

Grassland Gazette

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Wild Encounters -----



Photos by Doug Thorson

I was on my motor bike headed to Montana on the weekend. We were approximately 30 km north of the border when something caught my eye about 100 yards off the highway. I turned around and there was a 4 point mule deer with his antlers wrapped up in some wire which was caught in a barbed wire fence.

I approached the animal on the opposite side of the fence, slowly moving towards the buck. He thrashed his head pulling against the fence....straining his neck out as far as he could. There was almost no hair left on the deer as it appeared that he had been there since early that morning at the latest. I unwrapped the wire while the deer stood there motionless. As the wire came free, the deer backed up and just stood there looking at me. After a few minutes I retreated along the fence keeping it between the deer and me. At 100 feet back, I crossed the fence while the deer watched me carefully...probably not knowing whether he should charge me or run away. After I was safely back across the main fence, the mule deer took one final look at me, jumped the fence and as if drunk, wobbled towards the creek.

This is the closest I've ever been to a live deer without making sausage with him. It was a very nice change to be saving his life than taking his life.

- Doug

Send in your Wild Encounter and see it printed here in the next issue!

In Brief

- MULTISAR is currently offering personalized Species at Risk Conservation Plans for your property! Get one this winter and be ready for spring! See multisar.ca for more details or call Darryl at 403-388-3146 today!
- Field work for 3 Habitat Conservation Strategies was completed this year. Wildlife and vegetation inventories and range and riparian health assessments were completed for 40,000 acres. Habitat enhancements completed this year include replacing a paige wire fence with a wildlife friendly fence and spraying weeds in a pasture being reclaimed to native grassland.
- In August the Government of Canada's Habitat Stewardship Program invested \$427,525 in the MULTISAR program through the Alberta Conservation Association. The funds will be used for annual expenses as well as the purchase of a small property.
- MULTISAR has developed a new youth presentation all about Raptors at Risk and is offering it to grade 5-7 students in the grasslands. Contact Shannon at 403-388-3191 or Shannon.Frank@gov.ab.ca to book your presentation today!
- Three interpretive signs highlighting provincially threatened northern leopard frogs were installed along Galt Canal Trail in Magrath where the frogs have been successfully reintroduced.
- A successful 6th Annual Southern Alberta Grazing School for Women was held in New Dayton. The 2010 school will be held in Vulcan County in late July. Watch multisar.ca for more information on how to register.



Photos by Paul Jones

A pronghorn wonders back and forth along a fence he cannot cross.

Highways, fences and a fragmented landscape shape habitat use and movement of pronghorn in Alberta

By Paul F. Jones (based on article in *Conservation* 2009, volume 12)

The doe streaks across the highway at a blazing speed of 100 kilometers an hour, narrowly missing oncoming traffic. She continues on her way north, knowing that fences, highways and a fragmented Alberta landscape littered with energy wells and agricultural fields are just some of the obstacles she will face during the spring migration.

Pronghorn in Alberta have made a tremendous comeback after nearly becoming extinct at the turn of the century. With numbers approaching 20,000 strong, pronghorn are now seen throughout the province, from the Alberta/Montana border to the south, and as far north and east as the Edmonton International Airport and Provost. And even though the numbers remain steady, severe winters can cause large natural die offs for the pronghorn population. The magnitude of these winter die off events and the duration of the recovery period are likely influenced by the loss of or changes to pronghorn habitat.

A collaborative effort between the Alberta Conservation Association (ACA), the University of Calgary and the Alberta Fish and Wildlife Division recently revealed new information on the ecology of pronghorn and how the Alberta landscape affects pronghorn migration. The program continues with the support of ACA, the Alberta Professional Outfitters Society, Alberta Fish and Game Association Zone 1, the two Alberta chapters of Safari Club International, the Canadian Forces Base Suffield, Mountain Equipment Co-Op, the World Wildlife Fund, and the Natural Sciences and Engineering Research Council of Canada.

Habitat Use Patterns in Alberta

For four years, Mike Grue and Paul Jones, ACA wildlife biologists, have been studying the habitat use patterns of pronghorn in Alberta.

“Previous studies in the province showed that pronghorn were tied very closely to native prairie grass and that the animals only used cultivated lands on a seasonal basis, mostly in the fall. What we found is that pronghorn can be grouped based on vegetation gradients,” explains Jones. “We have a pronghorn group using native grasslands, a group in cultivated land (both annual and perennial crops) and a third using a mixture of grasslands and cultivated land. However, the number of pronghorn in grasslands is significantly greater than in other gradients.”

Pronghorn Movement and Migration

Although it has never been fully documented, previous research has shown that pronghorn often migrate as far south as Montana, in order to escape Alberta’s severe winter weather. “Their natural defense is to move really far and really fast to escape the conditions,” says Mike Sutor, a University of Calgary graduate student. “If the proper management is not in place to ensure safe travel for pronghorn, any pinching of the migration route from central Alberta into Montana could result in catastrophic die offs.”

During his studies, Sutor found that up to 40 per cent of Alberta pronghorn migrated annually, travelling between their seasonal ranges that were 200 kilometers long. “One doe even traveled 515 kilometers (km) from her winter range before arriving on her fawning range. Her combined migration path length totaled over 830 km for the year,” Sutor says.

Sutor also found that the remaining 60 per cent stay in an area year-round, except during those times of severe winter weather. He has identified several seasonal migration routes, along with two migration corridors that the pronghorn use to move south during extreme weather conditions (Figure 1).

Grue says that collaborations such as our efforts and investigations into the ecology and movement will be the key to pronghorn management and conservation in Alberta. “Turning our results into positive, on the ground benefits for pronghorn, will be one of the key objectives in the future of the program.”

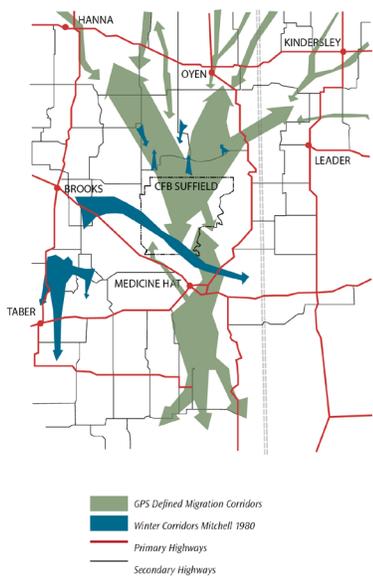


Figure 1: Migration Routes

Sharing our story: Hawk poles, fences and water at the Hand Holt Ranch



Barry Snow saw an opportunity to improve water availability in 3 of his pastures and help create habitat for endangered burrowing owls. This win – win opportunity led him to MULTISAR where a fruitful relationship has flourished for both the ranching operation and species at risk.

Barry's land, the Hand Holt Ranch, is located in the Milk River basin, a haven for many rare plants and animals that depend on large tracts of native grasslands to find food, shelter and reproduce. This very southern portion of Alberta is home to approximately 46 species of plants and animals that are at risk or may be at risk of disappearing from our unique province. For this reason MULTISAR focuses on this area for its Habitat Conservation Strategies and was more than willing to work with Barry to enhance habitat for species at risk.

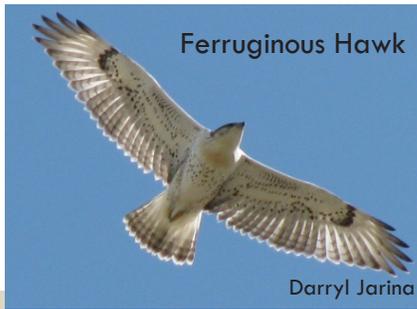


With the help of MULTISAR, a pasture pipeline was installed to provide water for 3 pastures and a water trough can now be moved between them. This set up allows cattle to better distribute throughout the pasture and helps create habitat for burrowing owls and Richardson's ground squirrels – an important animal that creates burrows that are used as nesting dens by burrowing owls. Ground squirrels also provide critical food for ferruginous hawks.

The ferruginous hawk is another endangered species supported by the Hand Holt Ranch. When a pair of these hawks nested on Barry's conveyor belt he decided to shut it down until the young were able to leave the nest. Alternate artificial nest poles were installed by AltaLink nearby to encourage the hawks away from the belt but allowing them to continue using the same habitat. This allowed Barry to reap the benefits of having the hawks on his land - to act as a natural control for the ground squirrels.

MULTISAR and AltaLink partnered to install 2 hawk poles on the Hand Holt Ranch. Another one was also installed near Bow Island where a nest was blown down in a wind storm.

Barry's also been busy protecting the riparian area on his ranch by creating a riparian pasture using wildlife friendly fencing and most recently using a bioengineering technique to stabilize an eroding river bank. The technique is called a wattle fence and involves using poplar tree trunks and branches to reinforce the bank. The tree continues to grow new shoots, eventually creating a stand of trees that stabilizes the bank with its roots.



Barry's commitment to stewardship is exemplary. He has been able to improve his operation while providing important habitat for species at risk. And that is what MULTISAR is all about – helping landowners benefit from species at risk.

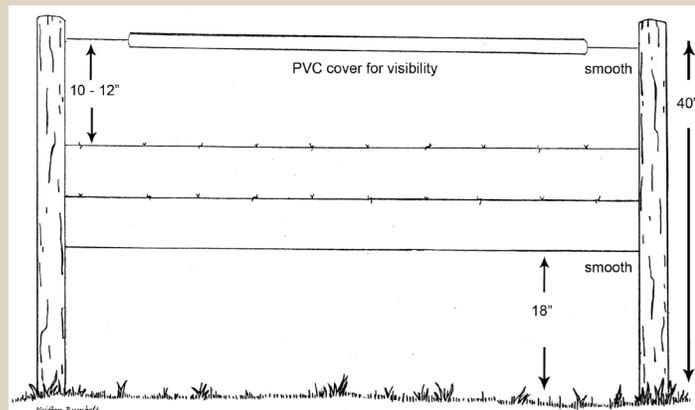
Wildlife Friendly Fences

Fences are necessary to control livestock but wildlife also need to move on the landscape and with a few simple adjustments any fence can be made more wildlife friendly. Adjusting the entire fence may not always be feasible. Adjusting on ions in high wildlife traffic areas is a great help to wildlife and reduces your maintenance costs.

- Ensure existing wires are tight. Wildlife are more likely to tangle themselves in loose or sagging wires.
- Adjust the top and bottom wire heights to 100 cm (40") and 45 cm (18") respectively.
- Adjust the space between the two top wires to 25-30 cm (10-12"). Wires can be raised or lowered with various fastening mechanisms that are inexpensive and easy to use (hooks, staple locks, clips) or gathered into a PVC pipe (called "goat bars").
- Increase fence visibility. Add a top rail, strips of vinyl siding trim (undersill), a PVC cover or flagging, especially in areas of known high wildlife movement.
- Replace wires, top and bottom wires especially, with smooth wire when possible.
- Leave gates open or lay down sections when pastures are not in use.

For more information visit multisar.ca/bmp.html or contact us.

An ideal 4 wire wildlife friendly fence



SPECIES PROFILE: Northern Leopard Frog

At risk - Threatened



Description: Northern leopard frogs are the **largest** frog in Alberta and range in colour from shades of **green to brown**. As their name implies they have large, dark, **leopard-like spots** with light borders or halos around them. One key distinguishing characteristic is a pair of continuous **cream coloured ridges** from behind their eyes to their lower back. Their mating call is also unique - it sounds like a **throaty snore** followed by clucking or grunting noises.

Status: Listed as **threatened** in Alberta and **special concern** in Canada. Until the early 1980s leopard frogs were common and well known to Albertans but the population declined abruptly and now there are only **smaller populations** in the southern portion of Alberta. In about half of their historical range there are no leopard frogs anymore.

Habitat: Northern leopard frogs require a **variety of habitats** to complete their life cycle. To reproduce they require shallow, standing water without fish and with plenty of aquatic vegetation where they can attach their egg masses. When foraging for insects upland and riparian vegetation is needed and when overwintering these frogs require a permanent water body deep enough that it does not freeze to the bottom and with enough oxygen that they can still breathe.

Threats: Habitat loss, degradation and fragmentation are the leading threats to leopard frogs in Alberta but there are also other factors such as climate change, ozone depletion, invasive species and disease that must also be considered. There has been a global decline of amphibians most likely because of the combination of problems and the sensitive nature of amphibians.

S h o w m e t h e m o n e y !

Shining the spotlight on financial incentives for environmental projects on agricultural land.

In the Spotlight: Growing Forward's Water Management Grant

Summary: Planning for a well, dugout or portable unit? If you are patient and willing to fill out the paper work you could be rewarded with up to \$5000. First you must complete a Long Term Water Management Plan and it must be approved by a Agriculture and Rural Development Water Specialist. Once your plan is approved you will be sent an information package including a grant application. If your grant is approved then you can start your project!

Pro: There is a transition period from January 1, 2009 to March 31, 2010 where producers may still be eligible if they completed the project before writing a plan and getting approval. You will still have to write a plan and apply for the grant, you would just be going through the process backwards.

Con: Quite a bit of paperwork is required: plans, checklists, grant application, worksheets, etc. This grant is not for the impatient. And you must wait for approval BEFORE doing any actual work on the project.

For more information visit ww.growingforward.alberta.ca/growingforward/program_WaterManagement.htm



Is there something you would like us to write about? Do you have any questions?

Please contact:

MULTISAR Extension Coordinator - 403-388-3191 or Shannon.Frank@gov.ab.ca