

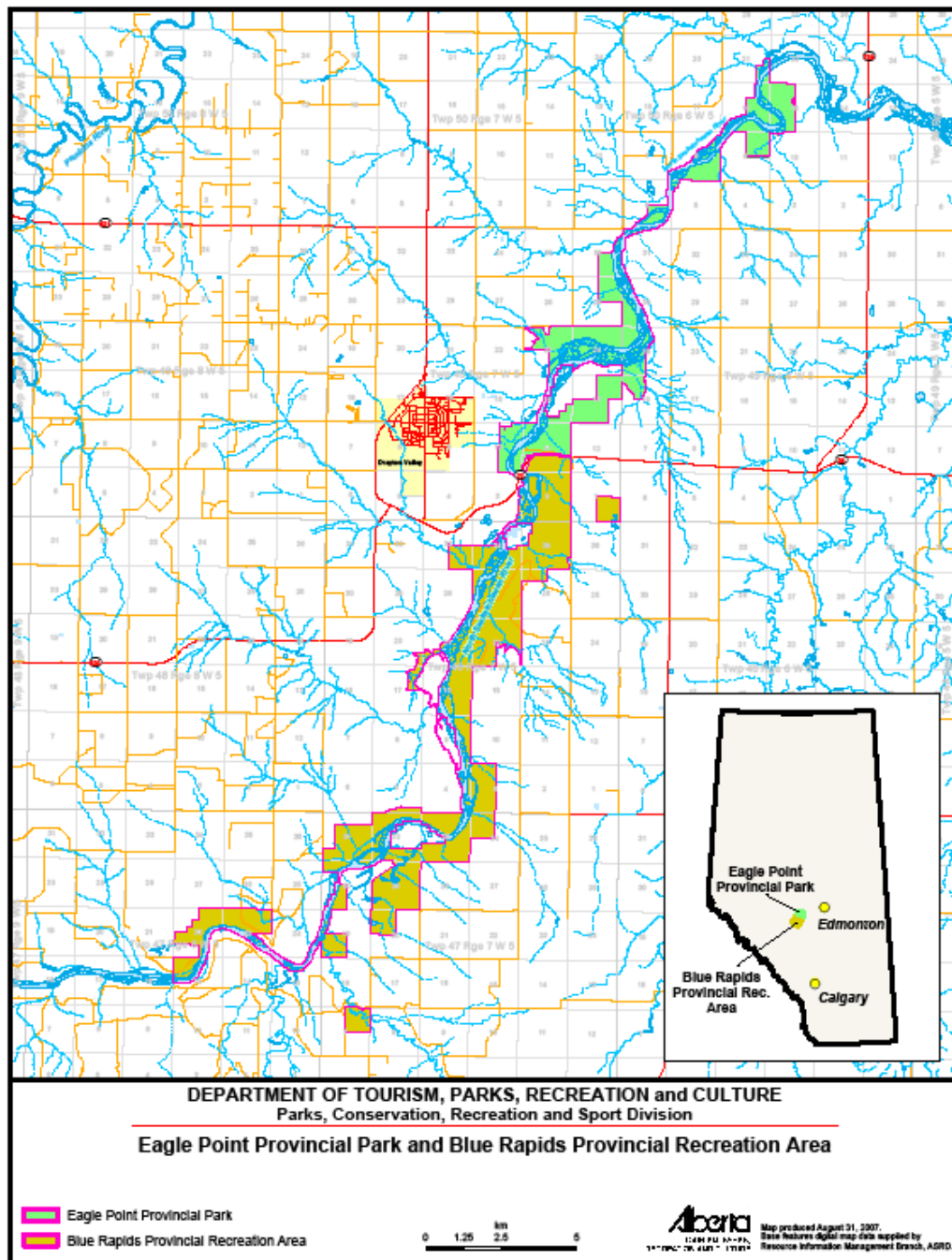


# Significant Features of Blue Rapids PRA & Eagle Point PP

Resource Management Coordination Branch  
Parks Division  
Alberta Tourism, Parks and Recreation

Presentation to the Eagle Point-Blue Rapids Parks Council

December 15, 2008



- **Eagle Point PP**
  - 4848 ac (~7.5 mi<sup>2</sup>)
- **Blue Rapids PRA**
  - 8953 ac (~14 mi<sup>2</sup>)

# Purpose of this Presentation

- Describe a scientifically-based approach whereby biophysical features in the Park & PRA can be evaluated for significance
- Present an overview of some of the significant features identified in the Park & PRA
- Provide “food for thought”; information provided is not biased or slanted in an attempt to influence decision-making
- Recognize that the information presented here is only part of what must be considered for planning & development of the site
- Recognize that folks in the local community here have much to offer in terms of knowledge – what I can present here is only a tiny segment of the store of knowledge for the area
  - ~ Submit to Rebecca or others on the Council, information you have about the features in the area – that information will assist in making sound planning and management decisions for the site

# Methods

- Reviewed Dave Mussell's preliminary background research and findings for the area
- Field visits to the Park and PRA
  - Seven days in August: 13, 14, 15, 21, 22, 27, 28
  - Three days in September: 23, 24, 25
- Used the approach of the Environmentally Significant Area (ESA) studies that have been done in Alberta as a basis for rating significant features present in the Park and PRA
- Mapped the significant features noted for the area in GIS

# ESA Approach

- **Nationally Significant Feature**
  - Those features which are limited in distribution in Canada or which are the best or only representatives at a national level
- **Provincially Significant Feature**
  - Those features which are limited in distribution at a provincial level or which are the best examples of a feature in Alberta
- **Regionally Significant Feature**
  - Those features which are limited in distribution at a regional level or which are the best examples of a feature in the region
- **Locally Significant Feature**
  - Those features which are limited in distribution at a local level or which are the best examples of a feature in the study area

ESA = Environmentally Significant Area

# Nationally Significant Features

**Such features would include:**

- Elements\*\* that have status under the federal Species at Risk Act (SARA) (e.g., endangered and threatened species)
- Elements that are ranked as Globally Rare (G1 or G2) according to NatureServe's ranking system (<http://www.natureserve.org/explorer/ranking.htm#interpret>)
- Elements that are excellent examples on a national scale.

**\*\* *Elements* are components of environmental diversity defined at many different scales. An element may be a landform, an ecological community, or a plant or animal species.**



# Provincially Significant Features

## **Such features would include:**

- Elements that are ranked as Provincially Rare (S1 or S2, some S3) according to NatureServe's ranking system and that are on the tracking list of the Alberta Natural Heritage Information Centre (Centre is housed within AB Parks)  
(<http://www.natureserve.org/explorer/ranking.htm#interpret>)
- Elements ranked as 'at risk' or 'may be at risk' as well as some that are ranked as 'sensitive' in the 2005 General Status of Alberta Wild Species report
- Elements that are excellent examples at a provincial scale.

# Regionally Significant Features

- \* Region = the Central Mixedwood and Dry Mixedwood Subregions, the subregions in which the Park and PRA occur.

## **Such features would include:**

- Landscapes, forest types and habitats representative of the Natural Subregion and which have high to very high levels of integrity and intactness
- Some elements ranked as ‘sensitive’ in the 2005 General Status of Alberta Wild Species report
- Elements that are excellent examples at a regional scale



# Locally Significant Features

## **Such features would include:**

- those features important to the continuing functioning of the natural systems within the Park and PRA, including all areas of native vegetation that remain relatively intact and are not identified as significant at a higher level
- features that are important to a species life cycle, such as a nesting area or an amphibian breeding pond or a mineral lick, and that are not identified as significant at a higher level
- The best example of a particular feature in the Park or PRA

# RESULTS

- **Nationally Significant Features**

- **Potential habitat for Northern Leopard Frog**

- SARA = ‘special concern’
- AB Status = ‘at risk’
- Species has not been observed in the area for many years



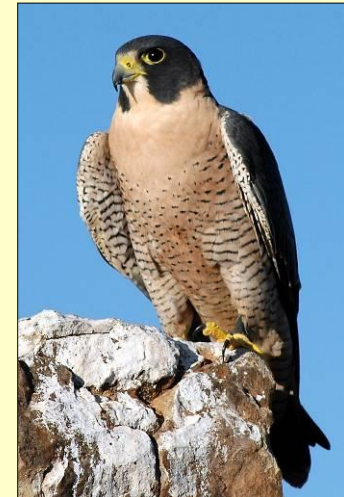
- **Habitat for Western Toad**

- SARA = ‘special concern’
- AB Status = ‘sensitive’
- NatureServe = S4G4
- IUCN = ‘near threatened’
- Species is present in the Park and PRA



# RESULTS

- **Nationally Significant Features**
  - **Potential habitat for Peregrine Falcon**
    - SARA = 'threatened'
    - AB Status = 'at risk' 50-60 pairs in AB
    - NatureServe = S3G4
    - Historic nesting records for this species in the area



# RESULTS

- **Provincially Significant Features**

- Locations in the Park or PRA for 4 species of rare plants

- Blue lettuce (*Lactuca biennis*)
  - NatureServe rank = S2G5
  - AB Status = ‘may be at risk’
- White adder’s mouth (*Malaxis monophylla*)
  - NatureServe rank = S2G5
  - AB Status = ‘sensitive’
- Golden saxifrage (*Chrysosplenium iowense*)
  - NatureServe rank = S3G3
  - AB Status = ‘sensitive’
- Mountain lady's-slipper (*Cypripedium montanum*)
  - NatureServe rank = S2G4
  - AB Status = ‘may be at risk’





# RESULTS

- **Provincially Significant Features**

- Location in the Park for one rare ‘ecological community’
  - balsam poplar / high-bush cranberry / ostrich fern (*Populus balsamifera* / *Viburnum opulus* / *Matteuccia struthiopteris*)
  - This community only observed in one location in the Park/PRA



NatureServe  
rank = S1S2



# RESULTS

- **Provincially Significant Features**

- Habitat in the Park & PRA for 6 bird species listed as ‘sensitive’ in the 2005 AB Status report. These species occur in the area.

**Great Blue Heron** (*Ardea herodias*) – (NatureServe rank – S3 G5)

habitat: ponds, shorelines, creeks, marshes

Less than 100 known nesting colonies in AB

**Osprey** (*Pandion haliaetus*) – (NatureServe rank – S4 G5)

habitat: lakes, shorelines, snags (for nesting)

**Bald Eagle** (*Haliaeetus leucocephalus*) – (NatureServe rank – S4 G5)

habitat: lakes/rivers (for foraging), snags/trees (for nesting)

**Northern Pygmy-owl** (*Glaucidium gnoma*) – (NatureServe rank – S3 G5)

habitat: coniferous forest, mixedwoods

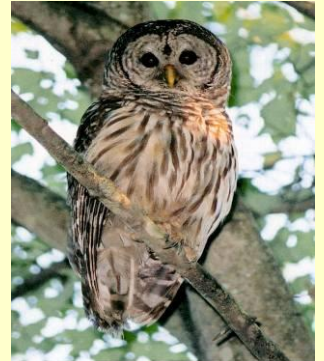
**Barred Owl** (*Strix varia*) – (NatureServe rank – S3S4 G5)

habitat: mature mixedwoods

Likely <2000 breeding birds in AB

**Great Gray Owl** (*Strix nebulosa*) – (NatureServe rank – S4 G5)

habitat: coniferous, deciduous and mixedwoods



Barred Owl habitat in the area

# RESULTS

- **Provincially Significant Features**

- Habitat in the Park & PRA for 3 mammal species listed as either ‘may be at risk’ or ‘sensitive’ in the 2005 AB Status report. These species occur in the area or are expected to occur.

**Long-tailed Weasel** (*Mustela frenata*) – may be at risk (NatureServe rank – S5 G5)

habitat: variable, ranging from open grassy areas to coniferous forests

**Silver-haired Bat** (*Lasionycteris noctivagans*) – sensitive (NatureServe rank – S3 G5)

habitat: woodlands

**Hoary Bat** (*Lasiurus cinereus*) – sensitive (NatureServe rank – S2 G5)

habitat: coniferous and deciduous forests



Silver-haired Bat  
and potential habitat  
in the area





# RESULTS

- **Provincially Significant Features**

- Habitat in the Park & PRA for 4 fish species listed as either ‘at risk’, ‘may be at risk’ or ‘sensitive’ in the 2005 AB Status report. These species occur or are expected to occur in parts of the North Saskatchewan River that flows through the Park and PRA.

**Lake Sturgeon** (*Acipenser fulvescens*) – at risk (NatureServe rank – S2 G3G4)  
habitat: shallow bottom areas of large rivers

**Spoonhead Sculpin** (*Cottus ricei*) – may be at risk (NatureServe rank – S3 G5)  
habitat: rivers (often muddy)

**Northern Redbelly Dace** (*Phoxinus eos*) – sensitive (NatureServe rank – S3 G5)  
habitat: scattered localities in the North Saskatchewan River

**Sauger** (*Sander canadensis*) – sensitive (NatureServe rank – S3 G5)  
habitat: river backwaters, mouths of tributary streams

NOTE: The **Silver Redhorse** (*Moxostoma anisurum*) may also occur in parts of the North Saskatchewan River that flows through the Park and PRA. This species is currently ranked as UNDETERMINED in the 2005 General Status of Alberta Wild Species report. Its NatureServe ranking is S2 G5.

# RESULTS

- **Regionally Significant Features**
  - Example: Abandoned river channel / oxbow / backwater complexes
  - Example: Areas with intact forests and shrublands (e.g., riparian shrublands, woodlands in ravines and coulees, mature/OG forests)



A regionally significant exposed slope / abandoned river channel / mature white spruce forest / shrubland / backwater channel complex in 24-49-7-W5.

# RESULTS

- **Regionally Significant Features**

- Habitat in the Park & PRA for several wildlife species listed as ‘sensitive’ in the 2005 AB Status report. Some examples of species in this category and which occur in the Park and/or PRA are:

**Northern Harrier** (*Circus cyaneus*) – (NatureServe rank – S5 G5)

habitat: marshes, meadows, fields

**Sora** (*Porzana carolina*) – (NatureServe rank – S5 G5)

habitat: ponds, marshes, sloughs, meadows

**Pileated Woodpecker** (*Dryocopus pileatus*) – (NatureServe rank – S4 G5)

habitat: mature mixed and deciduous forest

**Baltimore Oriole** (*Icterus galbula*) – (NatureServe rank – S5 G5)

habitat: deciduous and mixedwood forests

**Red-sided Garter Snake** (*Thamnophis sirtalis*) – (NatureServe rank – S4S5 G5)

habitat: variety of habitats; at least one hibernacula is known



# RESULTS

- **Locally Significant Features**

- Includes a variety of features that occur in the Park or PRA, ranging from special habitats to areas of biophysical diversity.
- Some examples:
  - ~ larch / horsetail stands
  - ~ Mature Alaskan birch stands (*Betula neoalaskana*)
  - ~ abandoned river channels and oxbows
  - ~ bedrock outcrops / cliffs
  - ~ eroded valley slopes
  - ~ ravine and coulee complexes
  - ~ wetland / meadow complexes
  - ~ animal dens, mineral licks
  - ~ river islands
  - ~ travel routes for predators (e.g., cougar) and neotropical birds

**Note:** With all significant features, their level of significance can change as we learn more about them, or the conditions which may affect their viability change.



# RESULTS

- **Locally Significant Features:**



larch / horsetail stand

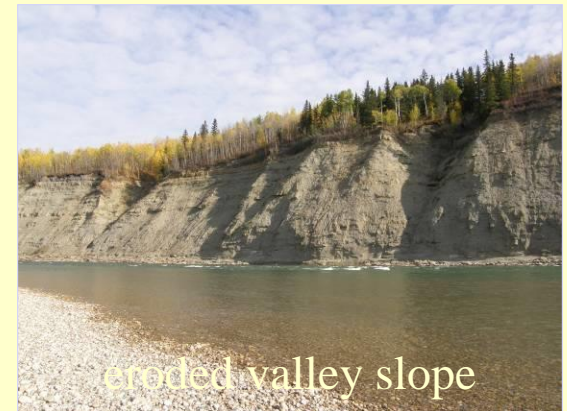
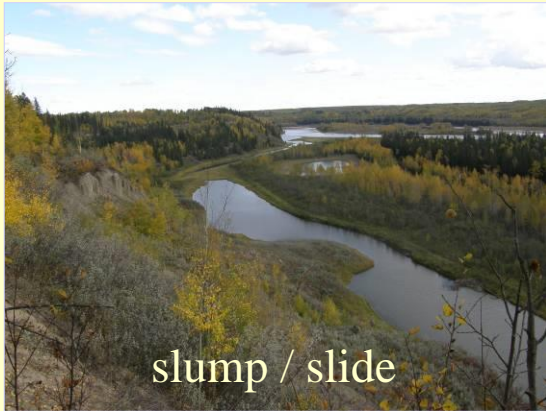


Alaskan birch stand



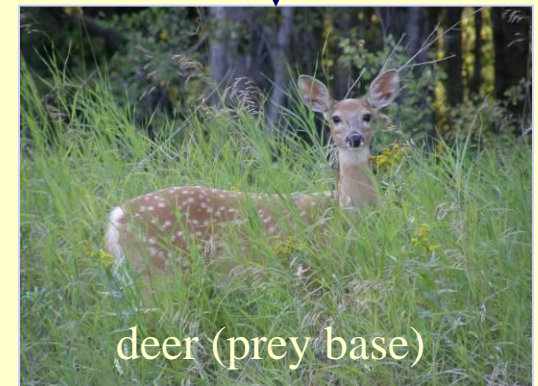
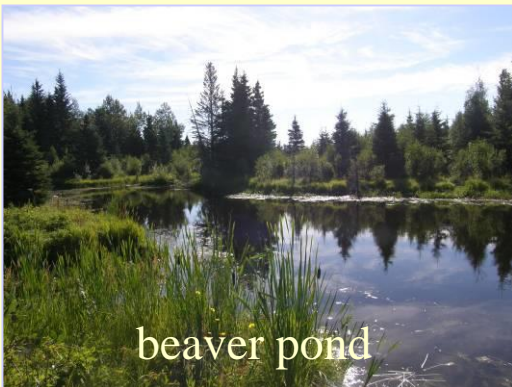
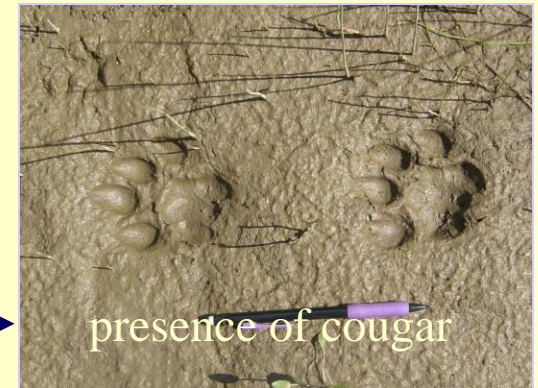
# RESULTS

- Locally Significant Features:



# RESULTS

- Locally Significant Features:





# RESULTS

- **Locally Significant Features:**



Abandoned or intermittent river channels



# RESULTS

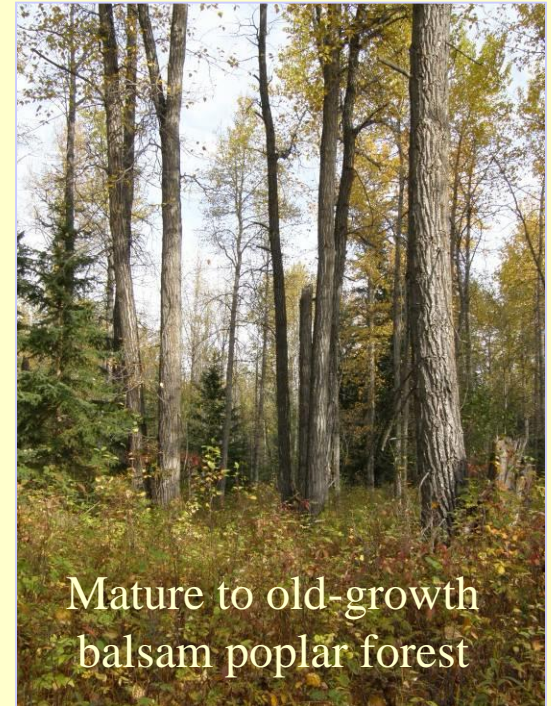
- **Locally Significant Features:**



blue lettuce with spider



snag — cavity nesters



Mature to old-growth  
balsam poplar forest



# CONSIDERATIONS

1. Take into account the known significant features during the planning and design phases of park and PRA development, including the sensitivity of a feature to disturbance.
2. Avoid negative impacts on the known significant features in the park and PRA; this is the most effective method to mitigate any impacts. The greater the level of significance for a particular feature, the more important it is to avoid negative impacts to them.
3. For the animal species noted above that are listed as ‘at risk’, ‘may be at risk’, or ‘sensitive’ in the 2005 General Status of Alberta Wild Species report, further work needs to be done to identify where their core habitats occur in the area. Those habitats would be significant.
4. Additional surveys are needed to fill data gaps. Little work has been done, for example, to identify the occurrence and distribution of amphibians, reptiles, lichens, mosses, butterflies, dragonflies/damselflies, and molluscs. Maternity colonies and roosting areas for different species of bats would be valuable information to obtain. Further work needs to be done on the vascular plants of the area, particularly the rare species and the rare plant communities.
5. Identify broad landscape units for lands within the park and PRA, based on vegetation cover type, slope, aspect and landform, to assist in various planning and development initiatives for the park and PRA.
6. Prior to park infrastructure and other facilities being built, an environmental review should be done at potential development sites to ensure significant features are documented and that appropriate mitigation measures are identified.
7. Retain as much of the landscape in an unfragmented condition as possible. Restoration of impacted sites is an important management tool for working towards conservation of natural landscapes.



QUESTIONS

