This landscape 200 years ago
by Larry Hyslop

The Great Basin has long been sagebrush country

I have heard a lot of talk recently on what this area of the Great Basin looked like before white settlers and their livestock arrived. What follows is the result of research for my book “Sagebrush Heart: the Sagebrush Landscape of Elko County, Nevada.”

Two hundred years ago, Elko County was not an Eden, not perfect, but its sagebrush ecosystem was “natural,” and had maintained itself for thousands of years. Two hundred years ago, the climate was cooler and wetter due to an event that started in the 4th century, called the Little Ice Age. Plant production was undoubtedly higher at this time.

The sagebrush landscape offered more habitat variety. Sagebrush still dominated the hills and valleys but the land was a mosaic of grasslands and brush. This landscape ran through cycles of sagebrush and grass, governed by wildfires as a disturbance. These fires were common but small in size, started usually by lightning but also by Western Shoshone who lived here.

Grasses stayed green through July’s lightning storms. Typically, sagebrush grew wide enough apart that fire needed to sweep through grass to reach the next sagebrush. Green grasses and forbs helped slow the fire’s spread through the sagebrush. Fires burned relatively cool and often did not even kill the grasses and forbs, merely burned them back to ground level. Even if they were killed, grasses and forbs quickly reestablished and the ground did not remain bare for very long.

Areas recently cleared by fire were grasslands with abundant forbs since these return to burned land much faster than brush. In other areas fire had not visited for a number of years and young, small sagebrush intruded between grasses and forbs. Other areas where fire had not visited for decades held tall sagebrush in thick groves, dense enough to shade out grasses and forbs between them. These thick stands of sagebrush burned readily and were prime for another fire to sweep through and start the cycle all over again.

The land was resilient and could bounce back from fires. It needed fires to maintain its mosaic of sagebrush, forbs and grasses that created variety. Its wildlife depended on this diverse habitat.

On average, such fires moved through the Wyoming big sagebrush about every 50 years, giving grasses, forbs and brush ample time to return and recover. Piñon/juniper forests saw fire
maybe every 20 years and stands were generally restricted to areas safe from fire such as steep, rocky slopes. Desert shrubs and low sagebrush almost never burned.

The sagebrush landscape contained large numbers of jackrabbits and pronghorn antelope grazing on the abundant grasses and forbs. The mountains held herds of bighorn sheep. Mule deer were fairly rare since their preferred food, shrubs such as bitterbrush, were rare. Elk also lived here in small numbers and small groups of bison occasionally wandered into the area from Idaho or Utah. Wolverines occupied the county’s northern mountains. Horses had not yet arrived. Sage-Grouse and cutthroat trout were abundant. Each year, numerous salmon migrated from the Pacific Ocean, through the Snake River and into the county’s northern streams.

© Gray Jay Press, Elko, NV

Return to Elko Nature Notes