### **Background Information for Wildlife Speakers**

# On the Agriculture/Wildlife Conflicts in the Peace River Region of British Columbia

Sample of compiler's association with this issue:

- Large animal veterinarian, in this region since 1987
- Chairman of the original Peace Liard Regional Problem Wildlife Advisory Committee, and Livestock Specialist for BCMAF since 1990
- Current member of local and provincial wildlife committee
- Just an all 'round good sort of guy (has a sense of humor anyways)

#### GENERAL BACKGROUND

- Almost all my comments are focused on conflicts between deeded landowners and
   elk, but they are not exclusive of focal deer (both mule and whitetailed), and moose
   conflicts with Agriculture in this region. Damage to large round bales during
   November to March and hay fields in April and May is most common.
- There is a growing perception amongst the wildlife enthusiasts that competition between elk and domestic animal grazing on crown land is the origin of the conflict.
   This perception is unsubstantiated with local scientific range information.
- Few stack yards are fenced and virtually no feed is stored indoors. There is a
  growing amount of damages reported to plastic protected feed (silage) and to other
  property such as fences (drift and perimeter fencing).
- Increase in reports of forage loss during winter from deer and elk feeding alongside of domestic stock fed on the ground.

#### **Physiography**

The region encompasses the northwestern most limits of the Glacial Lake Peace and the subsequent Alberta Plateau and its lowlands. Major watercourses include the Pine, Peace, Beaton, Halfway and Cache Creek rivers and relatively few lakes. Our lacustrine and fluvial soils, coupled with our long daylight hours during the growing season provides superior forage growing conditions while the subsurface contains world class oil and gas reserves.

- The large Hydro Electric Williston Lake and dams lie in the Rocky Mountain Trench
  on the western boundary of farming area and provides focus for large scale wildlife
  remediation and restoration along the Peace River watershed. Most of the conflicts
  of wild ungulates with agriculture lie northeast of the Rocky Mountains of this region.
- The vegetation here apparently bears little resemblance to earlier records of open grasslands interrupted with Trembling Aspen, Willow and Spruce trees. Native Range here is classified under Boreal White and Black Spruce biogeoclimatic zones with 50% or more in seral aspen communities. There is a greater canopy of cover by the trees that do exist although this is interrupted by early seral stages where clearcut logging is practiced. Aspen logging is a relatively new venture of about the last 10-15 years in this region.
- This region contains the largest portion of farmland in the province of BC and accounts for the vast majority of raw agricultural product for many traditional crops.
   There is a growing acreage of tame forages on deeded lands.
- Some BC Peace Forage Stats

Category	<u>Statistic</u>
Forage Land Base	
Acres in Forage	350,000
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Acres seeded for forage seed crops	60,000
Acres Harvested as Hay	200,000
Acres Harvested as Silage	<u> 20,000</u>
Acres in Tame Pasture	80,000
Tenured Crown Land AUM's	120,000
Acres of Community Pasture/Grazing Reserve	374,000
Long Term Historical Fine Seeds yields per acre	
Alfalfa Seed (500 acres)	340 lbs
Fescue Seed (45,000 acres)	400 lbs
Timothy Seed (5,000 acres)	350 lbs
Forage Economics	
Average Contribution Margin per acre Round Baled Hay	\$75.00
Average cost of an AUM of Community Pasture	\$12.00
Average cost of an AUM of Crown Range	\$2.00
Average Overwinter Stored Feed per Beef Unit	4.2 tons
Average Field Price of Mixed Grass/Legume Hay per ton	\$55.00

## Forage Preferences (by Farmers)

Long term most popular grasses:

Timothy, Smooth Bromegrass, C.R. Fescue

Timothy, Alsike and Kentucky Bluegrass are aclimatized forages on some native sites

Long term most popular tame legume varieties:

Alsike Clover- Aurora

Red Clover -Altaswede

Alfalfa -Peace

Smooth Brome - Carlton

Creeping R. Fescue - Boreal

Timothy - Climax

Latest most popular grasses:

Meadow Bromegrass, Annual Ryegrass

Latest most popular legumes:

Creeping rooted or low bloat

Hay Bale Form:

Large Round, Hard Core

Hay Storage:

Outdoor Uncovered

Silage Form:

Large Round Bale Tubes

## **Ancient History**

• Large herds of elk in this region recorded as early as 1792 by Alexander Mackenzie

- Late 1800's severe winter suspected cause of large reduction in elk numbers, small remnant herds remained along some watersheds such as the Peace and Pine Rivers
- Williston Lake and Dams were constructed in the late 60's flooding large river valleys in the Trench. Wildlife Rehab planning began.
- 1950-70's large growth in wild ungulate habitat north of Peace Region (eg Tuchodi Lakes area) afforded by active brush burning program carried out by Guides and Outfitters. International acclaim of hunting for Moose, Sheep, Caribou and Bear began to include Elk. Diversity of the big game hunting packages and remoteness of the area are important features of this area.
- 1972 Agricultural Land Reserve identified crown and deeded lands which were designated to have Agricultural uses as priority. Other land uses permitted but long term potential for agricultural use of these designates prioritized. One third of the Provincial ALR resides in this region, and there is fair dispute over use of ALR for forest, wildlife and agricultural use. Little alienation of crown land has occurred over the last 30 years in this region. The vast majority of the land in this area is still crown.
- 1976 Gov't Funding program (ARDSA) implemented in Cache Creek, Halfway River and other grazing reserves to enhance the use of crown lands for domestic animal grazing. Administration required consensus agreement between stakeholders (called

- CRMP's) and comprehensive resource inventories. Not a single critical elk habitat identified in these areas. (Maps on file)
- 1983-85 Ministry of Environment elk transplants Williston Lake area (Dunlevy) hotly contested by Ranchers who did not take part in the decision making process. First elk seen on second generation ranches here were ear tagged.
- Provincial Wildlife Act legislates that the crown is free of indemnity for damage to
  private property caused by wildlife. Government response to hay damage in fenced
  stack yards has been limited, and to that unfenced nothing at all.
- 1970-95 Provincial Problem Wildlife Advisory process developed and ended up largely in polarizing all interest groups despite limited success with address of Predator Response Zones and inclusion of the BC Peace Region in a federal Waterfowl Crop Damage Compensation Program.
- 1970-90 series of boom and bust Oil and Gas Industry developments in the Fort St.
  John and Northern most portions of this region. Access to crown land greatly
  enhanced and to some degree, Agricultural development followed road infrastructure
  developed in this process.

### **Recent History**

- 1991 Chetwynd area farmer shoots and kills elk that are habitually destroying his haystacks after publicly warning he would do so. Crown charges, convicts and passes suspended sentence.
- 1992 drought conditions and scanty feed antagonizes increased conflict over wild ungulates and haystacks (mainly). No mitigation, compensation nor prevention programs in BC.
- 1993 Crown Land Resource Management Planning processes begin. Interest groups identify resource emphasis zoning and strategies to address resource values. Strategic direction to address agriculture and wildlife and conflicts documented and completed (over 4 years). Subsequently there has been implementation of only vast park areas where wildlife have a major focus. These areas lie north of the agricultural settlement area and characterize the BC public support of 'more wildlife is better'.
- 1996 very wet fall with hundreds of acres of agricultural crops stranded in fields. Lots
  of spring threshed oats with deer dung. Overall damage of stored and field forages
  by wild ungulates escalates. Canadian Grain Commission forbids trade of any grains

- with cervid fecal contamination following costly international rejection of a grain shipment.
- 1997 local Forage Association request local gov't (PRRD) to get political address.
   Original Advisory process abandoned (a good feature).
- Fall 1997 Range Use plans (administered by the Ministry of Forests) of some cattlemen 'on the fringe areas' brought into question by Ministry of Environment. This enhanced the degree of polarization between cattlemen and the wildlife managers. M of Forests Range Staff could provide a more fair assessment of the role that crown range has in this conflict. My assessment is that we have voluminous crown AUM's; the crown just sees it as cheaper to have deeded land owners manage the wildlife habitat than it is to manage the crown habitat with public dollars. (forgive the bias).
- 1998 local forage association recommended that private landowners boycott hunter access for Limited Entry Hunt permits on Private Land Only in an effort to make the point that hunting and management of deeded land only is an inadequate address of the problem. This incensed the anger of the Ministry of Environment officials, and hunter organizations, further polarizing the two groups.
- Spring 1998 (late winter) Aerial Survey by cattlemen in Cache Creek area revealed
   >650 elk on deeded land on one small watershed, fanning the disagreement over
   wild ungulate inventories between Ag and Wildlife interest groups.
- Fall 98 to current local government led multi-group process listing tools of address.
- Fall 99 changes to hunting season dates and Special Permits to kill problem elk have results pending.

#### Other Factors

- Great disparity in wildlife compensation and prevention programs between British
  Columbia and other jurisdictions. There are no compensation nor prevention
  programs in BC that address wild ungulate depredation, nor are wildlife a covered
  peril under government Crop Insurance Programs.
- Considerable differences in agricultural interface and overlap with other land users in the Peace from the rest of the province (the Peace is likely more conventional?)
- Most recent winters have been favorable for high survival rates of wild ungulates.
   Despite this, death of impacted fawns have been reported with increased by farmers

- who find them in their stack yards. Also severe tick infestation and deaths in moose were a common report from farmers in the winter of 1998.
- A 'feral' plains bison herd in the Pink Mountain area (northern edges of Peace Region agriculture) has an impact on range that some suggest could be contributing to the wildlife conflict (pressure on elk ranges and gov't attitude on wildlife management).
- Remarkable change in crown elk habitat as a factor of:
  - Exponential increase of linear access corridors due to oil and gas exploration (seismic cut lines), development (roads, pipelines and development facilities)
  - 4 wheelers
  - control of fires
  - clearcut and aspen logging
- declining hunter harvest success and number of resident hunters