BANFF BISON RESTORATION

Summary of a Proposal by the **Eleanor Luxton Historical Foundation** September 8, 2010

Plains Bison (Bison bison) were historically an important wildlife species in the Bow Valley and along the eastern slopes of the Canadian Rockies (Kay et al. 1999, Langemann 2004). Parks Canada's (1997) management plan for Banff National Park required that the feasibility of plains bison re-introduction should be investigated to restore ecological integrity to the park. The 2010 plan for Banff Park released this June calls for the reintroduction of a breeding population of plains bison to the park.

In 2009 the Board of Directors of the Eleanor Luxton Historical Foundation (ELHF) initiated a project to help Parks Canada move promptly to restore wild bison to Banff National Park. This project commemorates the critical role of bison in the natural and human history of the Bow Valley. It builds on the Luxton and McDougall families connection with bison and support for the culture of the Canadian Rockies First Nations, , as well as the important role of Norman Luxton's work with Canada's national parks to preserve wild plains bison and to encourage a thriving tourism industry in Banff National Park (Luxton 1975). As an initial step, the ELHF participated in the Banff Park Management Plan review process. Subsequently it established a working group consisting of interested representatives from the ELHF Board of Directors, key stakeholder groups, and advisory capacity from Faculty of Environmental Design, University of Calgary. It has also developed a public outreach effort known as Bison Belong in Banff National Park (see Bisonbelong.ca)

While we recognize that federal government has authority for bison management within Banff, and Alberta provincial agencies would regulate any bison use outside the park, we provide a proposal that we hope will help move the important objective of wild bison restoration to Banff National Park forward successfully in this 125th anniversary year.

Overview

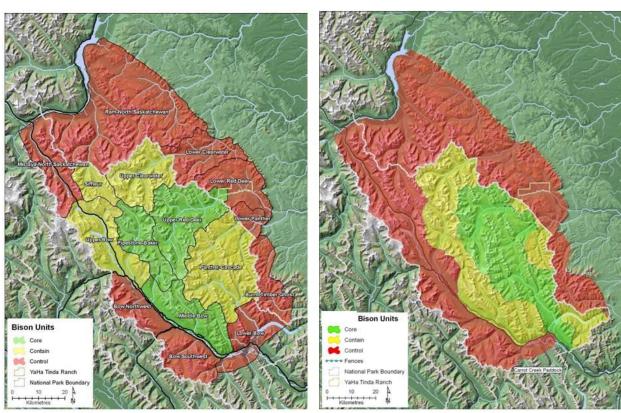
This paper provides a summary of development of the ELHF Banff bison project to date (early September 2010), including several components: 1) a discussion of possible options for ecological restoration of bison in Banff; 2) discussion of the important tourism opportunity wild bison would provide; 3) a recognition of the special role First Nations in relation to bison; 4) the idea of developing the "Banff Bison Stewards" to assist in monitoring and management; and 5) our ongoing efforts to develop public and stakeholder support.

Options for Banff National Park Bison Ecological Restoration

Banff National Park has two valley systems suitable for bison restoration that are functionally connected: the accessible Bow Valley and the remote Red Deer River Valley. Together they create a 3000 km² area in eastern Banff National Park. Bison could be returned to long-term habitat in the Red Deer and Bow watersheds through variations on a landscape-level zoning system:

- 1) A core zone bounded high mountain ridges, and the pre-existing wildlife highway fences in the Bow Valley either east or west of Banff townsite, and expansion of the horse drift fence in the Red Deer valley on the Ya Ha Tinda Ranch (or totally within the park up-valley from a new bisonproof/wildlife- permeable fence near Tyrell Creek.) Total bison habitat in the core area is over 600 km² including nearly 100 km² of winter range. Natural processes influencing bison herd dynamics would be favoured in the core area including predation (a full suite of predators including wolves, grizzly bears, cougars and wolves utilize the area), and annual bison migration to upper elevations and adjacent areas (White et al. 2001);
- 2) A containment zone surrounding the core area that could be periodically used by bison, but where the general objective is to limit the number of animals dispersing out of the park to a manageable number, and;
 - A broad control zone on park and provincial wildland where the objective will be to ensure that no bison disperse to lands with urban development, unfenced highways, cattle grazing or agriculture.

TWO POTENTIAL OPTIONS FOR BANFF BISON RESTORATION



a. Upper Red Deer/Bow Parkway option

b. Upper Red Deer/Fairholme Bench option

The map above shows two potential options to manage bison in Banff National Park and adjacent areas. With all options, the core area bison carrying capacity is anticipated to be approximately 100 animals, but this could increase over time depending on the number of bison using adjacent containment units. Use of bison-proof/wildlife-permeable fencing is a feature of all options. Use of contemporary bison fencing designs (relatively low heights of fence, and high heights to bottom wire) are anticipated to limit bison movements while facilitating the ability of other species to go over or under fences (Grasslands National Park 2005, Gates 2006). In addition, the length of bison fencing can be minimized by use of existing Trans Canada Highway wildlife fence, and the improvements to the existing horse pasture fences on the Ya Ha Tinda Ranch.

Some advantages and disadvantages for various zoning configurations include:

- Options including the Bow Valley Parkway could provide a unique wildlife viewing opportunity for park visitors that would differentiate this parkway in Banff from other scenic drives in the Canadian Rockies;
- Options including the Ya Ha Tinda Ranch would allow for public hunting of bison on an area outside of Banff National Park when this management tool is necessary while maintaining the park as a sanctuary. This would help control bison numbers in the area, and over time could become an important recreational opportunity in the eastern slopes of Alberta.
- Options where bison are constrained within Banff National Park (e.g., no use of Ya Ha Tinda Ranch) would minimize requirements of Alberta Fish and Wildlife officials to modify hunting regulations;
- Options for providing core bison habitat on the Fairholme Bench in Banff National Park could minimize interactions with the railroad;
- A more cautious option could include a phased approach where bison would be restored to the Upper Red Deer valley (e.g., Scotch Camp and/or Windy Meadows), and based upon this experience, a small herd could be restored to the Bow Valley in subsequent years. This would have ecological benefits but few visitor benefits.
- Either the Middle Bow or Fairholme Bench option could be expanded in the future as bison restoration techniques are refined to include the core habitat within both of them.

During the fall of 2010, the ELHF working group will continue to work with Parks Canada and Alberta Fish and Wildlife, and other key stakeholders refine these and other alternatives.

The Special Role of Bison for Tourism

Banff's Bow Valley is used year-round by many wildlife species. However, restoration of wildlife movement corridors and mitigation of the effects of the Trans Canada Highway over the last two decades has greatly changed distributions. While the viability of populations of wary predators such as grizzly bears and wolves has increased, the numbers of once easily visible wildlife such as elk and

bighorn sheep has declined near roadways. Moreover, these ungulates are often at higher elevations away from the valley bottom during the peak tourist season of July and August. In contrast, bison would likely remain in the valley bottom to eat their preferred grass and sedge forage during the summer months thereby creating a new and important viewing opportunity for park visitors. Similarly, in Yellowstone and Grand Teton National Parks, bison provide the main species for wildlife sightseeing in most seasons. Further, the excitement of the first wild bison calves born in Banff in over 100 years will create a positive media and general awareness opportunity for Banff.

The Special Role of First Nations in Bison Restoration

Luxton acknowledges the special cultural relationship between First Nations and bison. Prehistoric use as well as Stoney Nakoda, Siksika, Secwepemc, and K'tunaxa First Nations traditional use of bison in the Rocky Mountains near Banff is well documented (Luxton 1975, Langemann 2004). There may be special opportunities for the park to work with First Nations in connection with bison.

Banff Bison Stewards

The core area for bison restoration in the Red Deer valley of Banff National Park is remote wilderness with primitive trails, deep stream crossings, and a wide range of elevations over which bison could roam during their annual life cycle. Traditionally, this has been equestrian country used by First Nations, then by small parties of outfitters leading horse pack trips with sporadic foot backpacking use. In working with stakeholders, the ELHF working group is obtaining substantial support for the proposal from members of equestrian and other associations along the eastern slopes that are willing to become "Banff Bison Stewards" to assist in bison restoration. Key tasks of Bison Stewards would include checking bison-proof/other wildlife permeable fences and gates, conducting annual population and cow/calf censuses, informing other park visitors on safe travel techniques in bison country, assisting in transporting hunted bison from the Ya Ha Tinda Ranch, maintaining trails and patrol cabins in the core bison areas, and periodically hosting special groups visiting backcountry areas.

The ELHF working group is, or will be consulting with associations and other groups whose members could serve as Bison Stewards including:

- Sundre Fish and Game Association- In August, 2010 SFGA executive members made a 5-day
 equestrian tour through the Red Deer and Ya Ha Tinda core area. Pending membership review,
 this association could contribute important expertise and support for developing a bison hunt
 on lands adjacent to national parks, and monitoring bison along park boundary areas;
- **Friends of the Eastern Slope** the equestrian component of this association uses the Ya Ha Tinda Ranch extensively and could provide substantial assistance for safe equestrian use of bison country.
- Parks Canada Warden Alumni Association- members of the association accompanied the Sundre Fish and Game party on their August, 2010 pack trip. Members of the alumni association

are willing to become bison stewards with expertise in trail and cabin maintenance, biological survey techniques, and safe horse travel techniques in wilderness country.

- Alberta Trail Riders Association Several members of ATRA have shown a strong interest in Bison Stewarding, and through their guided trips to areas such as the Red Deer and Clearwater valleys, could increase outfitter and visitor awareness of bison ecology;
- Banff Light Horse Association- Members of BLHA will likely become bison stewards with core tasks of inspecting bison fences in the Bow and Cascade watersheds;
- Other Groups- As the "Banff Bison Stewards" formalizes, founding members will likely wish to expand membership to qualified individuals from other associations that can contribute expertise, funding, or political support for bison restoration.

The role of each of the above associations within the Bison Steward framework will continue to be refined through their respective membership meetings and direction. The Bison Stewards would likely request support and cooperation from Parks Canada including periodic use of existing backcountry patrol cabins, use by qualified members of Parks Canada riding and pack stock based at the Ya Ha Tinda, and if a bison-proof fence is constructed on the west side of the Ya ha Tinda Ranch, construction of a small patrol cabin near West Lakes to allow bison and visitor use monitoring by the Stewards.

Expanding General Public and Stakeholder Support

The ELHF working group is working on several fronts beyond the "Bison Stewards" to broaden general support for the Banff Bison Restoration proposal:

- Bisonbelong Website- The website http://www.bisonbelong.ca provides an opportunity for users to gain knowledge of the proposal including the history of Banff National Park and the Canadian Rockies, photographs of wild bison in other national parks, and an opportunity to show their support through "joining the herd" of supporters. Several business and non profit groups have already endorsed bison reintroduction;
- Special Consultation Groups- The ELHF working group has periodic "update lunches" with key stakeholders in the Bow Valley (Association for Mountain Park Protection and Enjoyment, Brewster Transportation, Bow Valley Naturalists, Banff Lake Louise Tourism, Parks Canada and others). In the fall of 2010, meetings will continue with owners/managers of outlying commercial accommodation along the Bow Valley Parkway (Johnson Canyon, Castle Junction, Baker Creek), Banff and Ya Ha Tinda backcountry outfitters (Holidays on Horseback, Timberline Tours, the Outpost at Warden's Rock), and other groups to obtain their perspectives on options for bison restoration in the Bow Valley and backcountry areas;
- Public engagement activities in Banff will occur in the fall of 2010 including a potential community bison barbeque;

- A Bisonbelong postcard campaign will begin this year to further inform park visitors and residents in local/regional communities, and to provide an opportunity for them to demonstrate support for the project;
- Media Events and Releases- The release of the IUCN Guidelines for Bison Restoration on March 2, 2010 (see http://www.iucn.org/?4750/Bringing-Bison-Back-to-North-America) provided a useful venue for discussing Banff bison restoration by several media outlets. During the fall of 2010, opportunities for media releases will occur as key stakeholder groups join the "Bison Stewards" and the Bisonbelong website. ELHF working group members anticipate an important media event by mid-November to celebrate participation of several important associations.
- Whyte Museum of the Canadian Rockies Forum- The Whyte Museum has been approached as act as a neutral institution to facilitate workshops to discuss the benefits and costs of bison restoration. The WMCR Museum director made a 4-day wilderness hike through the core restoration area in August 2010 for orientation to key issues and potential stakeholders. As part of this event, the executive director of the Jackson Hole Chamber of Commerce is willing to come to Banff to share that community's positive experience with wild bison.

References

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Free-roaming bison in Grand Teton National Park, Wyoming. This herd provides exceptional wildlife viewing within the park, and hunting opportunities on adjacent lands.

Further Information on the Eleanor Luxton Historical Foundation Proposal:

Please contact Outreach Coordinator Julia Lynx, email: info@bisonbelong.ca

See website: http://www.bisonbelong.ca