

The Sky Shouldn't Be The Limit:

Cattle in the Castle

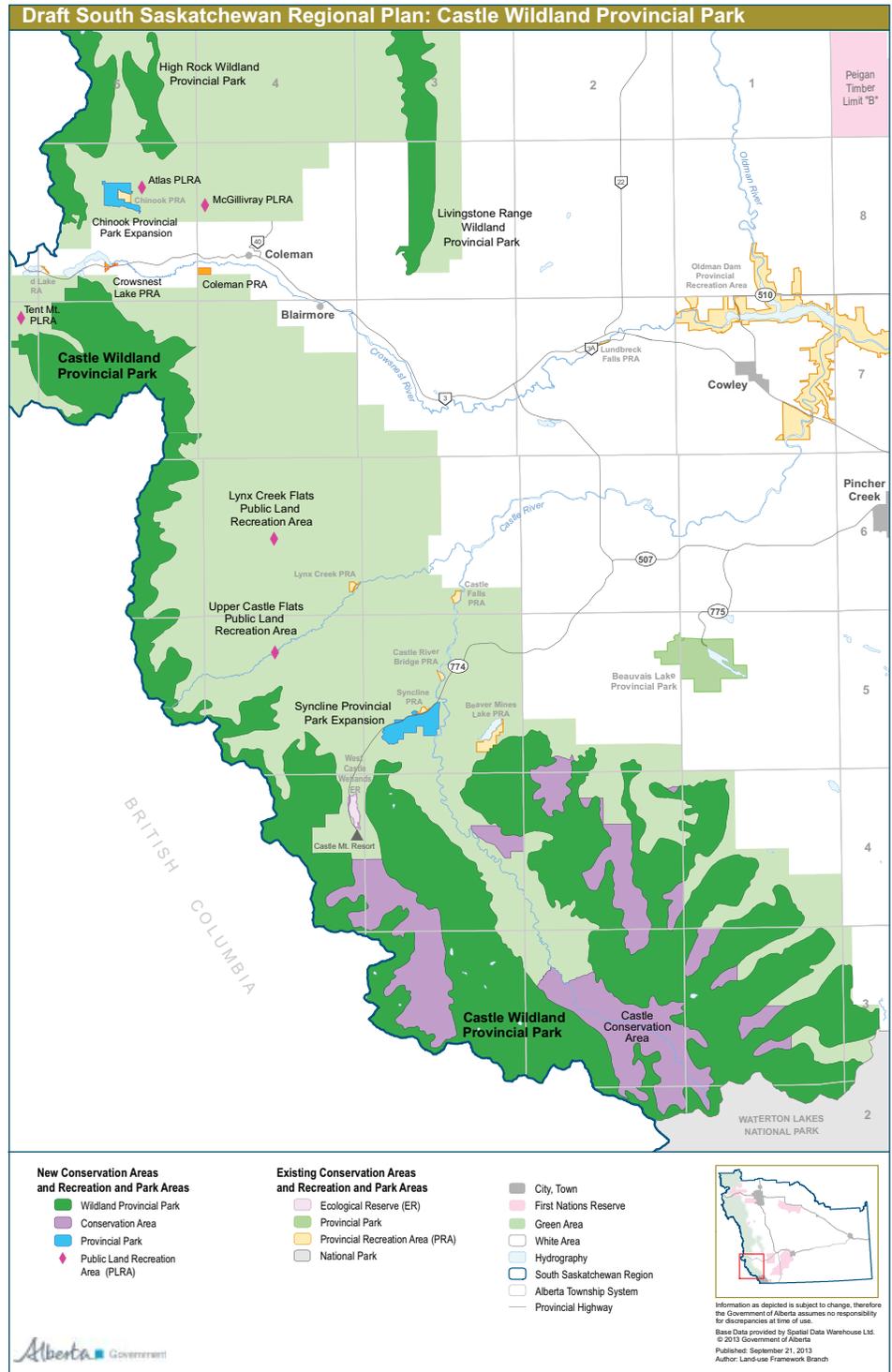
By Nigel Douglas



The Front Range Canyons of southwestern Alberta's Castle region are special places; deeply-cut valleys run in parallel from the high mountains westwards out towards the prairies. Hiking up one of the canyons takes you on a steady and continuous climb from the sub-alpine valley bottoms, through increasingly-scattered trees until you emerge into the glorious open vistas of the high alpine.

Take a look at a map of the Castle Wildland Provincial Park as proposed in the South Saskatchewan Regional Plan (dark green on the map), and the eastern edge of the park shows a series of (paler green) "fingers" of land encroaching into the protected Wildland. These are the Front Range Canyons, which are all subject to the lower level of protection afforded by "Provincial Park" status. This lesser level of recognition to some extent reflects their industrial heritage with oil and gas access roads carved deep into each canyon. But another factor may be a history of over grazing which has served to diminish the canyons' natural values, suppressing native flora and replacing them with a host of invasive plants and placing a very heavy burden on these crucial watersheds.

For many years AWA has offered guided backpacking trips into the Castle's Front Range Canyons and dozens of visitors have had the opportunity to experience this breathtaking landscape. But though this land is all public land, long recognized for its wildlife, recreation, and watershed value, all is not wine and roses in the canyons. In the southern canyons, particularly Spionkop and Yarrow, visitors are increasingly reporting the damage caused by persistent overgrazing.





Alpine plants manage to survive in harsh conditions, with icy temperatures, high winds and minimal soil cover. They are extremely sensitive to disturbance; while conscientious two-legged visitors can avoid causing too much damage, cattle may exact a heavy toll. PHOTO: © N. DOUGLAS

In an October 13, 2014 letter to Alberta Environment and Sustainable Resource Development (ESRD), AWA passed on the deep concerns expressed to us by our supporters who have visited the canyons. These concerns included:

- The trampling of tree and plant life on the valley floor. “This was so bad that the historic trail in many places in the upper part of the valley is now indistinguishable from dozens of other “trails” through the trees created by cattle.”
- The presence of large amounts of cow dung throughout the valley. “Although having some dung is undoubtedly a natural part of the ecosystem the problem seems to be that large numbers of cattle are returning to the same area year after year and are adding to the deposits faster than they can decompose.”
- The trampling of the banks and stream bed of the main creek and some of its

tributaries; and the pollution of this vital water source.

Wendy Ryan of the Castle Crown Wilderness Coalition has noted the same problems. “The overgrazing has probably been going on since SRD (then Sustainable Resource Development) first allowed cattle into the Front Range Canyons,” she says. “The cattle enjoy being up in the forested area of the canyons and up in the high alpine, getting away from the flies, bugs, and heat.”

Six years ago, in a 2009 report titled *Livestock grazing in the Front Range Canyons*, botanist and AWA member Reg Ernst made exactly the same point. “Because alpine and sub-alpine systems did not evolve under intensive, season-long grazing,” he wrote, “they are particularly vulnerable to the damage caused by a disturbance which they have little or no defence against.” Reg observed that: “Over many decades of cattle grazing, the plant communities along all stream corridors

and valley bottoms in the Castle area (where grazing occurs) have been altered to a mix of non-native grasses, weeds and other invasive plants, and native forbs and shrubs. Some native grasses are still present but are a minor component in the community.”

His report highlighted a number of problems associated with cattle grazing in the upper sub-alpine and alpine natural regions. They included:

- **Loss of native grass species.** “Non-native plant species are detrimental to native plant communities because they displace desirable native species resulting in a loss of wildlife habitat. For example, rough fescue (*Festuca campestris*), the dominant native grass species on climax plant communities in the Front Range Canyons, provides nutritious winter forage to a variety of wildlife including elk and bighorn sheep. Conversely, tame forage species make very poor winter forage because

after they senesce in mid to late summer, they have very low nutritional value.”

- **Loss of rare plants.** “A large proportion of the rare plants in the Castle area are found in the upper sub-alpine and alpine natural regions. These species are threatened because cattle grazing increases the density and distribution of competitive non-native plants and because of the physical damage caused by hoof trampling, particularly along riparian habitats where cattle have a tendency to congregate.”
- **Invasive weeds.** “Noxious and other weeds are particularly damaging to native plant communities because they have little nutritional value, they are invasive and readily displace valuable native species, and because their inferior soil binding properties allow soil erosion to occur.”
- **Watershed damage.** “Riparian areas receive a disproportionate amount of use by cattle and activity related to this use degrades the streamside environment and the local fishery.” Weeds and agronomics have poor soil-binding properties compared to native species. This means there is an increase in soil erosion which degrades the watershed and damages fish habitat. Most of southern Alberta depends on healthy mountain watersheds to provide water for both the urban and agricultural communities.”

In theory, grazing cattle are supposed to be prevented from accessing the sensitive high alpine areas, but enforcement in the southern canyons is minimal. Drift fencing has been erected across the heads of the valleys in the past but it is rarely maintained, and overworked ESRD officials show little appetite for getting to grips with the issue. Ryan refers to the Spionkop valley as “an oasis... and a mess. Every time I have been up there, the cattle have trampled the entire area by the falls, and eaten every wildflower and plant by the water.” The cattle “travel up these valleys on old industry roads until they reach the end of the trail, and then stay up there all season.”

In a November 2014 letter to AWA, ESRD Minister Kyle Fawcett pointed out that graziers on public land are required to stick to a *Grazing Lease Stewardship Code of Practice*,

but there is little evidence that this code is being applied on the ground. Theoretically, graziers are “required to apply sustainable grazing practices” on their lease,” with the requirement that “any rangeland grazing system must consider how to balance livestock needs with the available forage supply through proper stocking rates.” The code highlights the importance of careful management of grazing in riparian areas: “Riparian areas where livestock may find succulent forage, drinking water and shade require extra effort to ensure good livestock distribution and prevent potential negative effects... Grazing leaseholders have a particularly critical responsibility to address any riparian area management issues on their grazing lease.”

Rangeland health assessments are occa-

sionally carried out on grazing leases, but past assessments in the Front Range Canyons seem to have made little difference to the grazing problems noted by visitors to the canyons.

AWA has long supported a cost/ benefit analysis of grazing on public land, and in the Castle in particular. The minimal amount of income derived from leasing our public land in no way justifies the considerable cost of the damage to natural habitats and watersheds. If lease fees do not generate adequate income to allow provincial staff to monitor grazing adequately, then they should either be substantially increased, or grazing suspended until adequate oversight can be introduced to ensure that future grazing is truly sustainable. 🌱



Rare plants such as red and yellow monkeyflower, which grow alongside creeks, may suffer heavily from cattle grazing. PHOTO: © N. DOUGLAS