Counting Sage-grouse

By Larry Hyslop



NDOW personnel checking Sage-grouse wings turned in by hunters

Everyone wants to know how many Sage-grouse are in Elko County. The problem is no one can accurately count them, any more than we could count mule deer or jackrabbits. The Elko Office of the Nevada Department of Wildlife (NDOW) can only look at population trends regarding Sage-grouse, using two important methods.

Ken Gray is the head game biologist for the local NDOW office. He explained the most vital method is counting birds on their leks, or dancing grounds. NDOW wildlife biologists can spend 96 mornings each spring counting birds on leks. The county has ten volunteers who also reliably count birds on leks, of which I am one. It is a large commitment since leks must be visited before sunrise and rarely can two leks be counted during the same morning.

Elko County contains 726 known leks, but it is so large and remote, there may be 1,000 leks total. Of these, 410 leks were counted this spring, resulting in 3,413 males. NDOW has 21 leks called trend leks, reliably counted each year and visited up to four times per spring. These contained 572 birds this year. NDOW personnel also conduct flights, sometimes in cooperation with the BLM, to search large areas for new leks.

Major concern about Sage-grouse populations only started about 2000, but NDOW does have four trend leks begun in 1983. These bird populations vary widely year to year but a mathematical computation shows a downward trend in these bird populations. Since 2004, 21 Elko County trend leks have shown an approximate 22% reduction in bird numbers.

The birds at trend leks in the northeastern corner of the county have dropped significantly, probably in correlation to the amount of habitat burned. Three leks west of Willow Creek Reservoir have shown a drop after fires in that area and are now rebounding, perhaps in response to reseeding efforts.

All lek count data goes into a state-wide database, allowing analysis of state-wide population trends.

A second method used to estimate population trends comes from Sage-grouse hunters. NDOW puts out 40 wing barrels in Elko County during the short hunting season. In 2011, Elko hunters dropped off 377 wings. By examining these wings, wildlife biologists can determine if each bird was male or female and adult or juvenile.

This allows NDOW to gather an important estimate, the number of chicks per hen produced during the spring and summer. A good year might be 1.8 chicks/hen while a dismally bad year is around 0.8. In 2011, it was about 1.5, which is better than average. Wings also help get an idea of sex ratio, nesting success and hunting success. This data depends totally on hunters helping out by dropping off a wing

from each bird killed. They can also take the time to fill out the needed information on the envelope, including the number of birds observed and number of hunters and days hunted.

The Internet is making it easier to gather needed information. 90% of hunters bought their upland game stamp online this year. 30% of these returned online after the hunt to fill out a questionnaire, the first year this has been offered.

Ken stressed that the Elko office of NDOW works on the ground, collecting and analyzing population data and making recommendations. All major policy and management decisions are made at the Reno and Commission level. NDOW also makes recommendations to the BLM and USFS but all decisions on public lands are made by the land management agencies.

Elko Daily Free Press, "Nature Notes", 10/19/2012 © Gray Jay Press, Elko, NV

Return to Elko Nature Notes