



# Coming Full Circle

## Active Restoration in Grasslands



- Species
- Function
- Into the Future





## Vision

In Grasslands National Park visitors pause to watch bison interact with prairie dogs, pronghorns... the earth itself. Dust stirs as fire, drought and flood punctuate the pulsating rhythm of the prairie. Neighbors share the pride of living alongside a national park, and all Canadians know that they are welcome, invited and engaged in shaping the future of this prairie park.

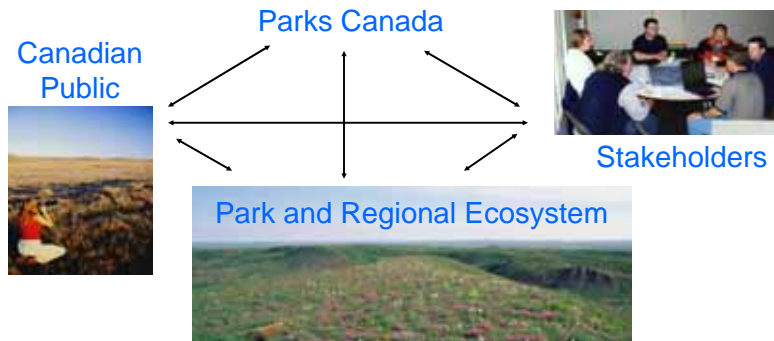


## Vision

*The prairie persists – restored, resilient, timeless.*



## Restoring Integrity to a Grasslands Ecosystem



## Key Elements

- Building support
- Raising the profile of GNP
- Creating memorable visitor and learning experiences
- Enhancing Ecological Integrity





## Building Support

- Internally
- Stakeholders
- Community



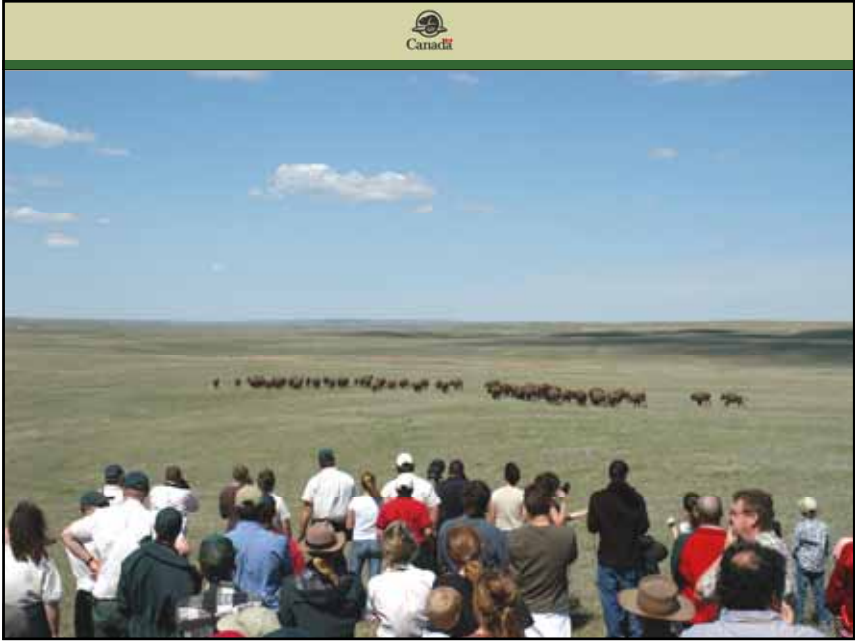
## Stakeholders



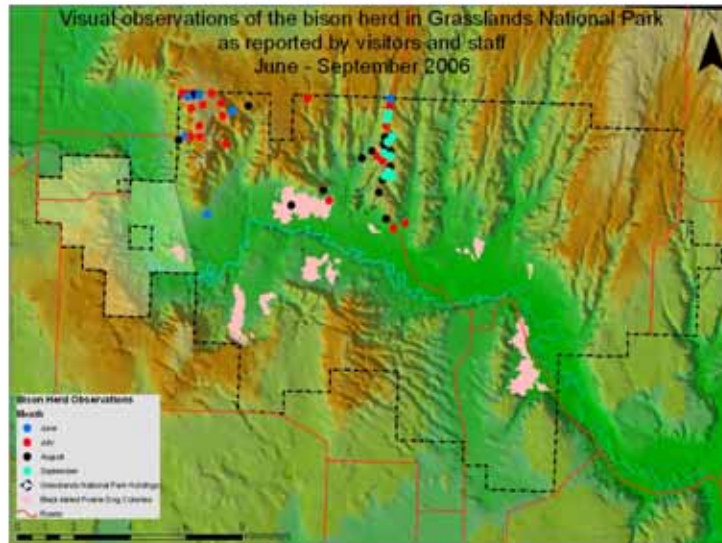


## Raising the Profile of GNP





## Creating a Memorable Visitor Experience





## Creating Learning Opportunities



## Prairie Learning Centre







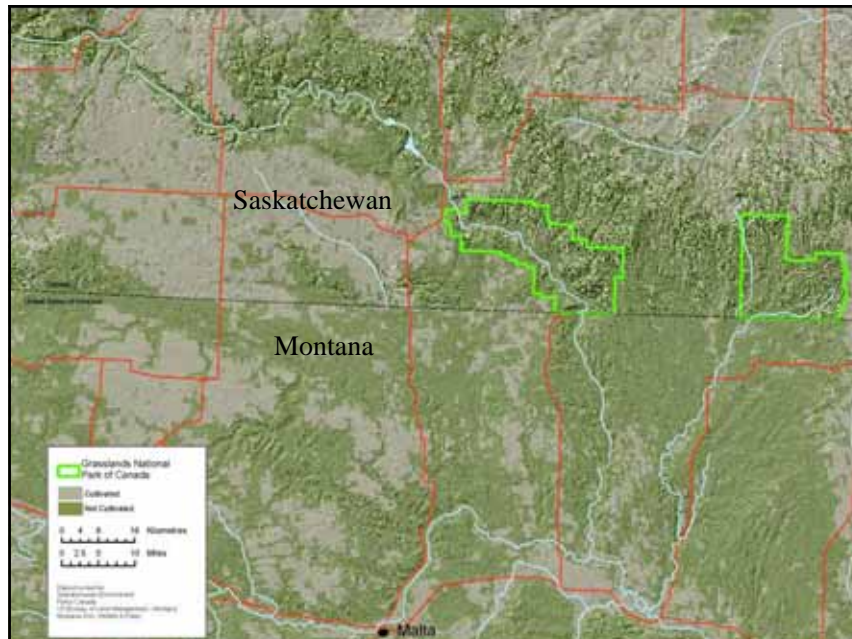
## Enhancing Ecological Integrity



Now have a direction for grazing!

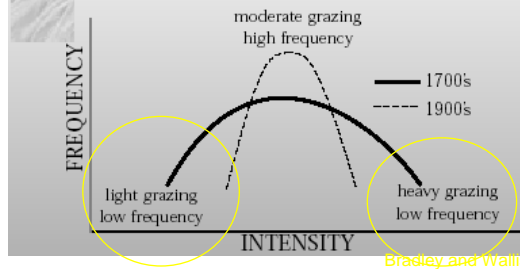
**Plan vision:**

“emphasize aspects that are under-represented in the regional landscape. The result will complement surrounding rangelands and increase the ecological integrity of the whole.”



### Process: Grazing

#### Variation in Grazing Intensity on Native Prairie



Bradley and Wallis, 1996

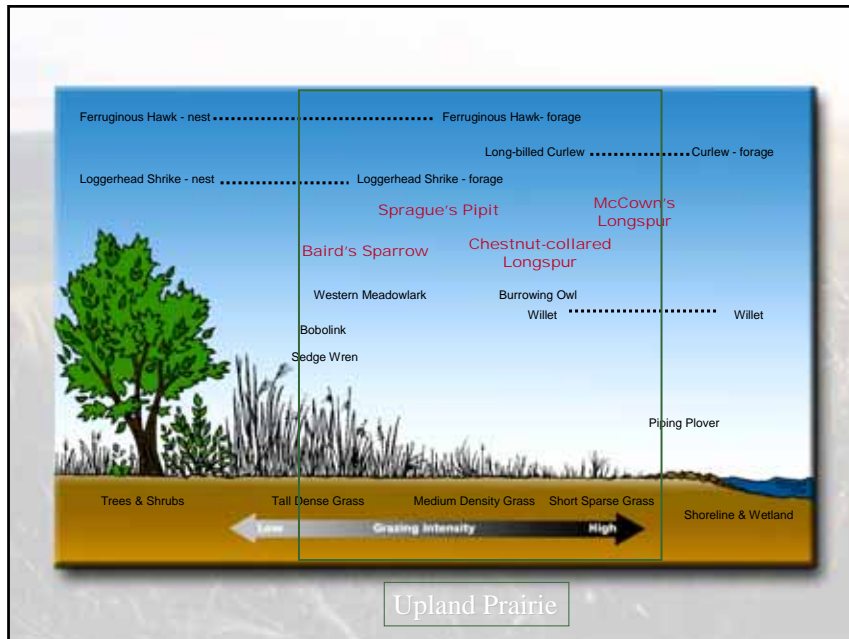
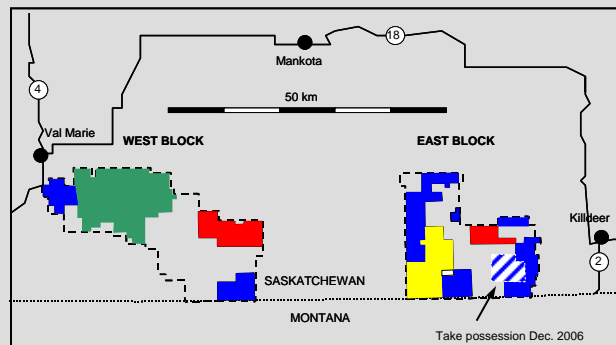


Table 3.1 Prescription for Grazing

Disturbance	Targeted Range or Trend
moderate grazing	3-33% of park land grazed such that 35-45% of non-woody above-ground forage is removed annually
intense grazing	0.1-2% of park land grazed such that 90% of non-woody above-ground forage is removed or trampled in a short time - less than 2 weeks/patch

- Specifics worked out in an Adaptive Management Framework

This is what it will look like!



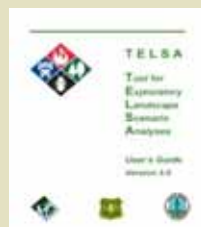
- Grazing restoration areas – cattle
- Grazing restoration area - bison
- Grazing restoration area - experiment
- Interim Grazing Exclusion Areas

## The Science Continues...

- Grasslands Ecosystem Management Model
- Grazing research
- Bison movement
- Prairie restoration
- Species at risk

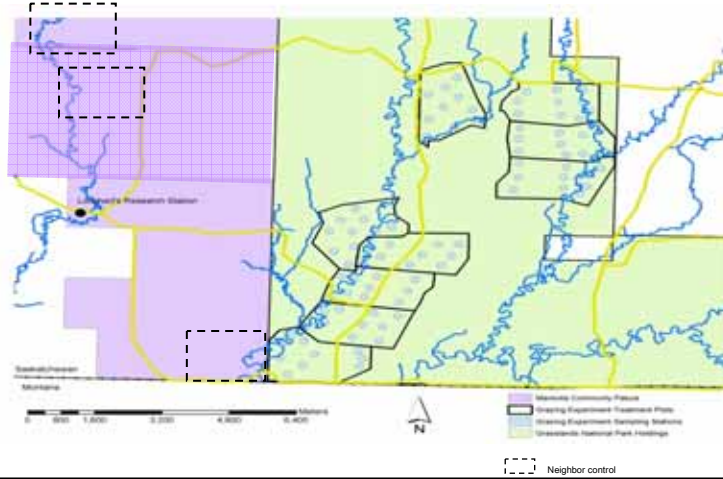


## Grasslands Ecosystem Management Simulation (GEMS) Model



- Start with vegetation community
- Disturbance probabilities
  - o grazing
  - o fire
  - o protection
- Management actions
  - o restoration
  - o prescribed fire
- Simulate in Space and Time

## Grazing Management Experiment



## Bison Collaring





Visitors and staff working together

- Visitors report observations
- Staff track bison movement

Contribute to visitor experience  
plains bison conservation, and  
grazing restoration.

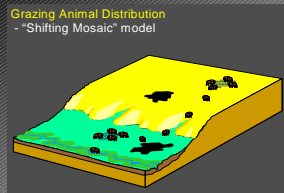


Fire/Grazing Restoration

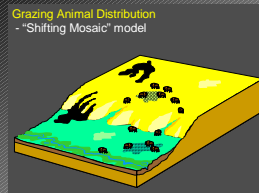
- Influence grazer distribution
- Exotic species control

Stakeholder support/engagement

#### Grassland Fire Ecology



#### Grassland Fire Ecology





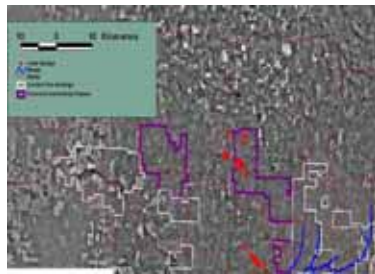
### Restoration of cultivated land

- Diverse vegetation mix
- Very good establishment
- Technology transfer with neighbour



### Collaborative Invasive Species Mgmt

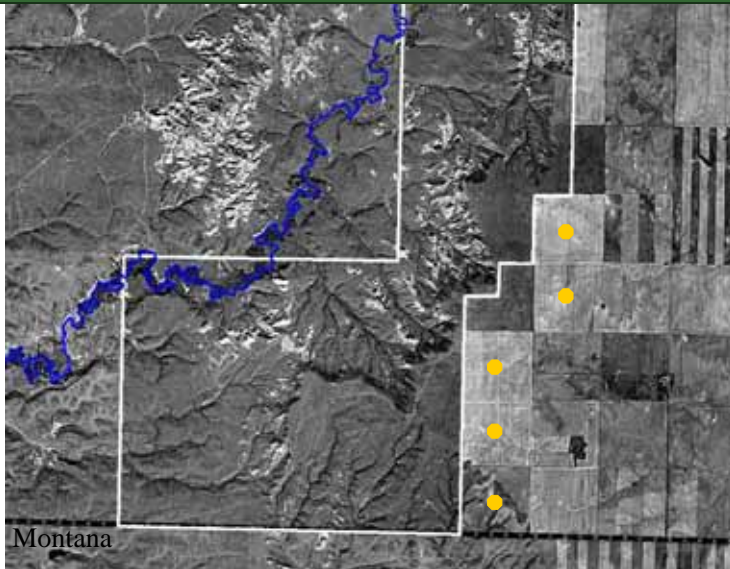
- Frenchman –Wood R. Weed Mgmt Area
- Multijurisdictional approach
- Inventory, Education & Control







## Conservation Easement

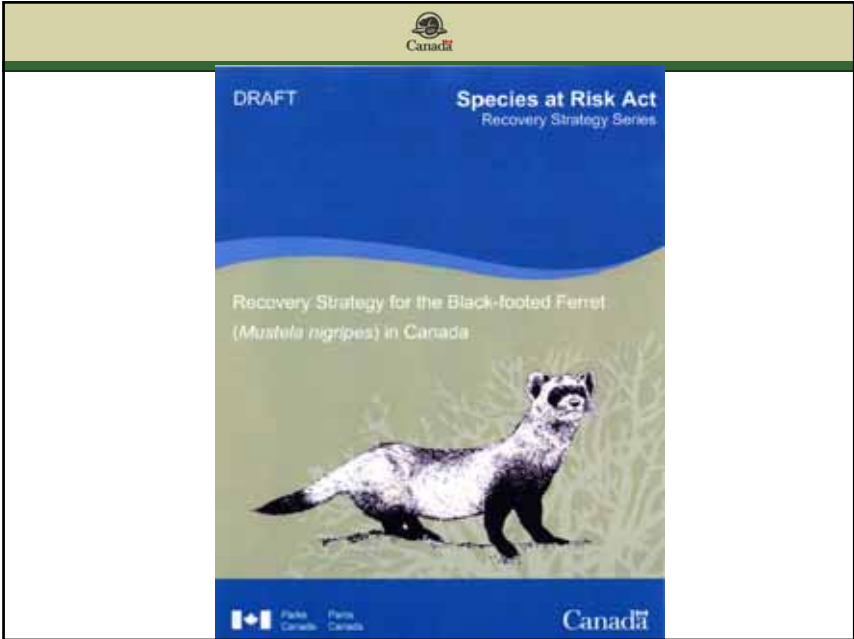
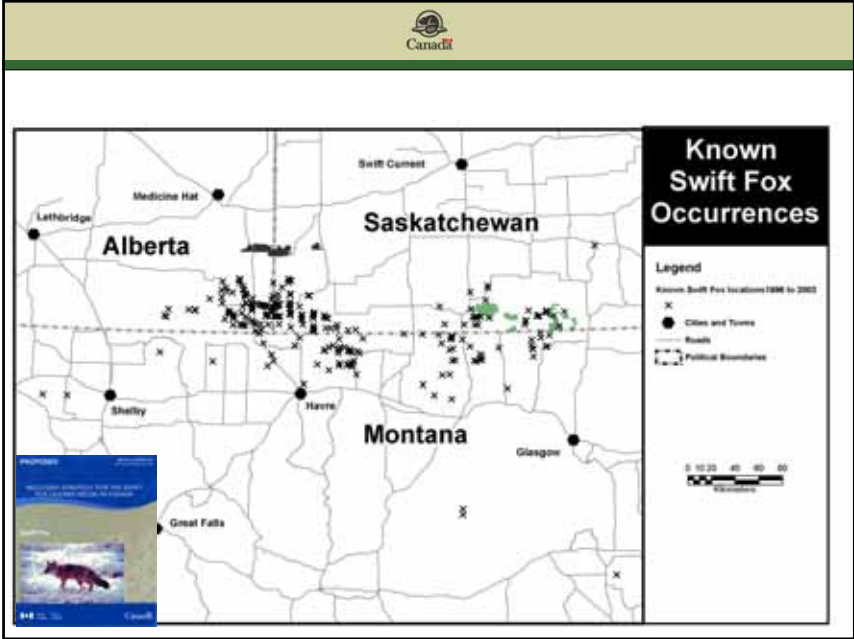




## SPECIES AT RISK

- 5 ENDANGERED; 2 NOT REGULAR BREEDERS
- 5 THREATENED
- 6 SPECIAL CONCERN





## Outcomes

- EI enhanced
- Community, regional and national audiences engaged
- Memorable visitor experiences created
- Quality learning ongoing





*coming full circle . . .*

