Comparing Bison to Cattle



One of 500 bison on Antelope Island

Antelope Island makes for an interesting visit. A seven-mile long causeway across the Great Salt Lake separates this quiet island from the bustling area between Ogden and Salt Lake City. Cindy and I visited this Utah State Park in January. Soon after entering the island, we were driving past some of the approximately 500 bison that live on the island.

Bison have been on the island since 1893. Although livestock have grazed this island, the last sheep left 30 years ago. The island has since been grazed only by bison, which made me curious on the effects of bison grazing and the differences if cattle had grazed here for the last 30 years. My preconceived idea was that bison graze differently and since they have grazed Western grasslands for thousands of years, the island's range must somehow be in better shape.

Steve Bates is the Antelope Island State Park's Range Manager. He told me there have been no scientific studies on the matter but he felt the island's riparian areas might be in better shape. Some studies in other areas have found that bison do not tend to stay on riparian areas as much as cattle. Steve had to qualify that guess, however, since the island has only one perennial stream and its lower end is fenced off to protect its riparian area. The bison get their water from numerous springs.

He said the biggest difference he has found is bison require much less management. They manage on their own all year with no supplemental feeding. When cattle grazed the island they were only there during the growing season.

The island rangelands face the same problems as most rangelands. Wildfires have burned much of the island and helped the establishment of cheatgrass. Introduced weeds are a problem.

The American Bison Society sponsored a November 2010 working paper comparing the grazing of bison or cattle. Bison are often used to restore historical disturbance patterns but this study states such use does more for bison conservation than for restoring ecosystems. Both species can be mismanaged.

A study published in 1999 by the Nature Conservancy also compared the two species and found definitely differences in the two species. Cattle utilize more forbs in their diet and use wooded areas more often. Bison are less productive, taking longer to grow to market size and suffer more stress during handling. They do better in cold, using their powerful heads to sweep aside snow in search of food. This study found bison in the Intermountain West use riparian areas much like cattle.

This study states stocking rates and grazing management determine the long-term health of the land and the animals, not the species of grazer. Cattle may be more appropriate in intensively managed agricultural systems.

So Antelope Island's rangelands are not necessarily in better shape because of bison, but watching these lumbering beasts still makes for an interesting visit.

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