

Effects of Sage-grouse Hunting in Nevada



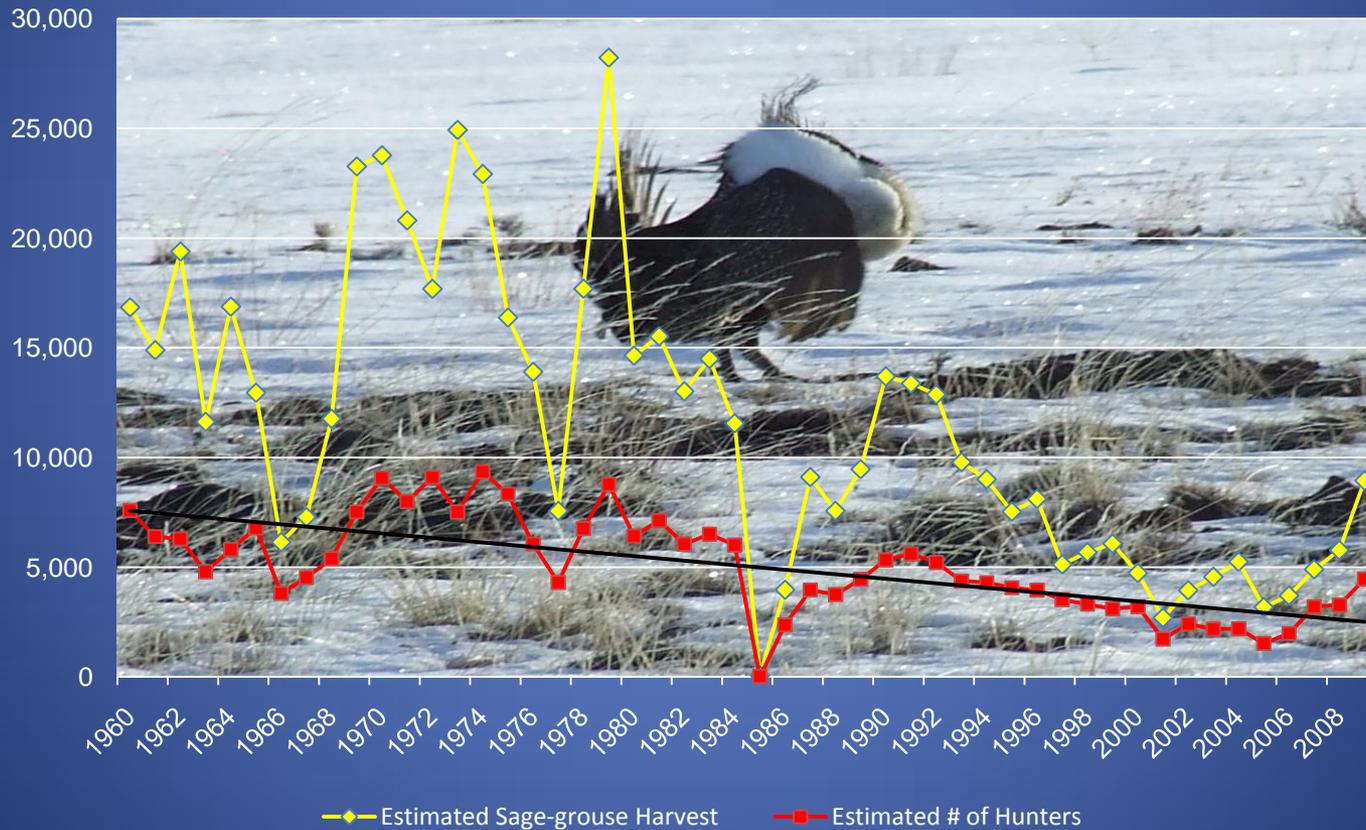
Nevada Board of Wildlife
Commissioners
August 13, 2011

Current Season Structure

- Season is from September 25 – October 9 (15 days total)
- Bag Limit = 2, Possession Limit = 4
- Separate from the General Season, there is a two day season in Hunt Unit 184.
- A special permit system is in place for the Sheldon NWR with 75 permits issued for two separate, two day seasons in September.

Long term Harvest Statistics

Nevada Sage-grouse Harvest Information



WAFWA Management Guidelines

- If populations are declining (for 3 or more consecutive years) or trends are unknown, seasons and bag limits should be conservative (1- or 2-bird daily limit and a 1 to 4-week season) for hunting seasons allowing firearms, or suspended (for all types of hunting).
- Where populations are hunted, ***harvest rates should not exceed 10% of the estimated fall population*** to minimize negative effects on the subsequent year's breeding population.
- Populations should not be hunted where ***<300 birds comprise the breeding population*** (i.e., <100 males are counted on leks).

Annual Harvest in Relation to Fall Population Estimates

	2004	2005	2006	2007	2008	2009
Harvest	5244	3176	3701	4897	5775	8944
Fall Population Estimate	146,327	155,303	115,385	107,601	139,266	141,996
Percentage	3.6%	2.0%	3.2%	4.6%	4.2%	6.3%

Areas and Units Closed Since 1997

- 5 entire counties and 20 hunt units closed
- Entire NV portion of the Bi-State population including Douglas, Esmeralda, Lyon and Mineral.
- All of Pershing, Lincoln and most of Churchill except Hunt Unit 184.
- Unit 079, 091 and 106 in Elko County
- Unit 032, 035, 042, 044, 046 and 151 in Humboldt
- Unit 151 and 183 in Lander County
- Unit 132, 133, 181, and 251 in Nye County
- Unit 021 and 022 in Washoe County
- Unit 114, 115 and 132 in White Pine County

Bi-State Population

- Has not had an open sage-grouse hunting season in 14 years.
- Currently, the Bi-State Population has a listing priority number of 3 and Greater Sage-grouse have an 8.
- Population numbers on the Nevada side either are declining or remaining stable at low levels in spite of the cessation of hunting.

Existing Peer Reviewed Research

- Connelly et al. (2000) found that predation was the most common cause of death for radio-marked sage-grouse. Gender specific differences in harvest were also found. A total of 504 birds were radio marked of which 36 (7.1%) were shot by hunters.
- Sedinger et al. (2010) found no support for additive effect of harvest on survival in two separate study areas including North Park in Colorado and the Montana Mountains in Nevada.

Existing Peer Reviewed Research

Sedinger et al. 2010

- From 2001-2004, 1,092 sage-grouse were captured and banded resulting in 137 recoveries (12.6%)



Ongoing Research Activities

- Sedinger, Blomberg, Atamian and Nonne
- Assessing effects of utility scale transmission line in Eureka County, NV.
- UNR has banded 852 male sage-grouse of which 30 (3.5%) have been shot and reported.
- A total of 312 females have been captured and banded of which 9 (2.8%) were recovered by hunters.

Ongoing Research

- From 2008-2010 (3-year period), UNR monitored 134 radio-marked females in Eureka County to determine cause of death during the hunting season. *Of these marked birds, two females were shot and killed by hunters and another was wounded and later found. The female mortality over those three years associated with hunting was 2.2%.*

ESA Listing

- The USFWS analyzes five factors when determining whether or not a species warrants listing including:
 - A. The present or threatened destruction, modification, or curtailment of habitat or range.
 - B. Overutilization for commercial, recreational, scientific or educational purposes.
 - C. Disease and predation.
 - D. Inadequacy of regulatory mechanisms to protect the species habitat.
 - E. Other natural or manmade factors affecting the species' continued existence.

ESA Listing

- In 2010, the USFWS determined that Listing Factor A and Listing Factor D posed the most significant threats to Greater Sage-grouse.
- In the USFWS' 2005 finding, 19 different threats to GSG were analyzed by a panel of 7 experts. They found that hunting ranked 16th.
- The top 4 threat identified were: 1) invasive species, 2) infrastructure (roads, transmission lines, fences), 3) wildfires and 4) agriculture (conversion to cropland).

Even though the cessation of sage-grouse hunting may be viewed by some as a conservation action, the decision to move sage-grouse up or down the listing priority scale will have little to do with recreational hunting.

Other States

- Sage-grouse are currently hunted in 9 of 11 states.
- Washington has not hunted sage-grouse in over 20 years (and has not seen an increase in population numbers). They are listed as a state threatened species there.
- North Dakota closed hunting for its small sage-grouse population in 2008 and 2009 due to low lek attendance likely due to West Nile Virus.

Grant Funding

- The Nevada Department of Wildlife receives Pittman-Robertson Act funding (Federal Aid) from the USFWS. Our Sage-grouse Conservation Grant is matched with sportsmen's dollars (25%), or 1:3 match.
- This grant has been used for research, monitoring, local conservation planning and project implementation.
- NDOW receives between \$400,000 and \$600,000 each year through this grant.

Historic vs. Current Range

