

**Conservation of the
Northern Yellowstone Pronghorn:
*A Report and Possible Approaches
for NPCA's Involvement***



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I. Executive Summary

Although they once flourished in the area, Yellowstone's pronghorn (*Antilocapra americana*) population is now precariously small. Conservation measures are necessary to preserve this iconic population so that it can continue to graze alongside bison and elk in and around our nation's first national park. The Earth Friends Parks Wildlife Initiative, based in the Yellowstone Field Office, provides an ideal vehicle for the National Parks Conservation Association (NPCA) to become engaged in the effort to safeguard this pronghorn population.

Justification

While there are over 600,000 pronghorn in Montana and Wyoming, the Yellowstone population is worthy of conservation for several reasons: 1) it is an iconic species in our country's first national park, 2) Yellowstone is one of few places where pronghorn can maintain their ancient association with bison, and 3) this population still participates in the rare phenomenon of long-distance migration. Pronghorn antelope are not in danger of going extinct throughout the western United States, but Yellowstone's pronghorn are. This pronghorn population deserves to be restored and protected.

History

Pronghorn have roamed the northern range of Yellowstone for thousands of years. They dominated the prairie alongside bison; feeding on forbs and shrubs left ungrazed by the bison. Their fate changed with the settlement of the Yellowstone Valley in the late 19th century, when excessive hunting resulted in the slaughter of thousands of pronghorn. Settlement also resulted in an extensive infrastructure,



A lone pronghorn grazes alongside a herd of bison and a herd of elk in Yellowstone. © Harvey Locke

including fences, roads, railways, and homesteads that cut off pronghorn access to much of their low-elevation winter range.

Since its inception in 1872, Yellowstone National Park has managed its pronghorn with a heavy hand; successfully alternating between efforts to expand and decrease the size of the herd. In recent years, the park has shifted to management that emphasizes natural population regulation and the pronghorn population has been stable at 205-252 animals since 1995. Wildlife biologists and park officials believe this number is too low to ensure long-term survival.

Current Status

The current status of Yellowstone's pronghorn illuminates the need for additional winter range, improving the quality of their existing winter range, increasing overall numbers, and restoration of their historic migration routes.

Pronghorn winter range has been dramatically diminished since the early days of Yellowstone Park. The winter range that remains, approximately 30 square kilometers just north of Gardiner, is only partially within the park boundary. In addition to being extremely small, this winter range has been degraded by agricultural and mining uses.

Supplemental feedings during the first half of the 20th century led a portion of the population to stay on the winter range year-round. Two-thirds of the herd still participates in an abbreviated migration that takes them from their winter range to portions of Yellowstone's northern range up to 50 km away. However, this migration is significantly shorter than seasonal migration that once took Yellowstone's pronghorn all the way down Paradise Valley each winter. Human settlement has effectively ended this migration.

Yellowstone's pronghorn population is considered to be generally healthy, showing few signs of disease. It also demonstrates remarkably good genetic variation for such a small, isolated population. Recruitment levels, however, are alarmingly low, mainly due to predation by coyotes (but potentially connected to their lack of winter range).

Challenges

In his 1996 viability analysis, Goodman states that Yellowstone's pronghorn have an 18 percent probability of extinction within 100 years. This report identifies their major challenges as:

- loss of migration routes and winter range,
- degradation of winter range,
- isolation,
- inbreeding,
- future interruption of migration routes,
- disease, and
- bison management activities.

Opportunities for Action

There are several important opportunities for NPCA to engage in the protection and long-term recovery of this herd. The eight areas of focus include:

1. Improve the Quality of the Winter Range
2. Expand Winter Range
3. Improve Access to Historic Migration Route
4. Support Future Collaboration around Pronghorn Conservation
5. Monitor YNP Management Decisions
6. Raise Public Awareness about the Yellowstone Pronghorn
7. Minimize Harmful Development outside YNP
8. Engage NGOs in Conservation of Yellowstone Pronghorn

Yellowstone's highly significant pronghorn population is in danger of going extinct. Its current size leaves the population vulnerable to inbreeding or extinction in the face of a disease outbreak or a particularly harsh winter. The reasons for this population's struggles are complex, but the small size and poor quality of their winter range are considered substantial limiting factors. This report reviews the history of the Yellowstone pronghorn population, as well as its current status and threats; most importantly, it identifies opportunities for NPCA to support the long-term conservation of this unique sub-population in Yellowstone National Park.

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Full copies of this report are available from the Yellowstone Field Office upon request.