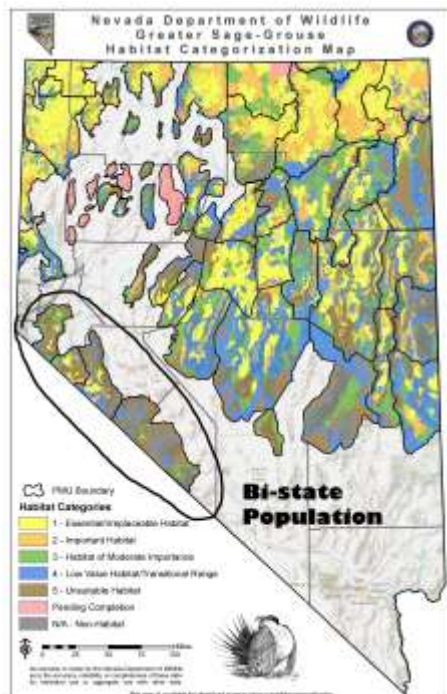


Finding Good Sage-grouse Habitat

By Larry Hyslop



Sage-grouse habitat map showing the separate, isolated Bi-state population

We do not want the sage-grouse listed as an endangered species, so it will be important to protect the habitat needed by sage-grouse. First, we must know what habitat to protect. Mapping this priority habitat is a vital necessity.

Pete Coates is a USGS wildlife biologist. During his talk last week in Elko, he described habitat mapping done in the Bi-state area. The Bi-state bird population spans the Nevada and California border south of Lake Tahoe. This greater sage-grouse population is separate from the main population across Nevada. This smaller population is at greater danger of declining numbers and the U.S. Fish and Wildlife Service will make a decision whether to list this population later this year. A decision on the main bird population will not take place for two more years.

Although this mapping technique was created in the Bi-state area, Pete stated he would love to create the same sort of maps for Elko County and use them as a benchmark for Nevada.

The first step in creating vital habitat maps is gathering data already known. GPS data was gathered from various sources, data showing the land's use by man like agricultural areas, roads and communities. Other sources yielded altitude, slope and ruggedness of the land. Satellite images helped create map layers showing the location of pinon/juniper groves. Areas of native and annual grasses were added. Not only sagebrush areas but the types of sagebrush were gathered.

Once it was known what the ground looked like, the next step was to find out which areas were actually used by sage-grouse. Much of this work had already been done, since for 10 years, radio collars had been placed on birds. Every few hours, the collars recorded the bird's exact position. Collars had been placed on more than 200 birds by seven different agencies in the two states. This data added 15,000 dots of actual bird use to the maps, showing what areas were used by birds during each part of the year.

Another indicator of use was the location of known leks. It was determined a 3.25 mile radius around a lek was important to the birds and therefore, contained important habitat.

All these points of data allowed researchers to define areasw containing priority habitat needed by sage-grouse. To proof this work, a second set of telemetry data was added, containing over 1,000 points. Over 99% of these proofing telemetry points fell within the priority habitat areas already determined.

The Nevada Department of Wildlife has been mapping sage-grouse habitat across Nevada, but their maps do not have the detail available for the Bi-state area. Their maps lack the precise GPS points. However, the types of habitat defined across Nevada agree closely with the Bi-state maps.

For the Bi-state area, good maps have allowed defining the priority habitat needed to protect sage-grouse. Hopefully, this type of detailed research can soon be completed for Elko County.

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