the number trapped was still quite negligible. 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, 2,075 animals were harvested in the Southern Region during the 2010-11 trapping year.

This figure represented a 6% increase compared to 1,956 animals harvested in 2009-10. Notable changes relative to last year involved decreased harvest of gray fox and beaver, and increased harvest of coyote and kit fox. Harvest figures as well as short- and long-term perspectives are presented in table 1.

Table 1. SOUTHERN REGION FURBEARER HARVEST

	Average 2000-09	2008-09	2009-10	2010-11	%Difference Short-term	%Difference Long-term
<b>Beaver</b>	13.5	39	18	<b>4</b>	-78%	70%
<b>Muskrat</b>	23.7	0	0	<b>0</b>	NA	NA
<b>Coyote</b>	477.0	672	374	<b>499</b>	33%	5%
<b>Gray Fox</b>	622.7	981	720	<b>446</b>	-38%	-28%
<b>Kit Fox</b>	137.7	215	250	<b>295</b>	18%	114%

Harvest levels over the short and long term decreased for gray fox. Conversely, kit fox harvest levels over the short and long term increased. Over the long term, beaver and muskrat harvest has been erratic. In the 2010-11 trapping seasons, commonly sought species associated with higher average prices included bobcat, raccoon, gray fox and kit fox. Bobcat and gray fox seasons were not concurrent in 2010-11. The gray fox season (November 1, 2010—February 28, 2011) remained unchanged from last year. Because of contracted bobcat populations throughout Nevada, the bobcat season was 82 days. The bobcat season opened December 1, 2010 and closed February 20, 2011, and was similar to the season authorized last year.

### **Bobcat**

In the Southern Region, 787 bobcats were harvested through trapping and shooting during the 2010-11 season, which reflected a 47% increase relative to the 2009-10 season. Compared to the long-term average, bobcat harvest in 2010-11 represented a 7% decrease (Table 2).

In the 2010-11 season, more trappers harvested more bobcats while expending nearly the same time per bobcat compared to trappers in 2009-10. The Southern Region bobcat harvest (trapping and shooting) comprised 31% of the statewide total, which reflected a decrease relative to the 43% proportion reported last year. Current trapping figures as well as short- and long-term harvest perspectives are presented in Table 2.

Table 2. SOUTHERN REGION BOBCAT HARVEST

	Average 2000-09	2008-09	2009-10	2010-11	%Difference Short-term	%Difference Long-term
<b>Bobcat Harvest</b>	846	932	535	<b>787</b>	47%	-7%
<b>Bobcat Trappers</b>	121	184	107	<b>124</b>	16%	3%
<b>Trap Days</b>	151,124	181,312	88,694	<b>132,541</b>	49%	-12%
<b>Trap Days/Cat</b>	197	210	176	<b>173</b>	-2%	-12%
<b>Bobcats/Trapper</b>	7.0	5.1	5.0	<b>6.3</b>	26%	-10%
<b>Season Length</b>	116.3	120	81	<b>82</b>	1%	-29%

**Population Status**

Bobcat harvest data compiled after the 2010-11 season indicate a kitten per adult female ratio of 0.46, which reflected a 6% decrease relative to the same production index reported last year. Viewed over the long term, the kitten per adult female ratio in 2011 was 25% below the long-term (1980-2011) average ratio of 0.617.

The Mojave Desert bobcat population experienced a 5% increase in the kitten per adult female ratio from 0.42 in 2009-10 to 0.44. However, compared to the long-term (1980-11) average ratio of 0.67 kittens per adult female, the Mojave Desert population experienced a 34% decrease in kittens per adult female.

The Great Basin bobcat population experienced a 27% increase in the ratio of kittens per adult female from 0.56 in 2009-10 to 0.71. Compared to the long-term (1980-11) average ratio of 0.704 kittens per adult female, the Great Basin population experienced a modest 1% increase 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 Pahrnagat Valley, Lincoln County, and Overton Wildlife Management Area, Clark County.

In 2005 and 2006, lightning caused wildfires in both Clark County and Lincoln County 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 2011-12 season are anticipated to vary across areas despite moderately high demand and market prices. Bobcat trapper participation is anticipated to increase slightly relative to the 2010-11 season. Trappers may encounter increased bobcat abundances in some areas. It is anticipated the availability of bobcats in the upcoming season will likely be influenced by lower recruitment rates in recent successive years. Harvest levels of gray fox and kit fox are expected to remain high as a function of incidental catch among bobcat trappers.

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**SUMMARY OF STATEWIDE UPLAND GAME HARVEST 1966-2010**  
**From Post-season Questionnaire**

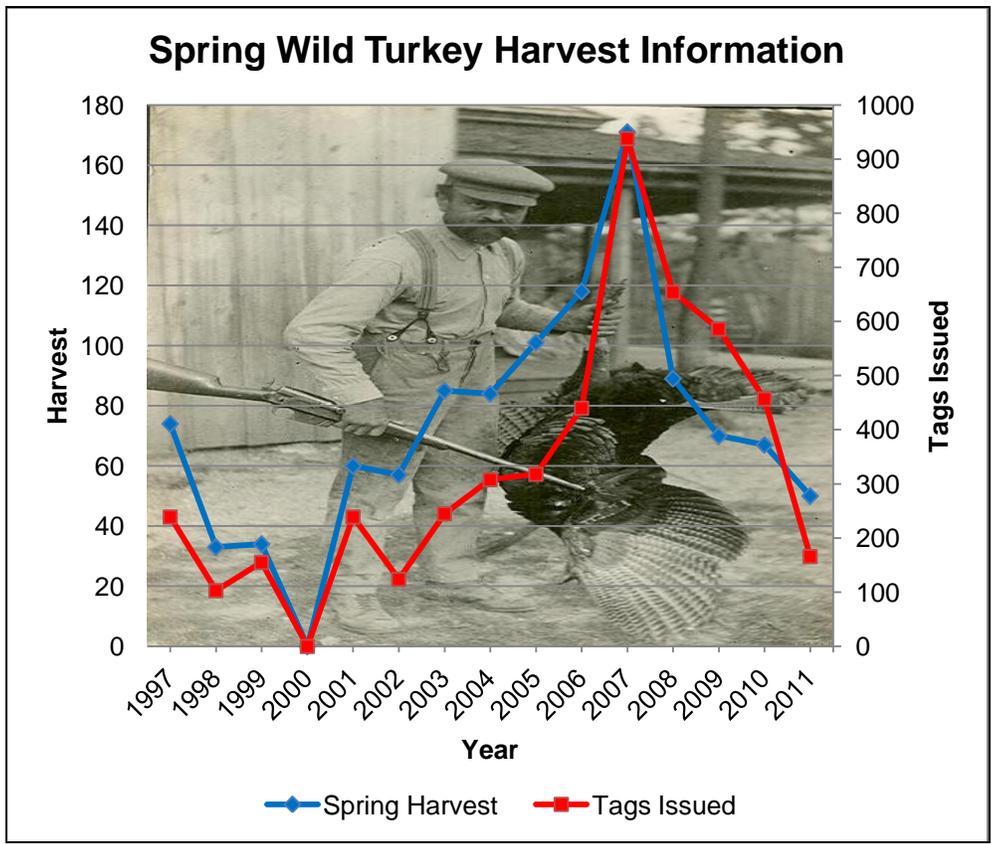
Year	Sage Grouse	Hunters	Blue Grouse	Hunters	Chukar Partridge	Hunters	Hungarian Partridge	Hunters
1966	6,138	3,883	451	506	28,963	6,028	ND	ND
1967	7,284	4,584	408	564	48,984	8,376	ND	ND
1968	11,765	5,499	975	559	78,064	10,047	ND	ND
1969	23,270	7,605	767	611	124,353	14,536	ND	ND
1970	23,775	9,180	645	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
<b>2010</b>	<b>7,353</b>	<b>3,827</b>	<b>1,599</b>	<b>1,375</b>	<b>83,660</b>	<b>14,770</b>	<b>3,656</b>	<b>1,300</b>

**SUMMARY OF STATEWIDE UPLAND GAME HARVEST 1966-2010**  
**From Post-season Questionnaire (page 2)**

<b>Year</b>	<b>Quail</b>	<b>Hunters</b>	<b>Pheasant</b>	<b>Hunters</b>	<b>Rabbit</b>	<b>Hunters</b>	<b>Dove</b>	<b>Hunters</b>
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	48,629	4,404
2008	53,150	8,262	463	588	15,878	2,691	51,786	4,493
2009	33,139	4,426	741	798	17,553	3,468	45,954	4,184
<b>2010</b>	<b>29,976</b>	<b>3,937</b>	<b>722</b>	<b>547</b>	<b>11,805</b>	<b>2,587</b>	<b>54,405</b>	<b>4,681</b>

<b>TURKEY RETURN CARD DATA</b>				<b>STATEWIDE SUMMARY</b>						<b>SPRING 2011</b>			
Hunt Area	Tag	# Tags	# Qstr.	%	Effort					Harvest			Chose Not to Harvest
	Quota	Issued	Rtnd	Rtn	# Succ.	%Succ.	Hunter Days	Scout	DNH	Tom	Jake	Lost	
<b>Elko Co. - Unit 091</b>	5	5	3	60%	1	33%	28	4	0	1	0	1	0
<b>Elko Co. - Unit 101</b>	5	5	4	80%	3	100%	9	4	1	2	1	0	0
<b>Elko Co. - Unit 102 &amp; 065</b>	17	17	15	88%	5	38%	50	24	2	4	1	1	1
<b>Elko &amp; White Pine - Unit 103</b>	CLOSED												
<b>Lander Co. - Units 151 &amp; 152</b>	3	3	3	100%	2	67%	18	0	0	2	0	0	0
<b>Lincoln County</b>	33	33	30	91%	9	32%	105	65	2	7	2	0	2
<b>Lincoln County (Youth)</b>	33	33	20	61%	1	6%	44	20	2	1	0	0	1
<b>Pershing County</b>	10	10	10	100%	6	60%	27	14	0	5	1	0	2
<b>Mason Valley WMA</b>	15	15	15	100%	9	64%	38	17	1	3	6	0	2
<b>Moapa Valley</b>	9	9	8	89%	4	57%	15	9	1	3	1	0	0
<b>White Pine Co. - Unit 115</b>	15	15	11	73%	5	45%	65	22	0	5	0	1	2
<b>Lyon County except MVWMA</b>	15	15	4	27%	4	100%	5	9	0	4	0	0	0
<b>Churchill County - Unit 181 &amp; 182</b>	2	2	0	0%			0	0	0				
<b>Paradise Valley</b>	4	4	4	100%	1	33%	7	5	1	1	0	0	1
<b>TOTALS:</b>	<b>166</b>	<b>166</b>	<b>127</b>	<b>77%</b>	<b>50</b>	<b>43%</b>	<b>411</b>	<b>193</b>	<b>10</b>	<b>38</b>	<b>12</b>	<b>3</b>	<b>11</b>

<b>SUMMARY OF STATEWIDE TURKEY HARVEST 1997-2011</b>						
<i>Year</i>	<i>Harvest</i>		<i>Tags Issued</i>		<i>Hunter Effort (days)</i>	
	<i>Spring</i>	<i>Fall</i>	<i>Spring</i>	<i>Fall</i>	<i>Spring</i>	<i>Fall</i>
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
2011	50	Closed	166	Closed	411	Closed
<b>TOTALS:</b>	<b>1043</b>	<b>332</b>	<b>4806</b>	<b>1056</b>	<b>9789</b>	<b>1393</b>
<b>AVERAGE:</b>	<b>80</b>	<b>28</b>	<b>370</b>	<b>88</b>	<b>1224</b>	<b>199</b>



**Summary of Statewide Fur Harvest 1980-2011  
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
<b>2009-10</b>	<b>918</b>	<b>4</b>	<b>11</b>	<b>627</b>	<b>74</b>	<b>5</b>	<b>731</b>	<b>95</b>	<b>114</b>	<b>363</b>	<b>821</b>	<b>4</b>	<b>77</b>	<b>1,240</b>	<b>1,514</b>	<b>\$431,438</b>
<b>2010-11</b>	<b>868</b>	<b>8</b>	<b>2</b>	<b>515</b>	<b>105</b>	<b>28</b>	<b>2,180</b>	<b>125</b>	<b>115</b>	<b>619</b>	<b>715</b>	<b>6</b>	<b>100</b>	<b>2,527</b>	<b>2,147</b>	<b>\$1,150,888</b>
<b>Average</b>	<b>738</b>	<b>26</b>	<b>3</b>	<b>716</b>	<b>109</b>	<b>9</b>	<b>6,482</b>	<b>85</b>	<b>94</b>	<b>547</b>	<b>726</b>	<b>8</b>	<b>225</b>	<b>2,213</b>	<b>4,305</b>	<b>\$651,040</b>

## NEVADA FUR HARVEST 2010-2011

Region	County	Beaver	Muskrat	Coyote	Bobcat	G. Fox	K. Fox	Mink	Otter	Badger	Weasel	Raccoon	Striped Skunk	Spotted Skunk	Ring-Tail Cat	R. Fox
<b>Western</b>	Carson	13	13	6	0	1	4	0	0	0	0	3	1	0	0	0
	Churchill	25	997	80	94	0	34	0	0	0	0	13	0	0	3	0
	Douglas	38	556	64	35	23	0	37	0	1	0	10	6	0	0	0
	Humboldt	1	0	181	244	3	33	0	0	8	0	0	9	0	0	0
	Lyon	92	130	118	101	101	83	19	0	6	1	44	44	4	0	0
	Mineral	0	0	38	81	11	11	0	0	3	0	0	0	0	0	0
	Pershing	0	0	157	150	19	126	0	0	9	0	1	0	0	0	0
	Storey	30	148	33	23	10	0	0	0	1	0	9	3	3	0	0
	Washoe	33	128	289	451	5	21	5	0	5	0	33	20	0	0	1
	<b>TOTALS:</b>		<b>232</b>	<b>1972</b>	<b>966</b>	<b>1179</b>	<b>173</b>	<b>312</b>	<b>61</b>	<b>0</b>	<b>33</b>	<b>1</b>	<b>113</b>	<b>83</b>	<b>7</b>	<b>3</b>
<b>Eastern</b>	Elko	279	168	351	226	3	1	64	28	21	1	9	9	1	1	1
	Eureka	0	0	73	81	25	3	0	0	1	0	0	0	3	1	0
	Lander	0	0	66	109	59	5	0	0	4	0	0	0	0	0	0
	White Pine	0	0	192	115	9	3	0	0	13	0	1	0	1	0	3
	<b>TOTALS:</b>		<b>279</b>	<b>168</b>	<b>682</b>	<b>531</b>	<b>96</b>	<b>12</b>	<b>64</b>	<b>28</b>	<b>39</b>	<b>1</b>	<b>10</b>	<b>9</b>	<b>5</b>	<b>2</b>
<b>Southern</b>	Clark	0	0	158	201	260	99	0	0	6	0	9	0	1	0	0
	Esmeralda	0	0	47	121	13	27	0	0	9	0	0	0	0	0	0
	Lincoln	3	0	101	298	115	78	0	0	5	0	1	0	0	3	1
	Nye	1	0	193	197	58	91	0	0	8	0	1	0	0	0	0
	<b>TOTALS:</b>		<b>4</b>	<b>0</b>	<b>499</b>	<b>817</b>	<b>446</b>	<b>295</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>1</b>	<b>3</b>
<b>Statewide Totals:</b>		<b>515</b>	<b>2140</b>	<b>2147</b>	<b>2527</b>	<b>715</b>	<b>619</b>	<b>125</b>	<b>28</b>	<b>100</b>	<b>2</b>	<b>134</b>	<b>92</b>	<b>13</b>	<b>8</b>	<b>6</b>

## NEVADA TRAPPERS BY SPECIES AND COUNTY 2010-2011

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	1	1	0	1	1	0	0	0	0	1	1	0	0	0
	Churchill	3	9	13	23	0	8	0	0	0	0	3	0	0	1	0
	Douglas	4	5	10	10	5	0	1	0	1	0	3	3	0	0	0
	Humboldt	1	0	16	21	1	6	0	0	4	0	0	3	0	0	0
	Lyon	8	6	21	22	19	8	4	0	4	1	5	8	1	0	0
	Mineral	0	0	6	9	5	3	0	0	1	0	0	0	0	0	0
	Pershing	0	0	15	17	8	5	0	0	5	0	1	0	0	0	0
	Storey	1	1	6	9	4	0	0	0	1	0	4	1	3	0	1
	Washoe	8	4	32	39	5	11	1	0	5	0	5	9	0	0	1
	<b>TOTALS:</b>		<b>26</b>	<b>26</b>	<b>120</b>	<b>150</b>	<b>48</b>	<b>42</b>	<b>6</b>	<b>0</b>	<b>21</b>	<b>1</b>	<b>22</b>	<b>25</b>	<b>4</b>	<b>1</b>
Eastern	Elko	16	8	39	37	4	3	4	5	11	1	4	1	1	1	3
	Eureka	0	0	13	14	5	1	0	0	1	0	0	0	1	1	1
	Lander	0	0	8	12	8	1	0	0	3	0	0	0	0	0	0
	White Pine	0	0	25	25	4	3	0	0	5	0	1	0	1	0	3
	<b>TOTALS:</b>		<b>16</b>	<b>8</b>	<b>85</b>	<b>88</b>	<b>21</b>	<b>8</b>	<b>4</b>	<b>5</b>	<b>20</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>2</b>
Southern	Clark	0	0	33	23	27	19	0	0	8	0	6	0	1	1	0
	Esmeralda	0	0	5	16	8	4	0	0	4	0	0	0	0	0	0
	Lincoln	3	0	18	35	30	19	0	0	6	0	1	0	0	3	1
	Nye	1	0	27	35	13	15	0	0	6	0	1	0	0	0	0
	<b>TOTALS:</b>		<b>4</b>	<b>0</b>	<b>83</b>	<b>109</b>	<b>78</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>4</b>
<b>Statewide Totals:</b>		<b>46</b>	<b>34</b>	<b>288</b>	<b>347</b>	<b>147</b>	<b>107</b>	<b>10</b>	<b>5</b>	<b>65</b>	<b>2</b>	<b>35</b>	<b>26</b>	<b>8</b>	<b>7</b>	<b>10</b>

## NEVADA FUR HARVEST VALUE 2010-2011

From Post-Season Questionnaire

Species	Total Value of Catch	AVERAGE PRICE		% Change
		2009-10	2010-11	
Beaver	\$6,442.65	\$13.33	\$12.51	-6.2%
Otter	\$0.00	\$0.00	\$0.00	NA
Muskrat	\$10,400.40	\$5.61	\$4.86	-13.4%
Mink	\$1,135.00	\$12.95	\$9.08	-29.9%
Raccoon	\$1,415.04	\$9.00	\$10.56	17.3%
Bobcat	\$1,049,336.75	\$284.00	\$415.25	46.2%
Coyote	\$57,389.31	\$27.07	\$26.73	-1.3%
Badger	\$1,247.00	\$17.32	\$12.47	-28.0%
Striped Skunk	\$398.36	\$5.80	\$4.33	-.25.3%
Ring-tailed Cat	\$0.00	\$0.00	\$0.00	NA
Kit Fox	\$7,322.77	\$11.71	\$11.83	1.0%
Gray Fox	\$15,679.95	\$21.39	\$21.93	2.2%
Red Fox	\$121.44	\$22.81	\$20.24	-11.3%
<b>Total</b>	<b>\$1,150,888.67</b>			

## SUMMARY OF STATEWIDE WATERFOWL HARVEST – 1970-2010

### From Post-Season Questionnaire

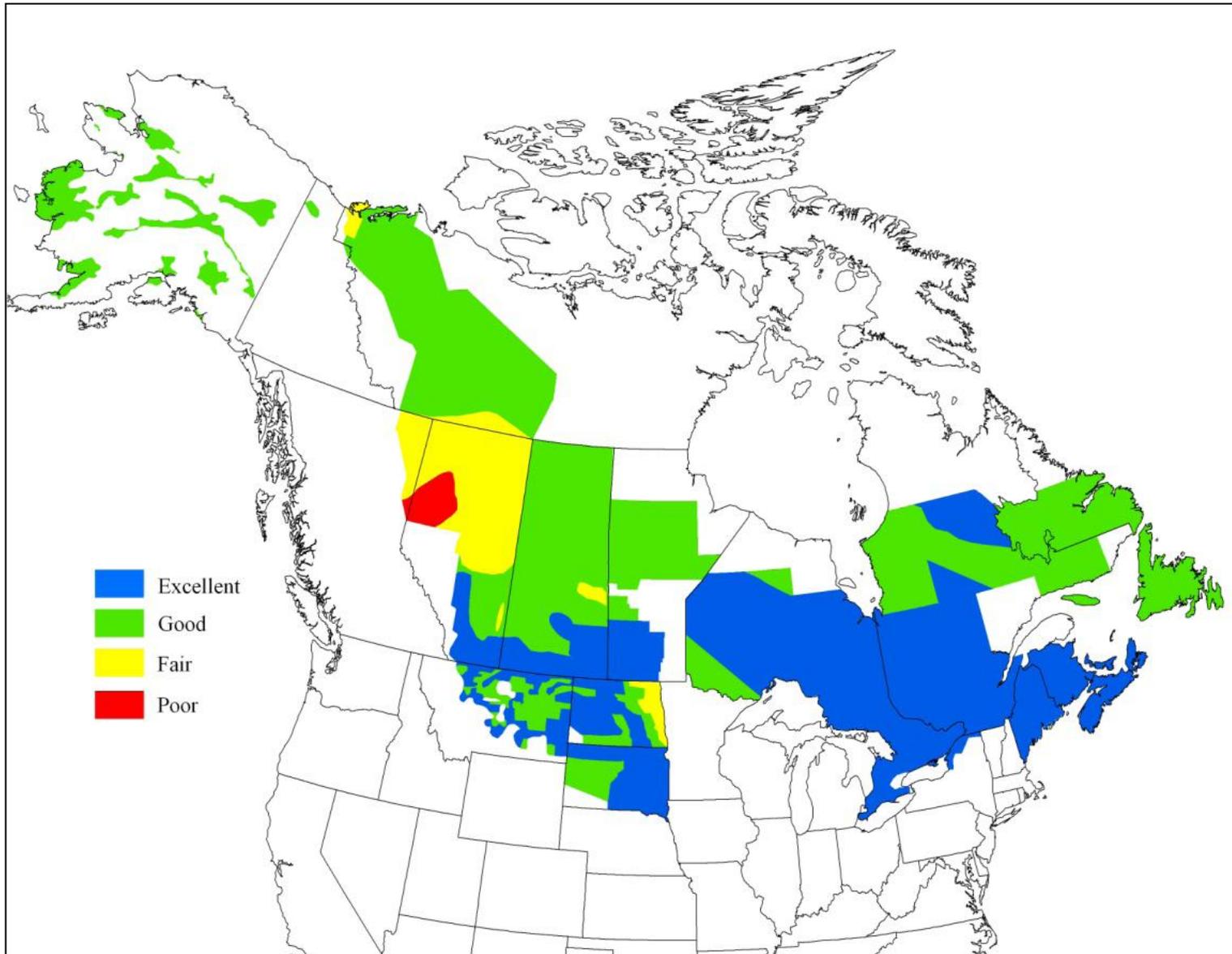
Year	Duck Stamp Sales		Est'd. NV Hunters	Ducks	Geese			Tundra Swans*	Total Waterfowl
	Federal	Nevada			Dark	White	Total		
1970	14,361	--	12,913	147,211	6,649	3,488	10,137	208	157,556
1971	15,029	--	16,906	178,107	7,357	4,655	12,012	102	190,221
1972	12,701	--	14,605	149,565	8,066	1,756	9,822	124	159,511
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	8,581	4,525	69,893	6,719	848	7,567	147	77,607
2007	6,337	7,863	4,038	54,459	5,339	414	5,753	200	60,412
2008	5,995	6,562	3,212	42,916	4,384	325	4,709	113	47,738
2009		5,889	4,273	51,696	6,400	718	7,118	56	58,870
2010		6,715	5,944	76,987	7,798	1,675	9,473	118	86,578

Individual year NV duck stamp sales noted by year beginning in 1989.

Individual Nevada hunters are calculated beginning in 2005.

<b>NEVADA MID-WINTER WATERFOWL INVENTORY DATA</b>									
<b>2007-2011</b>							<b>Current year compared to</b>		
<b>SPECIES</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>5 Year Average</b>	<b>47 Year Average</b>	<b>Highest</b>	<b>Lowest</b>
<b>Mallard</b>	25,979	28,950	17,326	15,148	19,868	22,093	14,081	28,950	4,321
<b>Gadwall</b>	4,551	3,055	2,739	1,042	3,253	4,104	2,908	12,832	550
<b>Widgeon</b>	2,414	820	1,941	1,267	1,534	2,013	1,300	4,154	205
<b>G.W. Teal</b>	6,222	3,973	4,601	2,010	7,296	6,866	6,491	26,150	540
<b>B.W. Teal</b>	0	0	0	0	0	0	8	75	0
<b>Cinnamon Teal</b>	0	0	2	55	90	13	45	660	0
<b>Shoveler</b>	5,321	5,654	4,679	1,738	8,620	4,331	3,433	24,700	224
<b>Pintail</b>	11,420	11,360	3,221	1,500	3,290	7,497	6,237	24,765	446
<b>Wood Duck</b>	10	2	46	35	141	25	32	150	0
<b>Redhead</b>	13,330	4,171	2,669	3,595	5,857	6,050	2,408	13,330	100
<b>Canvasback</b>	7,087	6,484	3,167	5,170	4,920	5,541	2,826	10,475	233
<b>Scaup</b>	989	262	116	215	222	456	234	1,850	10
<b>Ringneck</b>	3,316	2,155	803	728	1,791	1,880	817	3,316	13
<b>Goldeneye</b>	661	528	358	357	476	420	609	2,093	40
<b>Bufflehead</b>	2,300	1,727	1,480	1,019	1,217	1,754	882	2,571	153
<b>Ruddy</b>	10,970	5,659	10,432	6,162	9,064	7,470	4,727	22,532	268
<b>Merganser</b>	868	2,149	1,483	520	558	1,467	1,694	8,806	241
<b>Miscellaneous</b>	127	82	99	118	32	105	49	127	3
<b>Total Ducks</b>	<b>95,565</b>	<b>77,031</b>	<b>55,162</b>	<b>40,679</b>	<b>68,229</b>	<b>72,085</b>	<b>48,755</b>	<b>128,540</b>	<b>15,739</b>
<b>% Change from Previous Year</b>	<b>4%</b>	<b>-19%</b>	<b>-28%</b>	<b>-26%</b>	<b>68%</b>	<b>-5%</b>	<b>40%</b>		
<b>Dark Geese</b>	18,038	24,826	21,590	17,210	18,070	20,501	15,556	35,806	3,457
<b>Light Geese</b>	403	1,578	39	325	487	713	806	7,678	10
<b>Total Geese</b>	<b>18,441</b>	<b>26,404</b>	<b>21,629</b>	<b>17,535</b>	<b>18,557</b>	<b>21,214</b>	<b>15,244</b>	<b>33,730</b>	<b>3,651</b>
<b>% Change from Previous Year</b>	<b>-16%</b>	<b>43%</b>	<b>-18%</b>	<b>-19%</b>	<b>6%</b>	<b>-13%</b>	<b>22%</b>		
<b>Trumpeter Swan</b>	60	28	38	31	28	37	28	60	10
<b>Tundra Swan</b>	3,803	2,266	1,191	351	606	2,072	2,208	10,742	31
<b>Total Waterfowl</b>	<b>117,869</b>	<b>105,729</b>	<b>78,020</b>	<b>58,596</b>	<b>87,420</b>	<b>95,408</b>	<b>65,773</b>	<b>149,746</b>	<b>22,097</b>
<b>% Change from Previous Year</b>	<b>1%</b>	<b>-10%</b>	<b>-26%</b>	<b>-25%</b>	<b>49%</b>	<b>-8%</b>	<b>33%</b>		
<b>Coot</b>	39,330	17,827	43,380	25,193	39,130	31,798	19,512	65,280	3,926

# 2011 Breeding Waterfowl Habitat Conditions



## APPENDIX 2

### 2010-11 SMALL GAME AND WATERFOWL HARVEST DATA

DERIVED FROM MODIFIED POST-SEASON QUESTIONNAIRE

Small Game Post-season Questionnaire ESTIMATED HARVEST								
WATERFOWL		Species:	<b>DUCKS</b>			Run date: 8/24/2011		
HUNTING SEASON: 2010-11		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
<b>WESTERN</b>	Carson City	357	46	334	7.79	1.07	0.5%	0.5%
	Churchill	38,178	3,353	17,668	11.39	2.16	49.6%	39.1%
	Douglas	4,710	435	3,127	10.83	1.51	6.1%	5.1%
	Humboldt	1,138	134	906	8.49	1.26	1.5%	1.6%
	Lyon	5,460	929	3,762	5.88	1.45	7.1%	10.8%
	Mineral	2,192	144	922	15.23	2.38	2.8%	1.7%
	Pershing	514	160	445	3.20	1.15	0.7%	1.9%
	Storey	500	62	347	8.05	1.44	0.7%	0.7%
	Washoe	3,932	749	3,631	5.25	1.08	5.1%	8.7%
<b>EASTERN</b>	Elko	2,463	448	1,678	5.50	1.47	3.2%	5.2%
	Eureka	599	111	379	5.38	1.58	0.8%	1.3%
	Lander	370	65	383	5.65	0.97	0.5%	0.8%
	White Pine	628	124	448	5.05	1.40	0.8%	1.4%
<b>SOUTHERN</b>	Clark	7,079	664	3,497	10.66	2.02	9.2%	7.7%
	Esmeralda	0	0	0	0	0	0.0%	0.0%
	Lincoln	5,031	638	2,287	7.89	2.20	6.5%	7.4%
	Nye	3,837	510	1,662	7.52	2.31	5.0%	6.0%
<b>TOTALS:</b>		<b>76,987</b>	<b>8,574</b>	<b>41,475</b>	<b>8.98</b>	<b>1.86</b>	<b>100%</b>	<b>100%</b>
Estimated # of Individual Hunters:				<b>5,944</b>				

NEVADA DEPARTMENT OF WILDLIFE								
Small Game Post-season Questionnaire ESTIMATED HARVEST								
WATERFOWL		Species:		DARK GEESE			Run date: 8/24/2011	
HUNTING SEASON: 2010-11				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	124	36	258	3.45	0.48	1.6%	1.2%
	Churchill	1,829	883	4,521	2.07	0.40	23.4%	28.6%
	Douglas	1,636	314	2,260	5.21	0.72	21.0%	10.2%
	Humboldt	396	79	520	5.04	0.76	5.1%	2.5%
	Lyon	1,537	579	2,097	2.66	0.73	19.7%	18.7%
	Mineral	105	29	229	3.56	0.46	1.3%	1.0%
	Pershing	36	29	121	1.22	0.30	0.5%	1.0%
	Storey	65	26	79	2.50	0.83	0.8%	0.8%
EASTERN	Washoe	844	376	1,881	2.24	0.45	10.8%	12.2%
	Elko	317	131	628	2.43	0.51	4.1%	4.2%
	Eureka	173	69	291	2.52	0.60	2.2%	2.2%
	Lander	65	36	239	1.82	0.27	0.8%	1.2%
SOUTHERN	White Pine	59	39	118	1.50	0.50	0.8%	1.3%
	Clark	334	209	1,335	1.59	0.25	4.3%	6.8%
	Esmeralda	0	0	0	0	0	0.0%	0.0%
	Lincoln	219	170	592	1.29	0.37	2.8%	5.5%
	Nye	59	85	252	0.69	0.23	0.8%	2.8%
<b>TOTALS:</b>		<b>7,798</b>	<b>3,091</b>	<b>15,420</b>	<b>2.52</b>	<b>0.51</b>	<b>100%</b>	<b>100%</b>
<b>Estimated # of Individual Hunters:</b>				<b>2,538</b>				

NEVADA DEPARTMENT OF WILDLIFE								
Small Game Post-season Questionnaire ESTIMATED HARVEST								
WATERFOWL		Species:		WHITE GEESE			Run date: 8/19/8/24/112009	
HUNTING SEASON: 2010-11				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	3	7	0.00	0.00	0.0%	0.3%
	Churchill	821	445	2,306	1.85	0.36	49.0%	40.2%
	Douglas	170	75	360	2.26	0.47	10.2%	6.8%
	Humboldt	7	10	33	0.67	0.20	0.4%	0.9%
	Lyon	114	170	635	0.67	0.18	6.8%	15.4%
	Mineral	124	29	245	4.22	0.51	7.4%	2.7%
	Pershing	20	13	43	1.50	0.46	1.2%	1.2%
	Storey	3	3	33	1.00	0.10	0.2%	0.3%
	Washoe	59	111	432	0.53	0.14	3.5%	10.1%
EASTERN	Elko	128	3	52	39.00	2.44	7.6%	0.3%
	Eureka	7	3	13	2.00	0.50	0.4%	0.3%
	Lander	0	0	0	0	0	0.0%	0.0%
	White Pine	3	10	56	0.33	0.06	0.2%	0.9%
SOUTHERN	Clark	124	134	818	0.93	0.15	7.4%	12.1%
	Esmeralda	0	0	0	0	0	0.0%	0.0%
	Lincoln	49	52	291	0.94	0.17	2.9%	4.7%
	Nye	46	43	157	1.08	0.29	2.7%	3.8%
<b>TOTALS:</b>		<b>1,675</b>	<b>1,106</b>	<b>5,479</b>	<b>1.51</b>	<b>0.31</b>	<b>100%</b>	<b>100%</b>
<b>Estimated # of Individual Hunters:</b>				<b>903</b>				

NEVADA DEPARTMENT OF WILDLIFE								
Small Game Post-season Questionnaire ESTIMATED HARVEST								
WATERFOWL		Species:		COOT			Run date: 8/24/2011	
HUNTING SEASON: 2010-11				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	13	10	82	1.33	0.16	0.8%	2.2%
	Churchill	625	160	622	3.90	1.01	38.1%	35.3%
	Douglas	7	16	131	0.40	0.05	0.4%	3.6%
	Humboldt	0	0	0	0	0	0.0%	0.0%
	Lyon	164	56	229	2.94	0.71	10.0%	12.2%
	Mineral	167	10	88	17.00	1.89	10.2%	2.2%
	Pershing	0	3	20	0.00	0.00	0.0%	0.7%
	Storey	0	0	0	0	0	0.0%	0.0%
	Washoe	124	69	370	1.81	0.34	7.6%	15.1%
EASTERN	Elko	16	7	29	2.50	0.56	1.0%	1.4%
	Eureka	0	0	0	0	0	0.0%	0.0%
	Lander	3	3	10	1.00	0.33	0.2%	0.7%
	White Pine	7	10	65	0.67	0.10	0.4%	2.2%
SOUTHERN	Clark	451	75	586	6.00	0.77	27.5%	16.5%
	Esmeralda	0	0	0	0	0	0.0%	0.0%
	Lincoln	13	13	46	1.00	0.29	0.8%	2.9%
	Nye	49	23	49	2.14	1.00	3.0%	5.0%
<b>TOTALS:</b>		<b>1,639</b>	<b>455</b>	<b>2,326</b>	<b>3.60</b>	<b>0.70</b>	<b>100%</b>	<b>100%</b>
<b>Estimated # of Individual Hunters:</b>				<b>350</b>				

NEVADA DEPARTMENT OF WILDLIFE								
Small Game Post-season Questionnaire ESTIMATED HARVEST								
WATERFOWL		Species:		SNIPE			Run date: 8/24/2011	
HUNTING SEASON: 2010-11				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	3	7	0.00	0.00	0.0%	1.1%
	Churchill	213	121	419	1.76	0.51	57.0%	40.2%
	Douglas	3	20	131	0.17	0.03	0.9%	6.5%
	Humboldt	0	0	0	0	0	0.0%	0.0%
	Lyon	46	43	167	1.08	0.27	12.3%	14.1%
	Mineral	3	3	3	1.00	1.00	0.9%	1.1%
	Pershing	0	3	20	0.00	0.00	0.0%	1.1%
	Storey	0	0	0	0	0	0.0%	0.0%
	Washoe	33	36	272	0.91	0.12	8.8%	12.0%
EASTERN	Elko	0	0	0	0	0	0.0%	0.0%
	Eureka	0	0	0	0	0	0.0%	0.0%
	Lander	0	0	0	0	0	0.0%	0.0%
	White Pine	3	10	56	0.33	0.06	0.9%	3.3%
SOUTHERN	Clark	65	39	262	1.67	0.25	17.5%	13.0%
	Esmeralda	0	0	0	0	0	0.0%	0.0%
	Lincoln	0	10	26	0.00	0.00	0.0%	3.3%
	Nye	7	13	23	0.50	0.29	1.8%	4.3%
<b>TOTALS:</b>		<b>373</b>	<b>301</b>	<b>1,384</b>	<b>1.24</b>	<b>0.27</b>	<b>100%</b>	<b>100%</b>
<b>Estimated # of Individual Hunters:</b>				<b>252</b>	100.0%			

NEVADA DEPARTMENT OF WILDLIFE								
Small Game Post-season Questionnaire ESTIMATED HARVEST								
MIGRATORY BIRDS			Species: <b>MOURNING DOVE</b>		Run date: 8/24/2009			
HUNTING SEASON: 2010-11				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	620	83	216	7.43	2.86	1.1%	1.8%
	Churchill	10,077	591	2,487	17.06	4.05	18.5%	12.6%
	Douglas	1,247	160	444	7.79	2.81	2.3%	3.4%
	Humboldt	1,806	160	388	11.28	4.66	3.3%	3.4%
	Lyon	10,124	832	2,359	12.17	4.29	18.6%	17.8%
	Mineral	602	45	160	13.35	3.76	1.1%	1.0%
	Pershing	1,396	110	345	12.63	4.05	2.6%	2.4%
	Storey	857	61	205	14.07	4.18	1.6%	1.3%
EASTERN	Washoe	12,219	1,008	3,389	12.12	3.61	22.5%	21.5%
	Elko	1,044	185	397	5.65	2.63	1.9%	3.9%
	Eureka	401	56	110	7.12	3.63	0.7%	1.2%
	Lander	347	45	122	7.70	2.85	0.6%	1.0%
SOUTHERN	White Pine	609	110	302	5.51	2.01	1.1%	2.4%
	Clark	7,915	728	2,566	10.87	3.08	14.5%	15.6%
	Esmeralda	383	23	70	17.00	5.48	0.7%	0.5%
	Lincoln	2,183	230	591	9.49	3.69	4.0%	4.9%
	Nye	2,575	253	918	10.20	2.81	4.7%	5.4%
<b>TOTALS:</b>		<b>54,405</b>	<b>4,681</b>	<b>15,069</b>	<b>11.62</b>	<b>3.61</b>	<b>100%</b>	<b>100%</b>
Estimated # of Individual Hunters:				<b>4,329</b>				

NEVADA DEPARTMENT OF WILDLIFE					
Small Game Post-season Questionnaire ESTIMATED HARVEST					
MIGRATORY BIRDS		Species: <b>White-winged Dove</b>		Run date: 8/24/2009	
HUNTING SEASON: 2010-11			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	168	33	5.03	83.4%	85.3%
Nye	33	6	5.80	16.6%	14.7%
<b>TOTALS:</b>	<b>201</b>	<b>39</b>	<b>5.15</b>	<b>100%</b>	<b>100%</b>
Estimated # of Individual Hunters:			<b>58</b>		

NEVADA DEPARTMENT OF WILDLIFE						
Small Game Post-season Questionnaire ESTIMATED HARVEST						
MIGRATORY BIRDS		Species: Eurasian Collared Dove		Run date: 8/24/2009		
HUNTING SEASON: 2010-11			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	10	3	3.00	0.4%	1.1%
	Churchill	341	55	6.17	14.2%	17.8%
	Douglas	109	13	8.64	4.5%	4.1%
	Humboldt	127	18	6.88	5.3%	5.9%
	Lyon	340	58	5.90	14.1%	18.6%
	Mineral	6	3	1.67	0.2%	1.1%
	Pershing	113	12	9.80	4.7%	3.7%
	Storey	2	1	2.00	0.1%	0.4%
	Washoe	17	7	2.50	0.7%	2.2%
EASTERN	Elko	97	10	9.33	4.0%	3.3%
	Eureka	29	2	12.50	1.2%	0.7%
	Lander	30	5	6.50	1.2%	1.5%
	White Pine	41	5	9.00	1.7%	1.5%
SOUTHERN	Clark	920	85	10.80	38.3%	27.5%
	Esmeralda	46	5	10.00	1.9%	1.5%
	Lincoln	30	10	2.89	1.2%	3.3%
	Nye	146	17	8.47	6.1%	5.6%
<b>TOTALS:</b>		<b>2,403</b>	<b>310</b>	<b>7.76</b>	<b>100%</b>	<b>100%</b>
<b>Estimated # of Individual Hunters:</b>			<b>221</b>			

NEVADA DEPARTMENT OF WILDLIFE								
Small Game Post-season Questionnaire ESTIMATED HARVEST								
MIGRATORY BIRDS		Species:		AMERICAN CROW			Run date: 8/24/2009	
HUNTING SEASON: 2010-11				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	21	9	45	2.25	0.46	4.6%	10.7%
	Douglas	0	0	0	0.00	0.00	0.0%	0.0%
	Humboldt	82	10	61	7.89	1.34	18.1%	12.0%
	Lyon	36	8	14	4.43	2.58	7.9%	9.3%
	Mineral	23	2	5	10.00	5.00	5.1%	2.7%
	Pershing	0	0	0	0.00	0.00	0.0%	0.0%
	Storey	0	0	0	0.00	0.00	0.0%	0.0%
EASTERN	Washoe	75	13	58	5.91	1.30	16.5%	14.7%
	Elko	40	14	29	2.92	1.40	8.9%	16.0%
	Eureka	0	0	0	0.00	0.00	0.0%	0.0%
	Lander	55	7	28	8.00	2.00	12.2%	8.0%
SOUTHERN	White Pine	47	3	82	13.67	0.58	10.4%	4.0%
	Clark	49	12	73	4.30	0.68	10.9%	13.3%
	Esmeralda	1	1	2	1.00	0.50	0.3%	1.3%
	Lincoln	15	2	22	6.50	0.68	3.3%	2.7%
	Nye	8	5	20	1.75	0.41	1.8%	5.3%
<b>TOTALS:</b>		<b>452</b>	<b>86</b>	<b>436</b>	<b>5.24</b>	<b>1.04</b>	<b>100%</b>	<b>100%</b>
<b>Estimated # of Individual Hunters:</b>				<b>61</b>				

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-Season Questionnaire**

**UPLAND GAME SURVEY**

**SAGE-GROUSE**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	0	0	0	0	0	0%	0%
	Churchill	154	128	187	1.2	0.8	2%	3%
	Douglas*	0	2	6	0.0	0.0	0%	0%
	Humboldt	1672	859	1711	1.9	1.0	23%	22%
	Lyon*	5	8	13	0.6	0.4	0%	0%
	Mineral*	4	2	6	2.0	0.7	0%	0%
	Pershing*	10	5	7	2.0	1.4	0%	0%
	Storey*	0	2	6	0.0	0.0	0%	0%
	Washoe	1226	698	1400	1.8	0.9	17%	18%
	<b>Western Region Subtotals:</b>	<b>3071</b>	<b>1704</b>	<b>3336</b>	<b>1.8</b>	<b>0.9</b>	<b>42%</b>	<b>45%</b>
<b>EASTERN</b>	Elko	2088	1072	2452	1.9	0.8	28%	28%
	Eureka	649	266	534	2.5	1.1	9%	7%
	Lander	567	272	541	1.6	0.8	8%	7%
	White Pine	524	236	515	2.1	1.0	7%	6%
	<b>Eastern Region Subtotals:</b>	<b>3829</b>	<b>1846</b>	<b>4042</b>	<b>2.1</b>	<b>0.9</b>	<b>52%</b>	<b>48%</b>
<b>SOUTHERN</b>	Clark*	0	0	0	0.0	0.0	0%	0%
	Esmeralda*	4	3	7	1.3	0.6	0%	0%
	Lincoln*	0	2	4	0.0	0.0	0%	0%
	Nye	449	272	751	1.9	1.1	6%	7%
	<b>Southern Region Subtotals:</b>	<b>453</b>	<b>277</b>	<b>762</b>	<b>1.6</b>	<b>0.6</b>	<b>6%</b>	<b>7%</b>
<b>TOTALS:</b>		<b>7353</b>	<b>3827</b>	<b>8139</b>	<b>1.9</b>	<b>0.9</b>	<b>100%</b>	<b>100%</b>

\* 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, an inflated number of birds harvested was calculated. These numbers are not appropriate so the raw data is being used to indicate some reported hunting (poaching) activity in closed units.

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**BLUE GROUSE**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	66	90	188	0.7	0.3	4%	7%
	Churchill	0	9	24	0.0	0.0	0%	1%
	Douglas	69	81	164	0.9	0.4	4%	6%
	Humboldt	0	0	0	0	0	0%	0%
	Lyon	6	6	63	1.0	0.1	0%	0%
	Mineral	0	0	0	0	0	0%	0%
	Pershing	0	0	0	0	0	0%	0%
	Storey	3	6	6	0.5	0.5	0%	0%
	Washoe	293	341	723	0.9	0.4	18%	25%
	<b>Western Region Subtotals:</b>	<b>436</b>	<b>532</b>	<b>1169</b>	<b>0.8</b>	<b>0.4</b>	<b>27%</b>	<b>39%</b>
<b>EASTERN</b>	Elko	556	448	1058	1.2	0.5	35%	33%
	Eureka	36	21	42	1.7	0.9	2%	2%
	Lander	140	78	170	1.8	0.8	9%	6%
	White Pine	377	224	556	1.7	0.7	24%	16%
	<b>Eastern Region Subtotals:</b>	<b>1109</b>	<b>771</b>	<b>1826</b>	<b>1.4</b>	<b>0.6</b>	<b>69%</b>	<b>56%</b>
<b>SOUTHERN</b>	Clark	0	12	114	0.0	0.0	0%	1%
	Esmeralda	0	0	0	0	0	0%	0%
	Lincoln	0	9	45	0.0	0.0	0%	1%
	Nye	54	51	114	1.1	0.5	3%	4%
	<b>Southern Region Subtotals:</b>	<b>54</b>	<b>72</b>	<b>272</b>	<b>0.8</b>	<b>0.2</b>	<b>3%</b>	<b>5%</b>
<b>TOTALS:</b>		<b>1599</b>	<b>1375</b>	<b>3267</b>	<b>1.2</b>	<b>0.5</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

UPLAND GAME SURVEY			RUFFED GROUSE					
HUNTING SEASON: 2010-11			<i>Expanded Data</i>					
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	0	0	0%	0%
	Churchill	0	0	0	0	0	0%	0%
	Douglas	0	0	0	0	0	0%	0%
	Humboldt	38	32	110	1.2	0.3	21%	13%
	Lyon	0	0	0	0	0	0%	0%
	Mineral	0	0	0	0	0	0%	0%
	Pershing	0	0	0	0	0	0%	0%
	Storey	0	0	0	0	0	0%	0%
	Washoe	0	0	0	0	0	0%	0%
	<b>Western Region Subtotals:</b>		<b>38</b>	<b>32</b>	<b>110</b>	<b>1.2</b>	<b>0.3</b>	<b>21.2%</b>
EASTERN	Elko	132	204	532	0.6	0.2	74%	84%
	Eureka	0	0	0	0	0	0%	0%
	Lander	8	8	21	1.0	0.4	5%	3%
	White Pine	0	0	0	0	0	0%	0%
	<b>Eastern Region Subtotals:</b>		<b>140</b>	<b>212</b>	<b>553</b>	<b>0.7</b>	<b>0.3</b>	<b>78.8%</b>
SOUTHERN	Clark	0	0	0	0	0	0%	0%
	Esmeralda	0	0	0	0	0	0%	0%
	Lincoln	0	0	0	0	0	0%	0%
	Nye	0	0	0	0	0	0%	0%
	<b>Southern Region Subtotals:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0%</b>
<b>TOTALS:</b>		<b>177</b>	<b>244</b>	<b>663</b>	<b>0.7</b>	<b>0.3</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**CHUKAR**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	297	108	327	2.8	0.9	0%	1%
	Churchill	2201	559	1769	3.9	1.2	3%	4%
	Douglas	318	123	503	2.6	0.6	0%	1%
	Humboldt	26794	3247	14634	8.3	1.8	32%	22%
	Lyon	3040	787	3008	3.9	1.0	4%	5%
	Mineral	340	114	605	3.0	0.6	0%	1%
	Pershing	5889	1108	3546	5.3	1.7	7%	8%
	Storey	744	170	510	4.4	1.5	1%	1%
	Washoe	25011	3830	15605	6.5	1.6	30%	26%
	<b>Western Region Subtotals:</b>		<b>64634</b>	<b>10045</b>	<b>40506</b>	<b>6.4</b>	<b>1.6</b>	<b>77%</b>
<b>EASTERN</b>	Elko	11222	1728	7074	6.5	1.6	13%	12%
	Eureka	1096	587	2270	1.9	0.5	1%	4%
	Lander	1550	695	3025	2.2	0.5	2%	5%
	White Pine	235	95	260	2.5	0.9	0%	1%
	<b>Eastern Region Subtotals:</b>		<b>14103</b>	<b>3105</b>	<b>12629</b>	<b>4.5</b>	<b>1.1</b>	<b>17%</b>
<b>SOUTHERN</b>	Clark	1383	701	2754	2.0	0.5	2%	5%
	Esmeralda	316	93	80	3.4	4.0	0%	1%
	Lincoln	934	342	732	2.7	1.3	1%	2%
	Nye	2289	484	638	4.7	3.6	3%	3%
	<b>Southern Region Subtotals:</b>		<b>4923</b>	<b>1620</b>	<b>4204</b>	<b>3.0</b>	<b>1.2</b>	<b>6%</b>
<b>TOTALS:</b>		<b>83660</b>	<b>14770</b>	<b>57339</b>	<b>5.7</b>	<b>1.5</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**HUNGARIAN PARTRIDGE**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	0	0	0	0	0	0%	0%
	Churchill	0	0	0	0	0	0%	0%
	Douglas	0	0	0	0	0	0%	0%
	Humboldt	1732	461	1964	3.8	0.9	47%	35%
	Lyon	0	0	0	0	0	0%	0%
	Mineral	0	0	0	0	0	0%	0%
	Pershing	17	33	119	0.5	0.1	0%	3%
	Storey	0	0	0	0	0	0%	0%
	Washoe	335	56	358	5.9	0.9	9%	4%
	<b>Western Region Subtotals:</b>	<b>2083</b>	<b>551</b>	<b>2442</b>	<b>3.8</b>	<b>0.9</b>	<b>57%</b>	<b>42%</b>
<b>EASTERN</b>	Elko	1300	567	2939	2.3	0.4	36%	44%
	Eureka	119	93	557	1.3	0.2	3%	7%
	Lander	146	83	226	1.8	0.6	4%	6%
	White Pine	7	7	30	1.0	0.2	0%	1%
	<b>Eastern Region Subtotals:</b>	<b>1572</b>	<b>750</b>	<b>3752</b>	<b>2.1</b>	<b>0.4</b>	<b>43%</b>	<b>58%</b>
<b>SOUTHERN</b>	Clark	0	0	0	0	0	0%	0%
	Esmeralda	0	0	0	0	0	0%	0%
	Lincoln	0	0	0	0	0	0%	0%
	Nye	0	0	0	0	0	0%	0%
	<b>Southern Region Subtotals:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0%</b>
<b>TOTALS:</b>		<b>3656</b>	<b>1300</b>	<b>6193</b>	<b>2.8</b>	<b>0.6</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**CALIFORNIA QUAIL**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	611	80	270	7.7	2.3	2%	2%
	Churchill	4554	404	1885	11.3	2.4	15%	10%
	Douglas	2095	225	1583	9.3	1.3	7%	6%
	Humboldt	4966	708	2720	7.0	1.8	17%	18%
	Lyon	6717	671	2894	10.0	2.3	22%	17%
	Mineral	168	26	193	6.6	0.9	1%	1%
	Pershing	1708	233	750	7.3	2.3	6%	6%
	Storey	688	105	333	6.5	2.1	2%	3%
	Washoe	5793	952	3607	6.1	1.6	19%	24%
	<b>Western Region Subtotals:</b>		<b>27298</b>	<b>3402</b>	<b>14235</b>	<b>8.0</b>	<b>1.9</b>	<b>91%</b>
<b>EASTERN</b>	Elko	156	54	185	2.9	0.8	1%	1%
	Eureka	37	11	40	0.0	0.0	0%	0%
	Lander	23	23	68	1.0	0.3	0%	1%
	White Pine	20	6	9	3.5	2.3	0%	0%
	<b>Eastern Region Subtotals:</b>		<b>236</b>	<b>94</b>	<b>301</b>	<b>2.5</b>	<b>0.8</b>	<b>1%</b>
<b>SOUTHERN</b>	Clark	1950	318	1552	0.0	0.0	7%	8%
	Esmeralda	34	11	48	0.0	0.0	0%	0%
	Lincoln	219	65	247	0.0	0.0	1%	2%
	Nye	239	45	148	1.0	0.7	1%	1%
	<b>Southern Region Subtotals:</b>		<b>2442</b>	<b>441</b>	<b>1995</b>	<b>5.5</b>	<b>1.2</b>	<b>8%</b>
<b>TOTALS:</b>		<b>29976</b>	<b>3937</b>	<b>16531</b>	<b>7.6</b>	<b>1.8</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**GAMBEL'S QUAIL**

**HUNTING SEASON:**

**2010-11**

*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
<b>WESTERN</b>	Carson City	0	0	0	0	0	0%	0%
	Churchill	0	0	0	0	0	0%	0%
	Douglas	0	0	0	0	0	0%	0%
	Humboldt	0	0	0	0	0	0%	0%
	Lyon	0	0	0	0	0	0%	0%
	Mineral	0	0	0	0	0	0%	0%
	Pershing	0	0	0	0	0	0%	0%
	Storey	0	0	0	0	0	0%	0%
	Washoe	0	0	0	0	0	0%	0%
	<b>Western Region Subtotals:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0%</b>
<b>EASTERN</b>	Elko	0	0	0	0	0	0%	0%
	Eureka	0	0	0	0	0	0%	0%
	Lander	0	0	0	0	0	0%	0%
	White Pine	0	0	0	0	0	0%	0%
	<b>Eastern Region Subtotals:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0%</b>
<b>SOUTHERN</b>	Clark	15142	1958	8303	7.7	1.8	80%	73%
	Esmeralda	100	25	77	4.0	1.3	1%	1%
	Lincoln	3134	564	1865	5.6	1.7	17%	21%
	Nye	487	125	380	3.9	1.3	3%	5%
	<b>Southern Region Subtotals</b>		<b>18863</b>	<b>2672</b>	<b>10625</b>	<b>7.1</b>	<b>1.8</b>	<b>100%</b>
<b>TOTALS:</b>		<b>18863</b>	<b>2672</b>	<b>10625</b>	<b>7.1</b>	<b>1.8</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**MOUNTAIN QUAIL**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	44	9	40	4.9	1.1	4%	3%
	Churchill	98	27	141	3.6	0.7	9%	8%
	Douglas	186	53	248	3.5	0.8	17%	15%
	Humboldt	0	0	0	0	0	0%	0%
	Lyon	327	79	299	4.1	1.1	30%	22%
	Mineral	53	16	75	3.4	0.7	5%	4%
	Pershing	0	0	0	0	0	0%	0%
	Storey	28	8	30	3.7	1.0	3%	2%
	Washoe	289	128	502	2.3	0.6	26%	35%
	<b>Western Region Subtotals:</b>		<b>1026</b>	<b>320</b>	<b>1335</b>	<b>3.2</b>	<b>0.8</b>	<b>94%</b>
<b>EASTERN</b>	Elko	32	17	2	1.9	13.0	3%	5%
	Eureka	0	0	0	0	0	0%	0%
	Lander	0	1	0	0.0	0	0%	0%
	White Pine	0	0	0	0	0	0%	0%
	<b>Eastern Region Subtotals:</b>		<b>32</b>	<b>18</b>	<b>2</b>	<b>1.8</b>	<b>13.0</b>	<b>3%</b>
<b>SOUTHERN</b>	Clark	0	0	0	0	0	0%	0%
	Esmeralda	0	6	17	0.0	0.0	0%	2%
	Lincoln	0	0	0	0	0	0%	0%
	Nye	34	17	62	2.0	0.5	3%	5%
	<b>Southern Region Subtotals:</b>		<b>34</b>	<b>23</b>	<b>79</b>	<b>1.4</b>	<b>0.4</b>	<b>3%</b>
<b>TOTALS:</b>		<b>1092</b>	<b>361</b>	<b>1417</b>	<b>3.0</b>	<b>0.8</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**PHEASANT**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	0	0	0	0	0	0%	0%
	Churchill	3	17	8	0.2	0.4	0%	3%
	Douglas	7	3	0	2.0	0	1%	1%
	Humboldt	499	325	156	1.5	3.2	69%	59%
	Lyon	10	72	39	0.1	0.3	1%	13%
	Mineral	0	0	0	0	0	0%	0%
	Pershing	62	62	45	1.0	1.4	9%	11%
	Storey	0	0	0	0	0	0%	0%
	Washoe	72	14	6	5.3	12.0	10%	3%
	<b>Western Region Subtotals:</b>		<b>653</b>	<b>492</b>	<b>254</b>	<b>1.3</b>	<b>2.6</b>	<b>91%</b>
<b>EASTERN</b>	Elko	7	7	7	1.0	1.0	1%	1%
	Eureka	48	10	24	4.7	2.0	7%	2%
	Lander	0	3	3	0.0	0.0	0%	1%
	White Pine	0	0	0	0	0	0%	0%
	<b>Eastern Region Subtotals:</b>		<b>55</b>	<b>21</b>	<b>34</b>	<b>2.7</b>	<b>1.6</b>	<b>8%</b>
<b>SOUTHERN</b>	Clark	0	17	127	0.0	0.0	0%	3%
	Esmeralda	0	0	0	0	0	0%	0%
	Lincoln	7	14	27	0.5	0.3	1%	3%
	Nye	7	3	10	2.0	0.7	1%	1%
	<b>Southern Region Subtotals:</b>		<b>14</b>	<b>34</b>	<b>164</b>	<b>0.4</b>	<b>0.1</b>	<b>2%</b>
<b>TOTALS:</b>		<b>722</b>	<b>547</b>	<b>452</b>	<b>1.3</b>	<b>1.6</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**RABBIT**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	97	31	137	3.1	0.7	1%	1%
	Churchill	840	131	518	6.4	1.6	7%	5%
	Douglas	427	97	416	4.4	1.0	4%	4%
	Humboldt	1137	179	792	6.3	1.4	10%	7%
	Lyon	1043	225	1308	4.6	0.8	9%	9%
	Mineral	77	26	57	3.0	1.4	1%	1%
	Pershing	319	83	322	3.9	1.0	3%	3%
	Storey	80	31	68	2.5	1.2	1%	1%
	Washoe	2427	461	2165	5.3	1.1	21%	18%
	<b>Western Region Subtotals:</b>		<b>6447</b>	<b>1265</b>	<b>5783</b>	<b>5.1</b>	<b>1.1</b>	<b>55%</b>
<b>EASTERN</b>	Elko	1236	239	1077	5.2	1.1	10%	9%
	Eureka	225	40	245	5.6	0.9	2%	2%
	Lander	570	66	236	8.7	2.4	5%	3%
	White Pine	439	103	373	4.3	1.2	4%	4%
	<b>Eastern Region Subtotals:</b>		<b>2470</b>	<b>447</b>	<b>1931</b>	<b>5.5</b>	<b>1.3</b>	<b>21%</b>
<b>SOUTHERN</b>	Clark	1675	555	2763	3.0	0.6	14%	21%
	Esmeralda	26	6	17	4.5	1.5	0%	0%
	Lincoln	595	182	729	3.3	0.8	5%	7%
	Nye	593	131	667	4.5	0.9	5%	5%
	<b>Southern Region Subtotals:</b>		<b>2889</b>	<b>875</b>	<b>4176</b>	<b>3.3</b>	<b>0.7</b>	<b>24%</b>
<b>TOTALS:</b>		<b>11805</b>	<b>2587</b>	<b>11890</b>	<b>4.6</b>	<b>1.0</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**PYGMY RABBIT**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	8	4	4	2.0	2.0	1%	3%
	Churchill	31	4	23	8.0	1.3	6%	3%
	Douglas	8	4	4	2.0	2.0	1%	3%
	Humboldt	0	0	0	0	0	0%	0%
	Lyon	46	12	43	4.0	1.1	9%	9%
	Mineral	0	0	0	0	0	0%	0%
	Pershing	0	0	0	0	0	0%	0%
	Storey	4	8	19	0.5	0.2	1%	6%
	Washoe	104	31	104	3.4	1.0	20%	24%
	<b>Western Region Subtotals:</b>		<b>201</b>	<b>62</b>	<b>197</b>	<b>3.3</b>	<b>1.0</b>	<b>39%</b>
<b>EASTERN</b>	Elko	209	27	174	7.7	1.2	40%	21%
	Eureka	4	8	43	0.5	0.1	1%	6%
	Lander	15	8	19	2.0	0.8	3%	6%
	White Pine	8	8	15	1.0	0.5	1%	6%
	<b>Eastern Region Subtotals:</b>		<b>236</b>	<b>50</b>	<b>251</b>	<b>4.7</b>	<b>0.9</b>	<b>45%</b>
<b>SOUTHERN</b>	Clark	0	0	0	0	0	0%	0%
	Esmeralda	0	12	116	0.0	0.0	0%	9%
	Lincoln	85	8	62	11.0	1.4	16%	6%
	Nye	0	0	0	0	0	0%	0%
	<b>Southern Region Subtotals:</b>		<b>85</b>	<b>19</b>	<b>178</b>	<b>4.4</b>	<b>0.5</b>	<b>16%</b>
<b>TOTALS:</b>		<b>522</b>	<b>131</b>	<b>626</b>	<b>4.0</b>	<b>0.8</b>	<b>100%</b>	<b>100%</b>

**NEVADA DEPARTMENT OF WILDLIFE  
Small Game Post-season Questionnaire**

**UPLAND GAME SURVEY**

**WHITE-TAILED JACKRABBIT**

**HUNTING SEASON: 2010-11**

*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
<b>WESTERN</b>	Carson City	15	8	8	2.0	2.0	3%	4%
	Churchill	0	0	0	0	0	0%	0%
	Douglas	0	0	0	0	0	0%	0%
	Humboldt	158	15	53	10.5	3.0	33%	8%
	Lyon	0	0	0	0	0	0%	0%
	Mineral	0	0	0	0	0	0%	0%
	Pershing	0	0	0	0	0	0%	0%
	Storey	0	0	0	0	0	0%	0%
	Washoe	0	0	0	0	0	0%	0%
		<b>Western Region Subtotals:</b>	<b>173</b>	<b>23</b>	<b>60</b>	<b>7.7</b>	<b>2.9</b>	<b>36%</b>
<b>EASTERN</b>	Elko	188	83	166	2.3	1.1	39%	44%
	Eureka	8	23	113	0.3	0.1	2%	12%
	Lander	90	23	23	4.0	4.0	19%	12%
	White Pine	0	0	0	0	0	0%	0%
		<b>Eastern Region Subtotals:</b>	<b>286</b>	<b>128</b>	<b>301</b>	<b>2.2</b>	<b>1.0</b>	<b>59%</b>
<b>SOUTHERN</b>	Clark	0	0	0	0	0	0%	0%
	Esmeralda	0	23	226	0.0	0.0	0%	12%
	Lincoln	0	0	0	0	0	0%	0%
	Nye	23	15	23	1.5	1.0	5%	8%
		<b>Southern Region Subtotals:</b>	<b>23</b>	<b>38</b>	<b>249</b>	<b>0.6</b>	<b>0.1</b>	<b>5%</b>
<b>TOTALS:</b>		<b>482</b>	<b>188</b>	<b>610</b>	<b>2.6</b>	<b>0.8</b>	<b>100%</b>	<b>100%</b>