A publication of Alberta Conservation Association

Fall/Winter 2020

Conservation

10 YEARS

Taber Pheasant Festival

Everything Sandhill Crane

Alberta's Silver Lining

The sound of silence

Imagine being outdoors and hearing nothing. No sweet sounds of an American goldfinch, cedar waxwing or western bluebird. Nothing. Just silence.

It's almost unimaginable yet as we continue to lose grasslands, wetlands and other habitat areas, it could become a reality. Since 1970, three billion birds have been lost in North America. In Canada, 40 to 60 per cent of shorebirds, grassland birds and aerial insectivore birds are no more. It's an overlooked biodiversity crisis, but there is hope.

Thanks to the support of volunteers, donors, landowners and partners, the conservation community is having an impact. Some bird populations — especially waterfowl — are making a comeback, and in some cases, thriving.

But there is more to do. To learn how you can help, visit ducks.ca

Ducks Unlimited Canada

Sources: *Canada's State of Birds Report, 2020*
Decline of the North American avifauna, Science, 04 Oct 2019

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content

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Alberta Conservation Association

Follow our work on:

Our Vision

An Alberta with an abundance and diversity of wildlife, fish, and their habitats; where future generations continue to use, enjoy, and value our rich outdoor heritage.

Our Mission

ACA conserves, protects, and enhances fish and wildlife populations and their habitats for Albertans to enjoy, value, and use.

Waterfowl Hunting
photo: Gary Erickson


photo: Linda Zimmerling

From the President

Here we are, over 6 months into COVID-19, and we are just now starting to get a handle (maybe) on a new normal. It sucks; there is no doubt about it. Businesses are hurting, parents are struggling with how to school their children, and kids are anxious about school, frustrated with not being able to play with friends and tired of not being able to be kids…happy and carefree. No four-year-old should have to worry about catching a disease every time she plays on the monkey bars! All in all, this has been a very stressful and somewhat depressing year, but take heart, all is not lost. Good things are still happening in Alberta and this issue of Conservation Magazine is full of examples to lift your spirits and give you some ideas for getting out of the house and having fun as a family.

Check out our new conservation site, Funnell Lake. It was donated by a family that grew up exploring the natural wonders of the site and is now available for you and your family as well. Or perhaps after ten years, have you still not been to Golden Ranches? Read about the great conservation success story this property has become, and then go explore it for yourself. Is it time to restock your freezer for the winter? For the first time, a sandhill crane season opened this year. Check out the article with tips on how to successfully harvest one of the best-tasting wild game meals you will ever have. Or, if you are looking for motivation, check out "When it's Time to Make Time" and see what a hockey mom does in her spare time.

Yes, 2020 has not been the best year for a lot of people. COVID-19 caused us to rethink how we live life, but it has also allowed people to refocus on what is important. In some cases, this year allowed people to slow down a bit, get outside a bit more, and rediscover what Alberta has to offer. As we roll into fall, social distancing requirements are still in place and many group activities are on hold. But this doesn't mean you have to live like a hermit for the rest of the year. I would encourage you to take this time to reconnect with your family in the outdoors. Take up fishing, learn to hunt or just go for a hike and enjoy the fall colours. Someday COVID will be a distant memory, and so too could be the fall you spent exploring Alberta (safely with appropriate physical distance and potentially a face mask).

Sincerely,

Todd Zimmerling
President and CEO
Alberta Conservation Association

Conservation Magazine

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Turkey Track

Come spring, we welcome the wild turkey parade in the southwest corner of Alberta. March mating means big toms strut with their tail feathers fanned open like a deck of cards for prospective hens to admire. Blood engorges their snood and wattle, and if you get close, you might notice the colour of a tom's head change with his mood.

As theatrical as they are captivating, turkeys are unsurprisingly one of the most sought-after hunting draws in the province. Hunters commonly wait 11 years or more to draw a tag! While locals have insight, it's difficult to track turkey numbers on a region-wide basis. Alberta Conservation Association (ACA) is taking on the challenge to map out their distribution, as well as nail down an official approach for tracking year-to-year trends. Keep watch here!

photo: ACA, Doug Manzer

photo: ACA, Budd Erickson

photo: ACA, Ken Kranrod

photo: Cori Lausen

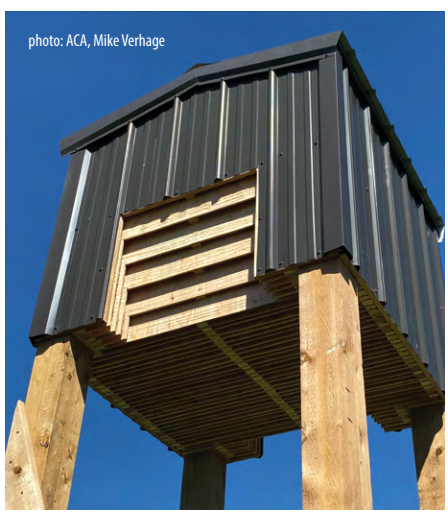
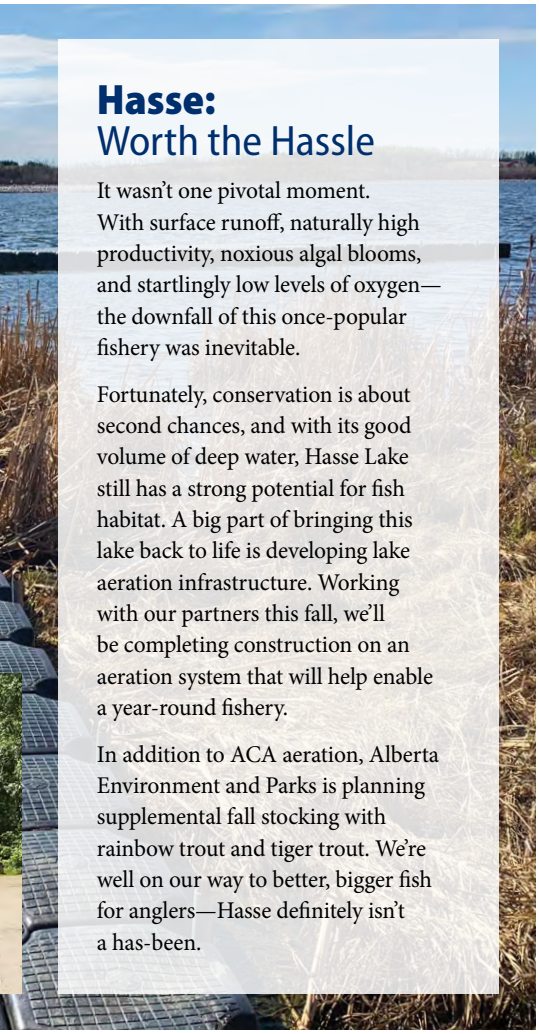


photo: ACA, Mike Verhage



Hasse: Worth the Hassle

It wasn't one pivotal moment. With surface runoff, naturally high productivity, noxious algal blooms, and startlingly low levels of oxygen—the downfall of this once-popular fishery was inevitable.

Fortunately, conservation is about second chances, and with its good volume of deep water, Hasse Lake still has a strong potential for fish habitat. A big part of bringing this lake back to life is developing lake aeration infrastructure. Working with our partners this fall, we'll be completing construction on an aeration system that will help enable a year-round fishery.

In addition to ACA aeration, Alberta Environment and Parks is planning supplemental fall stocking with rainbow trout and tiger trout. We're well on our way to better, bigger fish for anglers—Hasse definitely isn't a has-been.

Land Leaders

Did you know almost two-thirds of the province—62%—has been altered by industrial or agricultural development?

This number is one of the main motivations behind ACA's Provincial Habitat Securement Program, which conserves important wildlife and fish habitat through land purchases, donations, and leases on Crown land. More land secured means more conservation impact. And getting more accomplished rests on partnerships—conservation groups, industry, companies, and individual landowners have all stepped up to help set aside land. Some has been farmland, where we enhance habitats, encouraging the wild to get a little wilder. Other parcels are mostly untouched, and we work to keep them that way. Every piece has its own, unique story to tell—thanks to the people who make it happen.

Are you interested in working with ACA to conserve a piece of land? Email Ken.Kranrod@ab-conservation.com.

photo: (Timber Ridge Conservation Site) ACA, Darren Dorge

Bat-tastic: Only four or five of this type of bat condo exists in Alberta. It's unique for the chosen areas, and will prove interesting as we monitor the bats' behaviour.

photo: ACA, Mike Verhage

HUVAN Let the Bats Out

Back deck? No problem. Yard fence? Won't take long. Bat condo?

They were long, hot days in the summer, but watching the crew from Huvan Construction (one of ACA's valued Corporate Partners in Conservation) construct a "bat condo" was time well spent. A bat condo takes a lot materials and a full day's work. Huvan delivered—building with professionalism, attention to detail, and genuine interest in the project.

The project: ACA installed two bat condos—one on a ranch west of Edmonton and the other in southern Alberta—to help mitigate the exclusion of the flying mammals (the only in existence!) from residential ranch buildings. We hope the bats will vacate their current residential premises to make use of their built-to-spec condo. One of the property owners is also keen on any means to increase the bat population on their ranch, given an old lakebed there breeds billions of mosquitoes.

Goals that Go

photos: ACA, Samuel Vriend

Near the end of August at Ridge Reservoir, kids from the Milk River 4-H Multi Club gathered and let 200 pheasants fly into the wild.

It looks free and easy, but all the work leading to that moment was the true test of commitment. Participants of the 4-H Pheasant Raise & Release program plan and execute every detail it takes to raise day-old chicks into thriving birds. Although ACA's biologists help out, the kids and their families take on the daily challenges over the course of several months.

Thanks to supporters like the Lethbridge Fish and Game Association, Conoco-Phillips and McFarlane Pheasants, kids feel accomplished after seeing their birds take that flight of freedom—and even receive some profit with ACA buying back a portion of the birds raised.

Want to know more about the program and how it benefits Alberta and our youth?
Visit www.ab-conservation.com/pheasant-raise-and-release

Grant Deadlines

Alberta Conservation Association's (ACA) grants are in place to support projects that benefit the province's wildlife and fish populations, and the habitat they depend on.

Submit your application.

ACA Research Grants
Accepting applications in November 2020

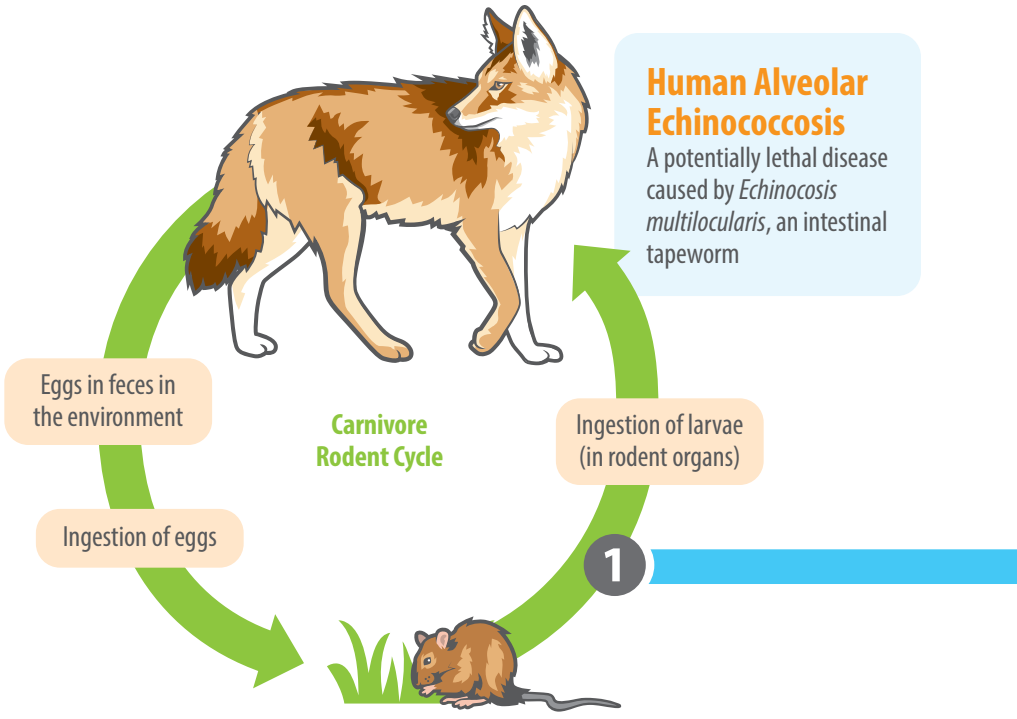
ACA Grants in Biodiversity
Accepting applications for the 2021–2023 funding term until December 1, 2020

ACA Conservation, Community, and Education Grants
Accepting applications from January 1–22, 2021

For more information and to download your application form, go to www.ab-conservation.com/grants/aca-grant-programs

Potentially Fatal Parasite Puts People and Dogs at Risk

► *by Mary McIntyre*



Emma and Logan race through their neighbourhood with their dog, Harley, making a beeline for the dog park. It's one of their favourite places. Walking trails and open spaces give them a chance to explore and maybe even see some wildlife. People at the park often see coyotes, and the kids know they need to be aware of the potential for interaction with their beloved pet. There is also a relatively new reason to be careful.

In 2012, when researchers were testing Alberta wildlife for disease, they found an unexpected European strain of tapeworm: *Echinococcus multilocularis*. Some Alberta coyotes had become infected and were carriers of this parasite. One year later, Alberta Health Services confirmed the province's first case of human alveolar echinococcosis, a disease caused by this tapeworm.

People can become infected by accidently ingesting the parasite's eggs which are not visible to the human eye. This could happen when handling egg-containing animal feces, or egg-contaminated soil, fruit, and vegetables. Researchers also suspect people can become infected after touching the fur of a pet that has come into contact with coyote scat. After a person consumes the egg, it hatches in the intestine and then the larval form targets the liver, producing a tumour-like growth. An infected person cannot transfer it to other people or animals.

There are no symptoms when initially infected so researchers' current estimation for incubation period ranges from five to 15 years. It has a high fatality rate if found at an advanced stage. Left untreated, the disease is always fatal.

While this is not a common disease in Canada, Alberta appears to be a hot spot. Researchers from the universities of Alberta, Calgary, and The King's University are trying to establish why.

"Something very new has happened recently because we have now seen 17 definitively proven cases in humans in Alberta alone," says Dr. Stan Houston, an infectious disease expert at the University of Alberta.

This parasite strain developed its own unique genetic marker while being carried and passed through Alberta wildlife. The *New England Journal of Medicine* published a report on the province's first seven cases of human disease caused by this unique strain.

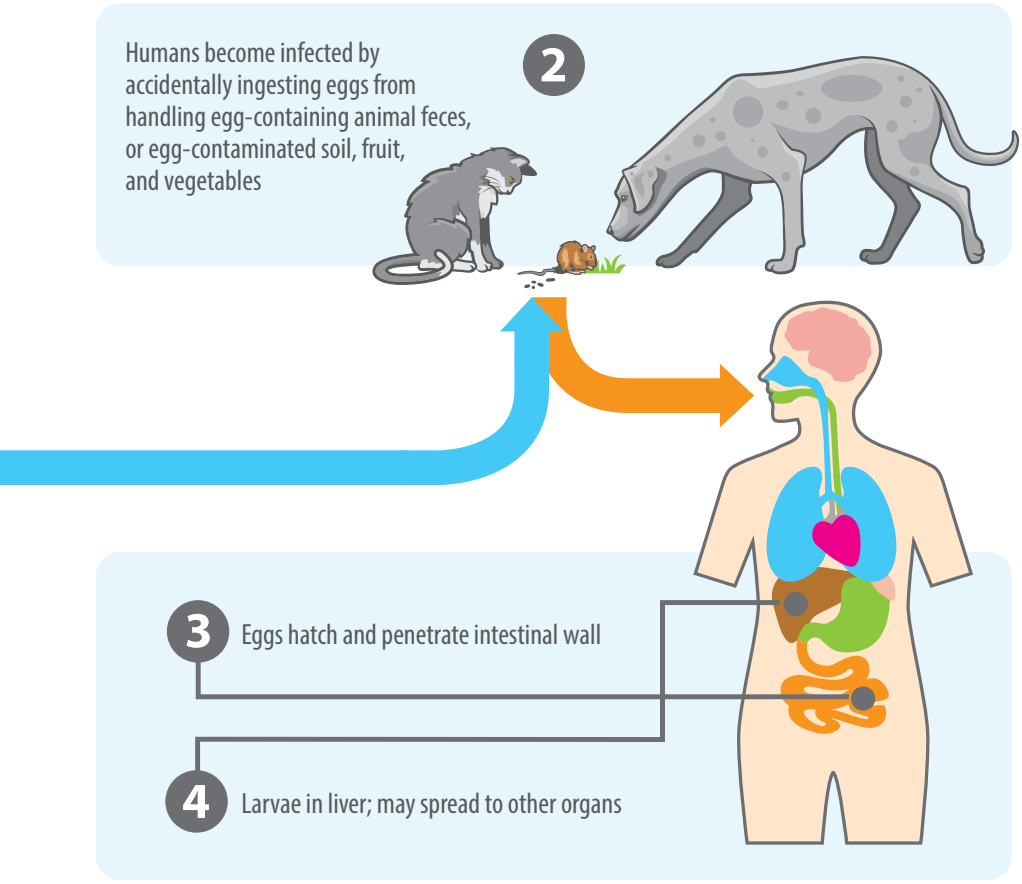
Dr. Kinga T. Kowalewska-Grochowska, provincial lab microbiologist, lab physician, and University of Alberta associate professor says, "Much is still unknown and we're learning that this mutated parasite may not behave like it does in Europe. We're watching and we're learning."

In 2019, Cassidy Armstrong shared her story after surgeons learned that the mass in her liver was from the parasite, not cancer. People can carry the tapeworm larva for many years before symptoms appear. In Cassidy's case, doctors believe she may have had it for a decade. Alberta news outlets covered her story, which went on to gain international attention.

There are now 17 human cases reported in Alberta, and researchers think these cases represent the tip of the iceberg.

This slow-moving disease can require radical surgical and long-term treatment. Drs. Kowalewska-Grochowska, Stan Houston, Safwat Girgis (clinical professor and pathologist at University of Alberta), plus other Alberta medical professionals and researchers have written a research paper describing all recent new cases to raise awareness of this serious—but treatable—disease. They hope to have it published soon. "Unless a pathologist knows exactly what to look for, there could be some of these patients walking around with an undiagnosed infection," says Dr. Kowalewska-Grochowska. The paper covers what this infection might look like and when medical professionals should consider it as a possibility. Dr. Houston says, "Indicators would suggest we are in the early phase of this and are likely to see more, but of course no one can know when or how fast."

Dr. Darcy R. Visscher, an associate professor at The King's University received an Alberta Conservation Association (ACA) Research



The blame game

Coyotes may be spreading this parasite, but they are not the villain here. In fact, coyotes have a natural and beneficial role as scavengers. They also play an important ecological role. They help spread the seeds of many berry-producing shrubs plus manage rodent and small mammal population within a city or town.

More information online

MyHealth Alberta: Echinococcus Multilocularis (Tapeworm)

Alberta Health Services Provincial Laboratory for Public Health report: Alveolar Echinococcosis (E. multilocularis)

***New England Journal of Medicine* report:** European *Echinococcus multilocularis* Identified in Patients in Canada

Grant to look at the relationship between wolves and the resident coyotes at a provincial recreation area. "The research support from ACA was fantastic," he says. "It allowed us to get some analysis done and got me thinking and transitioned us into thinking about dogs as potential transmitters of this disease between wild canids and humans. It really helped me turn the corner on my research and set up this wonderful collaboration I have with my colleagues at the University of Alberta and the University of Calgary."

Dr. Visscher's role in this collaboration is to find out what the risk is to dogs that are let off leash, primarily in the river valley, where there are rodents and coyote scat. The infection is spread through microscopic eggs on the feces of coyotes and foxes that have eaten infected rodents.

Dogs become infected by either eating infected rodents, or after coming into contact with coyote feces. Eggs become attached to the dog's fur and can be ingested through self-grooming. Once infected, dogs develop adult tapeworms and pass the microscopic eggs in their feces.

"Hopefully we'll get a good understanding of how this zoonotic disease, that normally exists in animals, moved from its normal habitat and lifecycle and is now infecting humans," says Dr. Visscher.

Previous published research has shown up to 65 percent of coyotes in some populations within Alberta carry this parasite. Scott Sugden, research assistant, led a project supervised by Drs. Colleen C. St. Clair and Lisa Stein, both University of Alberta professors. Their research will help determine if coyote health, including the presence of this parasite, is related to the different species of bacteria that live in the coyote gut. These bacteria, often referred to as the gut microbiome, are well-known to respond to changes in diet while also affecting health and behaviour. They hope to share the results in a published paper in the upcoming months.

Dr. Kowalewska-Grochowska wonders if we're currently missing cases of the disease or have missed them in the past, because it's relativity new and people are only now becoming aware of its existence in Alberta. She is concerned that the emergence of this provincial strain (similar to a virulent one from Europe) may mean the situation in Alberta is worse that we think.

In the future, Dr. Houston hopes all this work will lead to interventions that could prevent transmission and identify which groups of people might be at the highest risk. "I'd like to do some screening to see if there is a significant number of unrecognized cases out there and trappers would obviously be one of the most likely groups."

This article's introductory scene with Emma, Logan and their dog, Harley, is imagined, but the reality of a dog picking up the parasite and passing it on to humans is not. Fortunately, while researchers look for ways to prevent transmission and achieve earlier diagnosis, there are simple things you can do. Wash your hands after touching your pet. Contact your veterinarian to get worm medication for this specific parasite. Most importantly, when you head outside with your pet, keep them away from coyote scat and rodents.

illustration: Danielle Erickson

Ten Years in the Making

by Roy Schmelzeisen

photos (this page): ACA, Roy Schmelzeisen

It's been ten years since the first trees were planted on the North Fawcett 2 Conservation Site. Watching the transformation that has occurred since is one of the most rewarding aspects of working for Alberta Conservation Association's (ACA's) Land Management Program.

Purchased back in 2008, and funded by Shell Canada Energy through ACA's Corporate Partners Program, North Fawcett 2 is part of a land securement initiative focused on conserving previously cleared lands in the boreal forest. These lands hold the potential to be restored back to native habitat. Alberta's Boreal Forest Natural Region covers most of northern Alberta and makes up 58 percent of the province's landmass. It is a place of rich diversity and ample resources.

It is also a place where the familiar struggle between resource extraction and the maintenance of ecosystem goods and services play out. Often referred to as forest fragmentation, the cumulative effects of climate change, resource extraction, clearing of boreal forest, and other forms of development have greatly impacted many species that depend on large tracts of intact forest. Though restoring the 160 acres on this one parcel of land is not going to have a big impact on the overall issues that face forests today, it is one step in the right direction.

Watching trees grow

When North Fawcett 2 was first purchased, most of the forest cover had been cleared and many of the wetlands drained for agricultural purposes. Historic imagery showed that the land had been modified over 50 years ago, and the remains of a homestead can still be found in the southwest corner of the property.

Restoring a functional forest system takes dedication and a lot of patience—one cannot expect to simply plant a few trees and call the job done. To get it right, ACA biologists reviewed historical imagery and studied the remaining forest stands in the area to get an idea of what species are native to the area and what should be planted on the site. A management plan written specifically for North Fawcett 2 identified the site's features and established long-term objectives.

To date, over 260,000 trees have been planted. Much of this is thanks to partnerships between ACA and organizations such as Tree Canada, Millar Western Forest Products, and the Forest Resource Improvement Association of Alberta. Together, we selected a variety of

photos (this page): (top) ACA, Roy Schmelzeisen; (bottom) ACA, Drone

trees for planting and chose planting locations to conform with natural site features and maximize tree survival. Using locally sourced seed stocks was a priority. Some of the saplings planted were even grown from the seeds of an old pine tree that lives on the site.

With some of the trees now standing over head height, the forest has some aspects of an early successional forest. Though these young forests aren't as species rich as an old-growth forest, they can still provide a lot of habitat diversity. If you want to attract a good range of species to your plantation, a proper mix of tree species and stand ages is the key. The variety will maximize food, shelter, and breeding opportunities. Coniferous trees, such as pine and spruce, have the special role of providing thermal cover. They provide warm shelter in the winter and cool shade in the summer. In time, the woody shrubs and herbaceous plants that naturally occur in the forest understory take root and add to the diversity and overall stand structure.

Living on the edge

It's hard to get better diversity than along the water's edge. With help from Ducks Unlimited Canada, about 57 acres of wetland habitat has been restored. Whether a species actively breeds in the riparian area or just comes to quench a dry throat, marsh wetlands are hotspots for species diversity. In fact, a nesting pair of sandhill cranes moved in shortly after the wetlands were developed. Now that there are open bodies of water, ducks and other waterfowl can also be spotted here. And, very recently, beavers have arrived. Common yellowthroat warblers are a frequent inhabitant of local wetlands, so look for those too if you visit. The male's black face mask and bright yellow throat are hard to miss.

Part of a larger system

Larger conservation areas tend to have a better impact than smaller ones, and North Fawcett 2 butts up against two other great conservation sites—North Fawcett and North Fawcett 6—for a combined conservation area of 630 acres. Trees have been planted on those sites as well, and an added bonus with establishing the young forests is that they buffer older, existing stands on each of the sites. It's good news for some interior forest species that prefer a more transitional change from open field to mature forest and don't do as well in tree stands directly next to open fields.

A shared resource

One important consideration for ACA is conserving habitat as well as providing opportunities for responsible and sustainable use on our conservation sites. No call-in permission is required to visit North Fawcett 2 or the sites next door. All visitors have to remember is to use respect and access our sites by foot, follow regulations, and adhere to the restrictions printed in the *Alberta Discover Guide* and on the site signs. If in doubt about allowable activities, call ACA toll free at 1-877-969-9091.

So go! Check out the North Fawcett sites for yourself. Appreciate and enjoy the hunting, foraging, and nature walking opportunities they provide. After all, it's been 10 years in the making.

Drones provide a unique and new perspective for surveying our conservation sites. They can easily pass over wetlands or steep terrain that would be difficult to access on the ground.

Discover Guide

North Fawcett II
Conservation Site
D3-12

ALBERTA'S SILVER LINING

Twenty-twenty has been an unusual, challenging, and downright difficult year; our family lives, our work lives, and our recreational lives have all been disrupted. For many, outdoor pursuits offer one of the few respites from these daily difficulties, and fortunately we live in a province with an amazing abundance and diversity of angling and hunting opportunities. As we move into fall, here are four iconic Alberta experiences you shouldn't miss.

► *by Ken Bailey*

1. Eyes to the sky

You could make the case that Alberta has the best waterfowl hunting in North America. Our possession limits are generous, competition in the field is minimal, and our landowners are typically welcoming—a trifecta leading to unparalleled waterfowling opportunities.

The key to productive goose hunting is spotting. There's no practical alternative to putting miles on your tires and finding fields where geese are actively feeding. Focus your spotting in areas near large wetlands that provides staging and roosting habitat for migrant birds, then key in on nearby swathed crops, particularly barley and peas. Rest assured, the geese will find them.

Canada geese can be found across the province anywhere there is cropland; white-fronted geese (speckle-bellies) and snows are more common in the northern and eastern regions.

Duck hunters will be rewarded for their spotting efforts in these same areas, especially when field-hunting for mallards and pintails. As an alternative to hunting fields, identify the small—less than two acres—wetlands that ducks drop into before feeding. Often willow-lined, these potholes are commonly within or adjacent to the field where ducks are feeding. Natural cover is generally available, and all you need is a dozen or so floating decoys.

If you want to shoot a wide range of duck species, consider hunting larger waterbodies. Set up in the natural cover on points or islands and your reward will be shooting opportunities for many of Alberta's lesser-known, but fine-eating, duck species. Dogs, boats, and decoys can help, but aren't necessary if you have a little patience and a pair of waders.

2. Whitetail fever

Through the seventies, eighties, and nineties, Alberta was considered *the* premier North American whitetail destination, with visiting hunters forming a steady line through our airports. Then, quality deer management in the United States, firearms legislation barriers, and economic realities combined to reduce the influx of hunters. The outfitting industry was negatively impacted, but the good news is that the deer are still here. In fact, in many areas of the province their numbers and trophy-quality have never been better.

White-tailed deer are our most popular big game species for all the right reasons. They're reasonably abundant virtually across the province, making them relatively accessible irrespective of where you live. That makes them an ideal quarry for young and beginning hunters, or for those who willingly increase the challenge by hunting with primitive weapons. A growing cohort of new hunters—those who have taken up hunting as a means to procure healthy, organic, locally-sourced meat—will discover that the ubiquitous whitetail is ideal for meeting their needs.

Meanwhile, for experienced hunters, or those seeking to up the ante, few hunts exceed the challenge of taking a mature whitetail buck on his home turf. A crafty old buck knows his territory and has learned to avoid detection through years of hard-won experience. One tip from the pros—you'll never shoot a big buck if you close your tag on a smaller one!

This year, with the borders closed to most visiting hunters, many of our outfitters are able and willing to guide residents. This is an opportunity not to be passed up if you're anxious to learn from the best. If you do choose to hunt with a guide or outfitter, do so not with the mindset of learning *where* they hunt, but rather *how* they hunt; trophy-quality whitetails can be found throughout their range in Alberta.

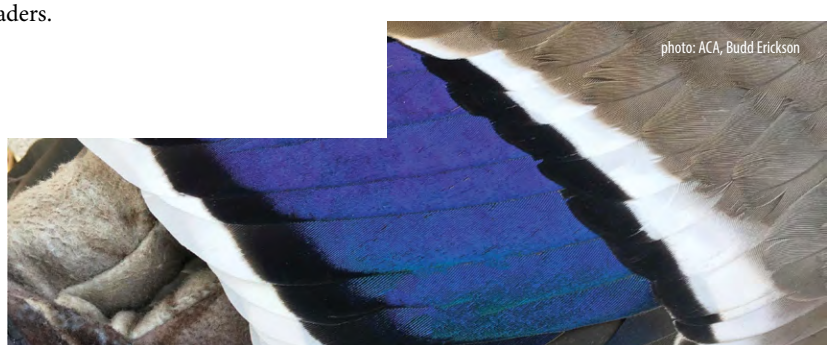


photo: ACA, Budd Erickson

photo: ACA, Doug Manzer

3. Go west

No landscape screams "Alberta!" quite like our foothills and mountains. Vast tracts of publicly accessible land and a diversity of game species make this a hunter's paradise. If you've not hunted there before, make this the year you do; it's like visiting a whole new country without leaving home. While hunting mule deer or moose requires that you draw a tag, whitetails, elk, black bear, and bighorn sheep can all be hunted by purchasing over-the-counter tags.

Elk populations in these regions are not what they once were, but good numbers remain in many watersheds. Do your homework to identify the best spots—conservation officers, biologists, leaseholders, outfitters, record-book entries, and maps and satellite imagery can all help you narrow the options.

For the more adventurous (and sure-footed), bighorn sheep represent the most revered of Alberta's big game animals. In fact, Alberta is one of the few jurisdictions where residents don't have to draw a tag. Surprisingly, when you talk to those in the know, many rams can be found in areas that are foot-accessible. It's expected that with fewer non-residents in the mountains this fall, the best sheep areas will see considerably less traffic; there may never be a better time to get your ram!

If you do choose to hunt the foothills or mountains, be aware they can be unforgiving to the unprepared. The weather can turn from pleasant to blizzard-like in an instant, the terrain can be treacherous, and grizzly bear encounters are not uncommon. Further, should you run into any difficulties, communications can be uncertain and help a long way off.

Despite these challenges, however, true wilderness, awe-inspiring vistas, and a unique experience awaits those who hunt the Rockies. Given that many won't be as busy as usual, consider hiring a capable outfitter to get you in and out of this rugged country, or to guide you throughout your hunt.

4. Hit the water

For many, September 1st marks the day they put down their fishing rods and pick up their shotguns, bows, or rifles. That's unfortunate, because it means they're missing out on what is arguably the best angling of the year, particularly in our western rivers.

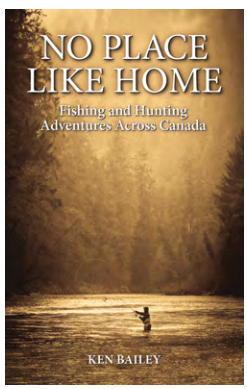
As fall progresses, water temperatures cool, levels are at their lowest, and fish begin to congregate in overwintering pools. A willingness to wear out a little boot leather can put you into superb and uncrowded angling. The fish are eager too, as they prepare for the leaner, frozen-water months.

There are few secrets to finding Alberta's trout streams—you probably already know most of them by name. Make a point to fish them through the cooler autumn days; you won't be disappointed.

At a time when many Albertans are feeling a little stressed, there's no cure better than time afield enjoying the best of our home province's generous hunting and angling opportunities.

About the author

Angling and hunting have been lifelong passions for Ken Bailey. He is a well-respected outdoor writer who has written more than 1,000 articles and columns for publications ranging from *Outdoor Canada* and *Alberta Outdoorsmen* to *African Hunting Gazette* and *National Post*, to name just a few. In his 2019 book, *No Place Like Home: Fishing and Hunting Adventures Across Canada*, Ken recounts the best of his many adventures.



Find Ken's book at www.nplh.webnode.com.

photos (left to right): ACA, Scott Seward; ACA, Mike Verhage; ACA, Mike Jokinen

Everything Sandhill Crane

► *by Brad Fenson*

Nicknamed "ribeye of the sky," sandhill cranes *(Grus canadensis)* are considered one of the best tasting migratory birds to harvest during the waterfowl season in some jurisdictions. After many attempts to open a hunting season in Alberta, it was approved at provincial and federal levels to open in September 2020.

Life history

Sandhill cranes are one of the world's tallest flying birds and can be spotted high in the sky during migration. Their unmistakable trumpeting "garoo-oo-a-a-a" call is audible up to 1.6 kilometres away.

Adult cranes are predominantly grey, with a red or burnt orange forehead and cap, white cheek patches, and a long, dark, and pointy bill. With an incredible two-metre wingspan, sandhill cranes use warm air thermals to stay aloft, which is especially helpful to conserve energy during long migrations. Adults can reach up to 1.5 meters when standing, and weigh about 3.5 to 6 kilograms. Juvenile birds are rusty- or cinnamon-coloured and do not grow their red forehead patch until they are two years old. The sexes look alike.

Sandhill cranes are social creatures and stage by the tens of thousands on their wintering grounds and during migration. As opportunistic omnivores, cranes will feed on a variety of flora and fauna. Their diet consists of anything from berries and aquatic plants to snakes, amphibians, small rodents, insects, and worms. Their serrated bills act like garden tools as they root around and pick at their meal.

Season opens September 2020

Creating a new opportunity

Estimates predict the Alberta season will account for about 2 percent of the total birds harvested in North America

photos: Brad Fenson Outdoors

For over two decades, Alberta has tried to implement a sandhill crane hunting season. Until recently, opposition to the hunt always forced proposals to be pulled. Saskatchewan and Manitoba have enjoyed seasons for over 50 years. In 2019, Alberta Environment and Parks worked with the Canadian Wildlife Service to overcome any hurdles, and late in June 2020, the federal government granted final approval.

It is important to note that sandhill cranes are already hunted along their migration routes from north to south. Estimates predict the Alberta season will account for about 2 percent of the total birds harvested in North America.

The Canadian Wildlife Service (CWS) and the U.S. Fish & Wildlife service monitor crane populations on their wintering grounds, where they congregate in large numbers. These agencies are responsible for setting and monitoring migratory waterfowl seasons and harvest. In its *Proposals to Amend the Canadian Migratory Birds Regulations: December 2019*, the CWS notes: "The latest 3-year average (2016–2018) of 659,899 birds is above mid-continent population management plan objectives of 349 000 to 472 000 birds. Plan objectives represent both minimum and maximum population levels, reflecting both social and agricultural limits on migration routes. As the current mid-continent population (3-yr average) has shown a 52% increase since the 3-year average calculated in 2000, and is 40% above its maximum population threshold, there is an opportunity to advance a fall hunting season for these birds in Alberta."

Hunting strategy

Birds of a feather do flock together. Sandhill cranes are social creatures and like to stage and feed in large numbers along migration routes. Like other waterfowl, sandhill cranes will come into decoys that look like other cranes already resting and feeding in a field. A dozen decoys can draw the attention of large flocks of up to 50 birds.

Hunters targeting fields, dry slough bottoms, or areas of grassland where they have spotted cranes feeding will find these areas ideal to return to and set up decoys. There is a morning and evening flight of birds heading out to feed before returning to a roosting area, which is typically a gravel bar on a river or shallow wetland.

Duck and goose hunters often shoot incidental sandhills that fly into range. One strategy is to place six sandhill crane decoys on the upwind side of a goose and duck decoy spread to draw potential birds in the area into range.

Because sandhill cranes stage in large numbers, they can provide some pass shooting opportunities. Watch for birds coming off the river or a wetland and intercept the main flight path. Most of the cranes will follow a similar flight line to feeding areas, making them vulnerable to hunters hiding in a treeline or behind a rock pile on a hill. On cloudy, windy days, pass shooting can be most productive.

Hunters in Canada must hold a federal migratory game bird hunting permit and stamp, as well as the appropriate provincial game bird licence. Sandhill cranes are migratory game birds, and hunters must use non-toxic shot. Steel shot sizes used for geese are ideal. Shot sizes BB, #2, or #4 provide the pattern density and knockdown power required.

For more recipes like this visit
www.HarvestYourOwn.ca

"Ribeye of the sky"

Coffee-Rubbed Crane Steak

Sandhill crane meat is fine-grained and easily mistaken for a prime cut of beef, so this recipe treats it like one.

A dry-rubbed crane breast sears to a flavourful char on the outside. Never cook beyond medium, and medium-rare is preferred.

Extra-fine ground coffee goes incredibly well with red meat. There are several commercial brands of meat or barbecue rubs that include coffee in the ingredients. However, it is easy to make your own.

Ingredients

- 4 to 6 boneless sandhill crane breasts
- ¼ cup finely ground coffee
- 1 tbsp smoked paprika
- 1 tbsp brown sugar
- 1 tbsp dry mustard
- 1 tbsp kosher salt
- 1 tbsp ground black pepper
- 1 tbsp ground coriander
- 1 tbsp garlic powder
- 2 tsp chili powder
- canola oil

Directions

1. Combine the coffee and all spices in a bowl.
2. Brush both sides of the crane breast with oil and apply one tablespoon of the coffee rub onto each side of the breast and rub to form an even layer. The rubbed breasts can be sealed in plastic wrap and placed in a fridge for two hours to increase flavour. Remove from the fridge 15 minutes before cooking to allow them to warm to room temperature.
3. Preheat a cast-iron frying pan over high heat.
4. Add two tablespoons of canola oil and place the breast in the hot frying pan, cooking each side until golden brown, about 4 minutes per side. Remove the breasts from the heat and let rest for four minutes before slicing and serving.

NOTE: This recipe makes enough rub for several meals and stores well in an airtight container. Use a clean spoon to place the rub on meat, so as not to contaminate the main supply.

About the author

Living off the land for most of his life, Brad Fenson is captivated by the richness of wild game. He's just as passionate about sharing knowledge too, helping others earn, cook and enjoy their Alberta harvest through his many years of writing, speaking and teaching.
Hosting the Harvest Your Own Podcast is Brad's latest pursuit—he interviews a range of guests about wild game strategies, the outdoor connection, and how to get started.

Connect with Brad today:

Instagram: @bradfenson
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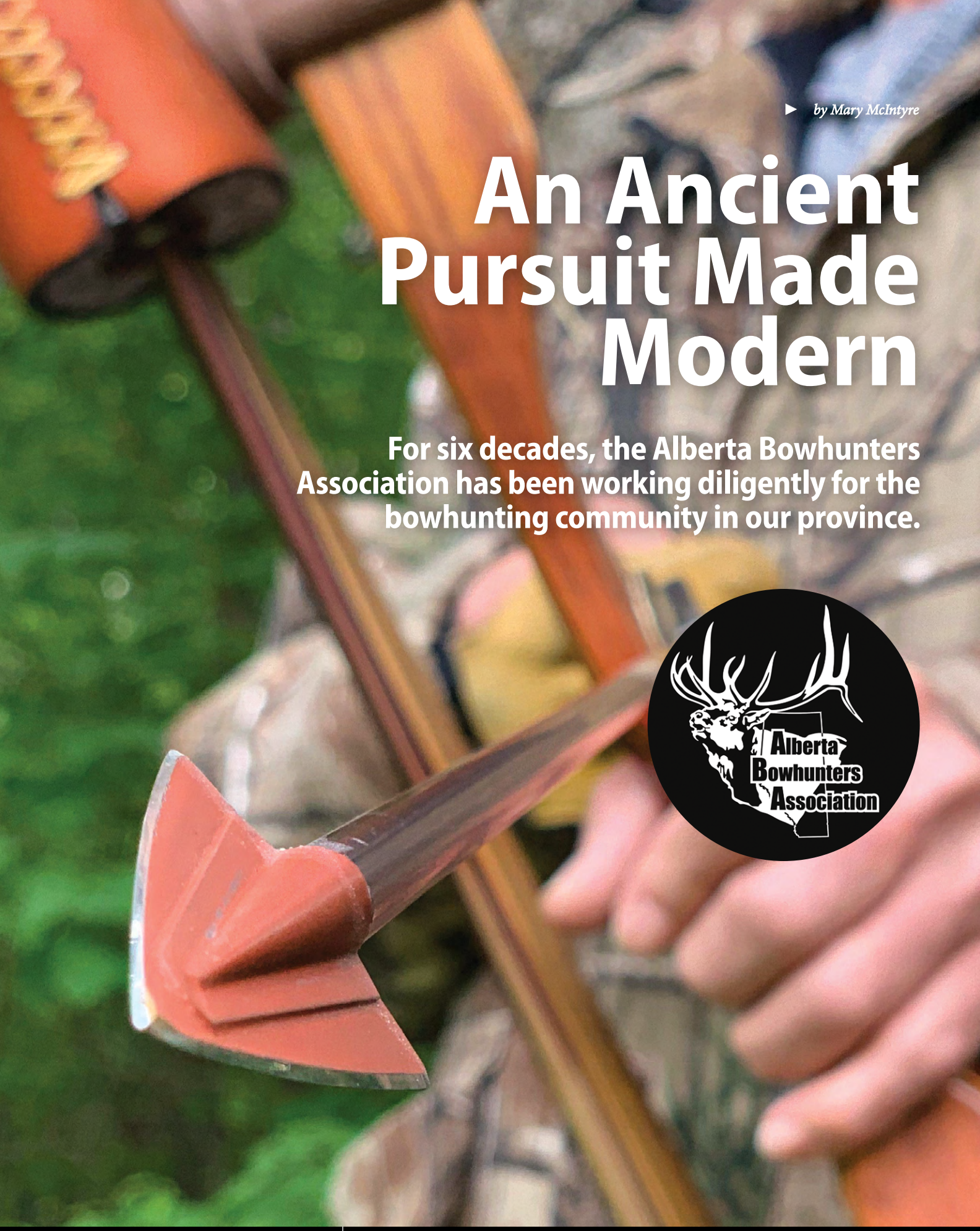
Podcast: www.harvestyourown.ca/podcast



by Mary McIntyre

An Ancient Pursuit Made Modern

For six decades, the Alberta Bowhunters Association has been working diligently for the bowhunting community in our province.

Bowhunters are driven by the thrill of getting close to their quarry. Perhaps more so than other forms of hunting, the skills needed to successfully bowhunt closely resemble those used thousands of years ago. Stealth and patience is the name of the game, as is resilience and the willingness to put in as many hours as it takes to get close enough. It's not all the same though—today's bows are lighter, more efficient, and more powerful.

Years ago, fewer resources were available to try bowhunting. Now, people have multiple options to try shooting a bow, with many archery pro shops and clubs that offer access to archery equipment. These opportunities help archers stay up to date on new technology, and help to continuously improve an archer's accuracy with expert advice and off-season activity.

First on the list of helpful bowhunting resources is the Alberta Bowhunters Association (ABA). Almost 65 years ago, ABA became the provincial organization representing the bowhunting community, and has over 1,700 members across the province today.

The association's board executives work with stakeholders and government to enhance and promote bowhunting opportunities. As advocates, they worked with government and stakeholders to create changes to the *Wildlife Act* and hunting regulations. Their work provided an increase in bowhunting opportunities for Albertans.

ABA offers a 3D Sponsorship program for its affiliate clubs that focuses on using real-life bowhunting situations. This gives bowhunters important practice before they go to the field. The association also supports the International Bowhunter Education programs and the National Archery in the Schools Program administered by the Alberta Hunter Education Instructors' Association. ABA's board executive members also developed a *Rules of Fair Chase* statement for game harvests and a member *Code of Conduct*.

Brent Watson, president of the association, believes discussions with stakeholders and government over the last 60 years has dramatically increased opportunities for Albertans to bowhunt in the province. Evidence of this lies in the increase in the number of people who have taken up bowhunting.

In the last 20 years, the number of Albertans purchasing bowhunting licences has almost doubled, reaching to over 21,150 in 2019. This increase also marks an influx of women and youth. "We're getting a lot more youth involved in the hunting aspect," says Watson, adding that helping hunters, both new and experienced, has helped ABA continue to grow and expand the hunting community.

Watson has been bowhunting for 40 years and is in his 16th year as president of the Association. "We're probably the envy of a lot of jurisdictions in North America. Our general hunting seasons are actually pretty long, and we've got it pretty good with the variety of game we can hunt."

Only a few people who are new to hunting start with a bow, according to Watson. For a lot of people, he explains, it's a progression. Watson moved to exclusively using a bow over two decades ago. "It was a greater challenge, and gave me the opportunity to be more connected with nature and the quarry I pursue," he says. Watson then transitioned further to only using a traditional bow for the last 15 plus years.

For him, bowhunting was more rewarding. "Hunting with a bow offers a more fulfilling pursuit that can be a spiritual and emotional experience…just being five or 10 yards from an animal and it is blinking, and you can see its eyelashes and you can see it licking its nose and scratching its ear…you're in their world up close and personal and that experience can change you."

He believes that is one of the things that attracts people to bowhunting. This connection has also led Watson to let a lot of animals walk away while hunting. "Wait another day and another opportunity will show up," is his advice to new hunters. "You won't regret making that decision, and you owe it to the animal. It's not like you're going to get hit by lightning if you don't take the shot."

Bringing together likeminded bowhunters is important to ABA, and they work to ensure it's a welcoming and nurturing environment. That's one reason why membership dues have stayed the same for over 20 years, and why there are no immediate plans to increase them. "If we bring that price up, it just makes it more difficult financially for people to free up those dollars, especially in these times," says Watson.

photos: (opposite) ACA, Charmaine Brunes; (this page) ACA, Darren Dorge

Tangled on the Prairie

► *by Ariana Tourneur*

San Antonio, Texas, 1876. Legend goes a young man named John Warne Gates started taking bets on whether the fiercest, most cantankerous longhorns of the state could bust through the freshly-patented, fragile-seeming wire pen. They couldn't. Even when Gates's cowboy sidekick charged the cattle head-on, bellowing and waving burning brands, that thin wire held.

photo: Steve Primm

Fencing lessons

John "Bet-A-Million" Gates didn't have to count on his wagers—he was selling a new kind of fence, and orders came rolling in. Invented by J. F. Glidden of Illinois, this fence was introduced to market with an 1875 ad proclaiming it "The Greatest Discovery of the Age." But John described it in a different way: "Lighter than air, stronger than whiskey, cheaper than dust."

We call it barbed wire.

Over here in southern Alberta, these impressive fences divided plots and kept in grazing cattle—making land ownership that much more real, and ranching more efficient and profitable. Now, with thousands of miles of this wire fencing crisscrossing our western landscape (the cumulative length found in southern Alberta and northeastern Montana could circle the earth eight times!), livestock remain exactly where we need them.

Barbed wire has certainly done its job well… maybe too well. "Fences have done such a good job that they have almost become an invisible icon of the prairies," says Paul Jones, senior biologist at Alberta Conservation Association (ACA) and lead on pronghorn research. "Although ubiquitous on the landscape, their invisibility is exactly the reason we published a paper [in *Biological Conservation*] identifying the hazards fences pose for wildlife and the need for more attention to this serious problem."

Twisted complications

Undomesticated animals—four-legged and feathered—face a real dilemma when it comes to fences. Needing to freely move as a way of survival, certain wildlife are being trapped, indirectly, by human intervention on the land. Because of robust monitoring and research by ACA, universities, other conservation groups, and volunteers, we know this to be fact, even though the unnerving blood-and-bone dioramas across our prairie landscape seem to be evidence enough.

An injury or infection from tangles or collisions with fences weakens an animal's chance of survival. And on the flipside, wildlife damage to fences can be costly and frustrating for landholders to repair. Winter-stressed, pregnant, and young animals are especially prone to fence run-ins, having trouble making the jump. If animals get stuck and can't pull free at all, they die of trauma, dehydration, or predation. Elk, deer, and other ungulates are susceptible to legs tangling in the top two wires. Page wire topped with barbed wire is the most lethal type of fence, especially for young fawns and calves. Separated from their mothers and stranded from the herd, the youngsters curl up and die of exposure and dehydration. Urban areas aren't exempt either; fences topped with barbs or pointed spikes, like decorative iron fences, can trap or impale leaping deer and other animals.

A sky view isn't necessarily safer—low-flying birds can also collide with fences and break wings, impale themselves on barbs, or tangle in wires. The most vulnerable? Ducks, geese, cranes, swans, grouse, and hawks. Waterfowl fly into fences that run near or across waterways, and hawks and owls careen into fences when swooping in on prey.


photo: ACA, Paul Jones


photo: ACA, Paul Jones

Plight of the pronghorn

Arguably the most affected by our ceaseless webs of fencing are pronghorn. The rich native grasslands of southern Alberta are home to approximately 18,000 of them, with many moving with the seasons to cover 180 to 500 miles (300 to 800 kilometres) in their annual movements (some even cross into Saskatchewan and Montana and back). Alberta's "speed goats" are the second fastest land mammal on earth, yet a small unassuming fence can stop them in their tracks. Max speeds of 98 kilometres/hour have allowed pronghorn to roam the continent for millennia—mindboggling to think they survived the age of the wooly mammoth and saber-toothed tiger—but a seemingly benign, nearly-invisible linear feature has highlighted one major shortfall: pronghorn are reluctant to jump.

They're strong and lithe, so why not? "Pronghorn are a highly-adapted species to open landscapes where historically, the tallest thing encountered would have been a sagebrush," explains Jones. "Or maybe, the very thin, delicate bones in their legs used to generate speed is why they are reluctant to jump."

A decade committed

Nearly ten years ago, this magazine published an article called "Under the Wire," which delved into the issues of migration and the intense research required to monitor pronghorn fence crossing habits and find realistic solutions. We've learned that oftentimes, the specific problem is that the bottom wire of many fences is strung too low for pronghorn to crawl under safely. Even if they can squeeze under, the barbed wire frequently scrapes off hair and hide—likely causing infection and frostbite. Pronghorn also may become entangled in fences and perhaps become trapped and die of starvation, or become sitting prey for predators. "These ecological traps are especially prevalent during winter when snow accumulates, reducing the height between the bottom wire and the ground," explains Jones.

More action, more species

While fencing is one issue impacting the movement across grasslands, the need to conserve connectivity in a shrinking landscape of intact prairies also comes into play. ACA has been at the forefront of much of the available research and practical conservation solutions that aim to find a balance between profitable ranching and the health of Alberta's prairie wildlife. Along with the U.S. Fish and Wildlife Service, the University of Montana, U.S. Bureau of Land Management, and The Nature Conservancy, ACA coauthored an important paper (also published in *Biological Conservation*) comparing the migration pathway overlap between pronghorn and sage grouse. "Our results show that the protection of a single species—sage-grouse in Montana—does not only provide benefits to the bird, but also helps protect the migratory pathway of pronghorn," says Jones.

ACA continues to pass information on to stakeholders, wildlife managers, and conservation groups, supporting their efforts to conserve movement patterns and grassland habitats. Connectivity between seasonal ranges and core habitats for pronghorn and other wildlife isn't just a bonus—it's vital for species persistence.

photo: ACA, Kevin Gardiner

The fencing effort

Jones believes solutions are already here, uncomplicated and available, with almost all success riding on relationships: "Partnering with ranchers through voluntary stewardship projects such as MULTISAR—that's how we can protect intact, native prairie and multiple species." Multiple organizations and ranchers continue joining forces with ACA to study and implement the best ways to conserve species on a working landscape.

After all, the decision to fence around land is one we base on functionality (and oftentimes appearance) to suit our own personal needs. In rural areas where livestock are kept, one thinks about which fence will be cost-effective yet strong enough to contain animals, define and separate ranches and farms, enclose pastures and rangelands, prevent trespassing, mark property boundaries and for some exclude wildlife. No doubt, they're necessary—no one is proposing to get rid of them. What is proposed is a better way that remains cost-effective and practical.

"Ranching is a vital part of Alberta's economy and a part of our heritage," says Jones. "It's who we are. Working voluntarily with landholders to modify fences, allowing pronghorn and other wildlife to pass through them safely—while of course keeping cattle inside and reducing the need of annual maintenance—is a win-win solution for both the rancher and wildlife."

Barriers meant to bypass

"At the Matador Ranch in Montana, and at varying locations in Alberta, researchers found it is not only pronghorn that have a preference to crawl under the bottom wire when it is at least 45 centimetres from the ground, but both species of deer as well," says Jones. One option is to replace the bottom wire with double-stranded smooth wire and move it up; however, this is expensive and takes a lot of effort. The easiest way is to space the bottom wire at least 45 centimetres from the ground. This significantly reduces the risk of a deer getting caught in the top two wires when jumping over, saving landholders the time and money of fixing fences damaged by struggling animals. Even more doable is looking for crossing sites along fences and simply modifying these specific sections by raising the bottom wire with clips, carabiners, or even tie-wire.

Tailoring fence design and placement isn't as big of an undertaking as you might think, and preventing wildlife injuries and fence damage more than pays for the effort it takes to repair. There isn't one set way of doing things, which is why ACA has put together a comprehensive guide of fencing options (see sidebar). Consider them when you construct or modify fences and crossings that give wildlife the freedom to roam while meeting your personal needs. The guide features sources for technical assistance and possible cost-share opportunities with local land trusts, sportsmen's clubs, community groups or conservation organizations.

Fencing forward

There are lot of details to take care of when you're a landholder, so the simplest way to think of a "friendlier fence" is that it needs to do just two things: allow animals to jump over and crawl under easily without injury; and be highly visible for both ungulates and birds.

The Texas barbed wire legend rests on a life-changing design to benefit the rancher. Alberta's legend? It just might be one that benefits the rancher and the wildlife.

Are you a landholder?

For more on how to enhance your fences and ranch operation, download your free copy of the comprehensive *Alberta Landowner's Guide to Wildlife Friendly Fencing* (www.ab-conservation.com/publications/educational-materials).

Look for the helpers

In southern Alberta, the Alberta Fish & Game Association (www.afga.org) has a dedicated volunteer group that works on fence removal and fence modification projects for pronghorn.

Since 2009, ranchers and volunteers have come together with AFGA and ACA to give pronghorn more room to roam. The Pronghorn Corridor Enhancement Project (or simply the Antelope Fencing Project) is a joint effort to modify fences so pronghorn can slip under easily without injury and move more freely across the prairies. Project funding comes from ACA's Grants Program and the Minister's Special Licence Fund, and the NGOs work with willing landholders to target fence projects throughout southern Alberta at no cost to the landholder.

Over the past decade, project volunteers have opened up 322 kilometres (200 miles) of fence for pronghorn, and completely removed another 40 kilometres (25 miles) of obsolete page wire fence. Nearly 80 percent of the projects have been on private ranches. For more information on this project, contact T.J. Schwanky, Wildlife Projects Coordinator, AFGA.

photo: ACA, Paul Jones


Taber
Pheasant
Festival
INFORMATION

photos: (left top to bottom) ACA, Colin Eyo; ACA, Rhianna Wrubleski; ACA, Budd Erickson; Ryan Doolittle; (above) Sandra Schindel

Taber Pheasant Festival

Canada's BIGGEST Hunting Festival

▶ *by Elize Uniat*

A fall blizzard dumps a foot of snow overnight. 100+ kilometre/hour winds howl. The prairie heat blazes.

Take your pick, because the hunters and organizers of Taber Pheasant Festival have seen it all. And while ten years' worth of October weather is variable, enthusiasm for Canada's largest hunting festival is not.

"Someone released their dog out of the back of the truck; it ran about 20 steps and fell in a snow bank and he couldn't find the dog…but they kept going!" says Todd Zimmerling, ACA president, remembering the second year's blizzard. From "snow boots to hunting in running shoes" is how Tom Machacek, a participating landowner and volunteer who chairs the organizing committee, sums up the festival. Whatever Mother Nature hurls at hunters, they forge on with adventure and optimism, and more often than not, bag a bird or two.

Gumption especially comes in handy now, as no one could have predicted Taber Pheasant Festival's 10th anniversary would fall in such a conspicuous year. But like every year since the beginning, the organizers and hunters make the best of it. "It's amazing what you can do when good people come together, all with a very strong service-oriented attitude and determined to make it the very best and safest experience possible for all participants," says Tom Bateman, Director Emeritus on Alberta Conservation Association's (ACA's) Board of Directors.

It's the thread that runs through every conversation about Taber Pheasant Festival: strong connections have been built between hunters, non-hunters, landowners, the MD of Taber, residents, conservation organizations, and sponsors.

It didn't start at that point though—event organizer and ACA biologist, Julie Landry-DeBoer, admits to her nightmares throughout the first festival in 2011. "I kept thinking there was something I forgot to do or something was going to go wrong," she says. Peek at the scope of what's involved in preparing for this event, and it's no wonder Julie didn't sleep well. From securing landowners who allow hunters on their land, promoting the festival, ensuring pheasants arrive and are cared for, releasing pheasants on 40 sites each day, and directing schedules of 700–800 hunters, to organizing multiple events including a banquet for 400, food tastings, raffles, silent auctions, and a two-day novice hunt—if that's not coordination, we don't know what is!

Initially, 30 landowners allowed pheasant releases and hunters on their land. Hunter demand soon bumped this up to 40, and with that the festival had become a catalyst to promote tourism and conservation in southern Alberta. Taber's mayor, Andrew Prokop, estimates the festival brings in around $3 million to the community each year. "Bottom line is it's very impactful and beneficial for Taber and area," he says. Alberta has also experienced an uptick in upland game bird licence sales over the last decade, attributable at least in part to the festival raising awareness. The vision—connecting landowners and hunters—is now real, illuminating the relationship between conservation, sustainability, hunting, and food. That was reinforced when the festival celebrated its fifth anniversary by winning the 2015 ALTO Sustainable Tourism Award from Travel Alberta. (Check out this video for more on that: www.youtube.com/watch?v=1dji31s6yrU.)

photos (opposite): (top three) ACA, Colin Eyo; (bottom left) Ryan Doolittle; (bottom right) Brad Fenson Outdoors; (this page) ACA, Colin Eyo

Most hunters are conservationists —they depend on the landscape and wildlife staying intact if they're to continue to enjoy sustainably harvesting dinner. It's exactly why creating connections with hunters and helping share the tradition of hunting is so important to ACA. Families in the field with their kids, people with new dogs, or even old dogs with senior hunters: every scenario makes the work worth it. "Working in the office you meet pretty much every hunting group that comes through, so you'll see there'll be the grandfather, a son or a daughter, plus a grandchild," says Julie. "Little ones are learning from people with a background in hunting, and that's just really good to see."

For people without that family opportunity, there's the novice shoot. Popular since the start, first-time hunters learn how to shoot a shotgun and then go on a mentored hunt for a chance at their first pheasant. The average age of novices at last year's shoot was 27, and just under half were 50 or older (the oldest novice was 73 years old!). Kandra Forbes, in her mid-twenties, highly recommends the novice portion: "The instructors they had from AHEIA [Alberta Hunter Education Instructors' Association] were amazing! You could try out different guns, and they knew exactly what to do. They were really great in teaching you….The dogs retrieve the bird for you, and even better, at the end a chef tells you exactly what to do with your bird."

Of course, there's food. Introduced in 2015, the culinary events are wildly popular. Three or four chefs with various backgrounds showcase their unique styles. Sean Cutler, executive chef at the Calgary Petroleum Club, teaches participants how to break down their bird and cook it for delicious results. The local, field-to-table aspect is what keeps Sean coming back. That, and meeting local farmers and seeing first-hand how passionate everyone is about conservation—and his pheasant chowder.

Just like enjoying a meal you harvest yourself, small moments become the special ones. Layne Seward, ACA biologist who has been with the festival since inception, lists the positive interactions between landowners and hunters as his personal favourite. Ten years along, and Layne estimates the release sites are 95 percent the same. That says something about the respect and relationships between landowners and hunters like no other number could.

Another standout? "With just about every novice when they have shot a pheasant—it's the excitement expressed in their eyes and body language," explains Tom Bateman. "It's that excitement of understanding and realizing that nature is there and it's available to us.

"And it's not just about hunting; it's about connecting with the natural world, and it goes further than that: it's about learning that we have a responsibility for the natural world."

"We have so much available to enjoy. Those moments keep us who are volunteers in the whole novice movement—be it for pheasant festival or other types of hunting or fishing or hiking or berry picking—going." He apologizes for being preachy, which, if you've ever met Mr. Bateman, sums him up perfectly: humble to a fault, even when his words are filled with the kind of sense we need to hear.

As for Julie, festival nightmares no longer plague her. Putting on the festival is hard work, but the pieces are locked in place, which means there's room for new ideas. "From day one, it has been popular and if we could make it work, we would have a larger festival," she says, echoing Todd, who also would like to see the festival grow. "We don't have the fiscal or even human resources to expand further, but I sure would like to find more funding," he says.

Most of all, this 10th anniversary is about celebrating the people—volunteers, organizers, landowners, sponsors, and hunters. Rain, shine, snow or wind, they come. Sure, some pheasant hunting goes on too (5,100 pheasants were released in 2019), but it's truly about creating relationships between people and the land, between novice hunters and experienced hunters, between people and their dogs, between landowners and hunters, and between hunters and the community of Taber. "If we could take this resource and enhance the community and make things better for everyone including the hunters, it's just a win-win," says Tom Machacek.

Todd stresses the importance of having AHEIA there for the novice hunt, the Alberta Fish and Game Association members who show up to help, and the unshakeable community support. "We really can get a lot accomplished because of working together and the partnerships," he says. Adds Tom Bateman, "This is about a cooperative effort that's experiencing wonderful results."

While it may have taken a pandemic to reawaken the desire to get closer to nature for some, the Taber Pheasant Festival has always been about fostering this connection. Julie reminds us of the why: "It's not all about bagging a bird, but the whole experience—from the cool, crisp autumn air, to the crunching of the leaves and grasses, to seeing your happy dog's head bobbing in and out of cattails." And sometimes, a snow bank.

Here's to the next ten!

photos: ACA, Colin Eyo; ACA, Rhianna Wrubleski

Why Hunt?

► *by Dr. Doug Manzer*

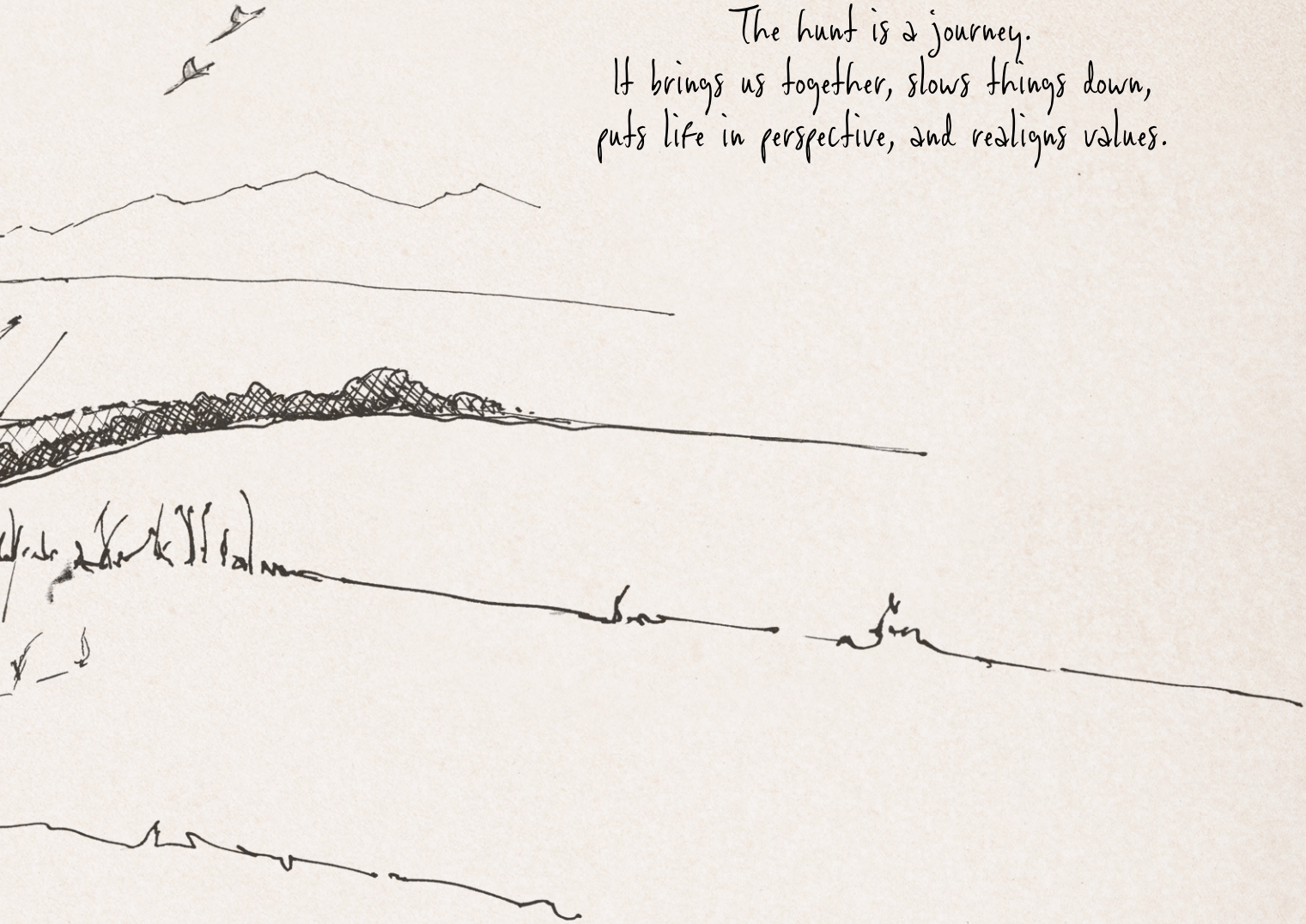
The motivations that inspire us to hunt are complex, and from a study on upland bird hunters, go far beyond the harvest. Eric Smith recently completed his graduate work (M.Sc. from the University of Alberta) that delved into the motivations of hunters, and their perspectives on elements of the hunt that bring satisfaction. He found that people are satisfied more by the underlying dimensions of the hunt rather than the harvest itself. Is this surprising? Perhaps to some, but certainly not for the 20th century Spanish philosopher, José Ortega Y Gasset, who suggested that "…one does not hunt in order to kill; on the contrary, one kills in order to have hunted."

Smith found that hunters derive satisfaction from elements described as lifestyle experiences. Spending time with family and friends was important, as was bringing home protein-rich meat for the table. Beyond this, the vast majority were at least partially motivated by their desire for exercise. All things considered this is a good thing too, as the caloric count expended while pursuing pheasants through a coulee bottom far exceeds the ration of any meat taken in.

If we visit Gasset again, he postulates that hunters desire to put their own efforts and skill to the test "…with all the extras this carries with it: the immersion in the countryside, the healthfulness of the exercise…." There are many competing interests for time, but something about the hunt slows things down, puts life in perspective, and realigns values. Hunters are normal everyday people who juggle their time like everyone else: from lawn mowing, movies, and cooking, to kids, dogs, and a mortgage that needs attention. The hunt fits into our overall lifestyle.

So why do people hunt? There was a time when it was life or death, with a utilitarian motivation balancing protein and life against effort and risk. However, I suggest that the motivation to hunt goes beyond utility, to something far deeper and more complex within the human spirit.

Hunting is, by definition, the pursuit of game rather than the assured killing of it.



When success is certain, it is not a hunt but something else quite different. One can still be a utilitarian hunter, solely gathering meat for the table or dealing with a crop pest; these pursuits are commendable. However, for many, and me included, the hunt goes well beyond a utilitarian view. While meat is important, we also hunt for everything leading up to the harvest of an animal. Not for the death itself, but for the uncertainty and the skill that it demands, as well as the emotion. Rather than pretend that the hunted is on equal footing, we embrace societal values of fair chase in pursuit of an unequal species. Beyond this, the individual may refine their approach even further (within the law) to further minimize advantages of the hunter and make the outcome less predictable (*sensu* Gasset).

If we accept the responsibility of the hunt, we also embrace the depth of emotion that comes with apparent failure or the harvest. Elation, sorrow, guilt, and happiness may flow leading up to and after the death of an animal. These balance the hunter and perhaps differentiate humans from common predators.

So again, why do we hunt? I suggest one's personal rationale differs among years, and perhaps among days as well. We hunt for the full complexity of all that comes before a kill, as well as the very common outcome of not achieving a harvest. Apparent failures are in fact nothing of the sort, but rather temper our expectations and heighten our value of the hunted for each day in the field.

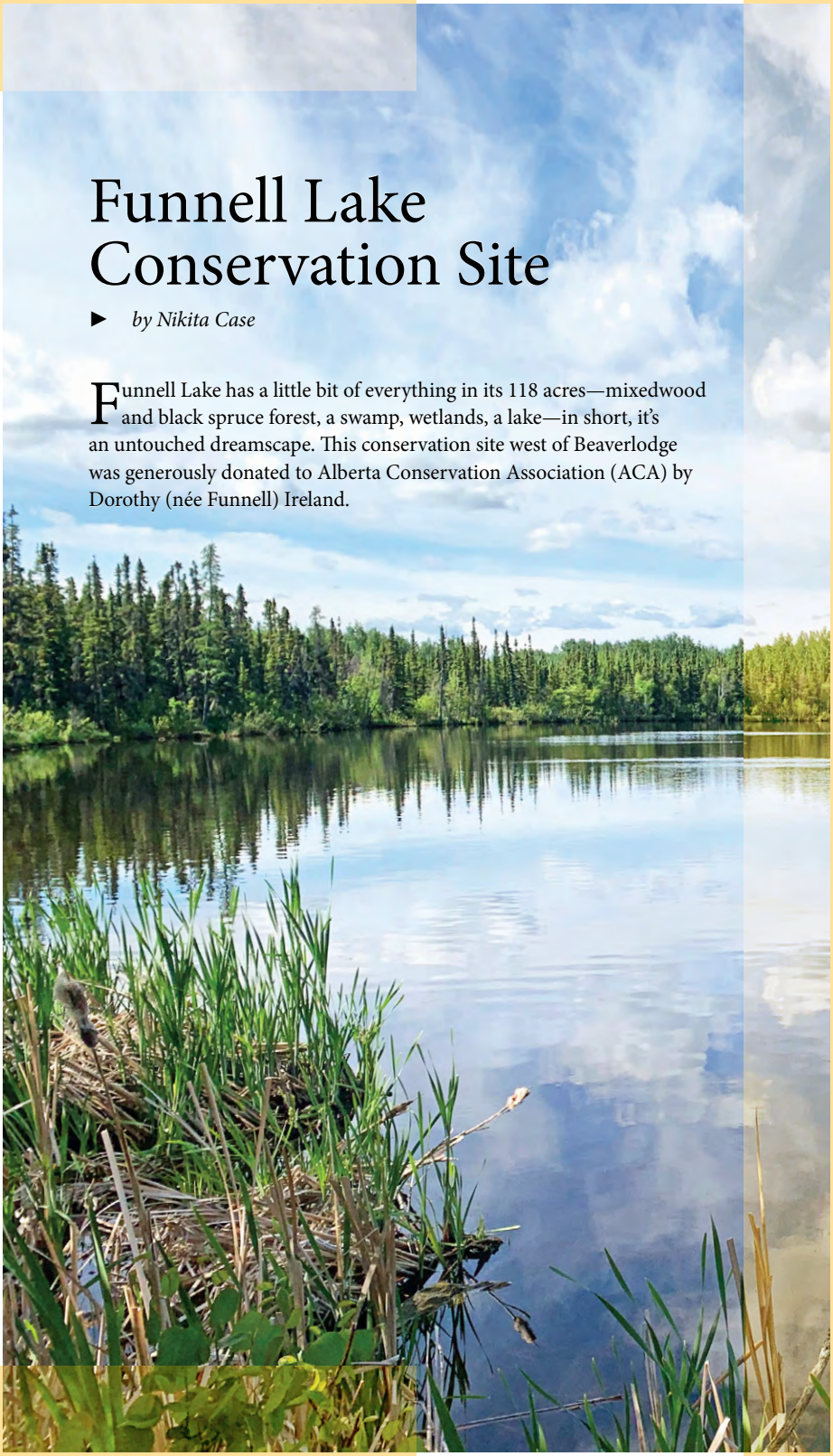
The hunt is a journey and not a result. It brings us together and opens our life to a range of emotions beyond daily existence. We feel the anticipation within ourselves and perhaps of the hunted, with all manner of emotion that comes from this journey. Joy, sorrow, remorse, and contentment all support the complexity of the hunt ethos. We are human in the hunt, and this intensifies self-awareness, and brings us closer to those that share in the experience. We hunt to live more fully, both physically and emotionally.

illustration: Jane Bailey

Funnell Lake Conservation Site

▶ *by Nikita Case*

Funnell Lake has a little bit of everything in its 118 acres—mixedwood and black spruce forest, a swamp, wetlands, a lake—in short, it's an untouched dreamscape. This conservation site west of Beaverlodge was generously donated to Alberta Conservation Association (ACA) by Dorothy (née Funnell) Ireland.



Within moments on the phone with Lisa Lagace, one can tell how much it means that Funnell Lake is now a conservation site. "I am so glad we were able to do this for our Mom. It was something she talked about to everybody who would listen." When asked why Dorothy, who has since passed on, donated the land, Lisa replies, "It was her way of ensuring it remained intact. It was very important to our Mom to keep it as natural as possible." The pride and happiness in Lisa's voice speak volumes.

The land was a reprieve from the city for Dorothy and her family. Since the family had a cabin there, they often spent weekends walking the trails and paddling their boat on the lake. Lisa remembers Dorothy with her grandfather out on Funnell Lake collecting wood for their homestead near Halcourt. "There was even a time," she laughs, "when a bear broke into the cabin and that didn't seem to bother her. She just loved nature." Dorothy's backyard in Grande Prairie boasted many trees filled with birdfeeders for both birds and squirrels. She had to have nature nearby.

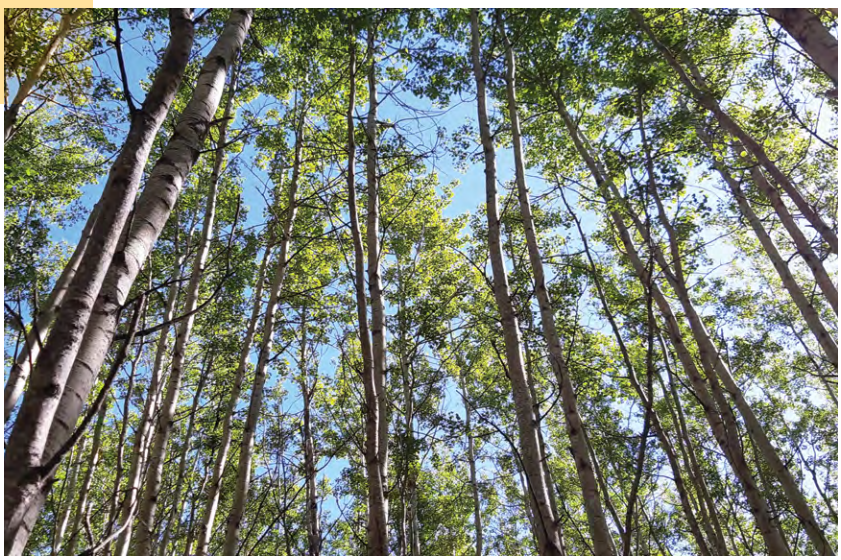
Lisa has her own childhood memories of Funnell Lake, with the bog holding a special piece of importance as it is where they would pick berries. "Going out to the bog was quite an event; we tried doing that as much as we could," she says. The family built the cabin, stripping logs that were used for its base. "Once the cabin was up, we went out often and it was our little nature getaway from the city."

Even though the land has been in the family for generations, one would be hard pressed to notice any human activity. "It's a hidden gem," says ACA biologist Sarah Bradley. "To have such a diversity of flora, fauna and habitat within one quarter section is unique." Indeed, animals like moose, deer and yes, bears frequent the land, which also boasts a large and diverse spread of birds and plants.

Another rare aspect of Funnell Lake Conservation Site is that it contains a trumpeter swan breeding habitat. Trumpeter swans are designated as *Threatened* under the *Wildlife Act*—it is estimated there are only 166 breeding pairs in Alberta. Securing the land around Funnell Lake protects critical trumpeter swan breeding habitat for the future.

The recurring thread in any conversation about Funnell Lake is the flawless land—it's a quiet place of beauty where one can reflect on and bask in nature, a respite from our everyday, hectic lives. That makes the small trek to reach Funnell Lake well worth it. Now that it is an official conservation site, the land is accessible for hiking, hunting, berry picking, and birdwatching.

Indeed, Funnell Lake is an incredible hidden and untouched haven, and it endures thanks to Dorothy.

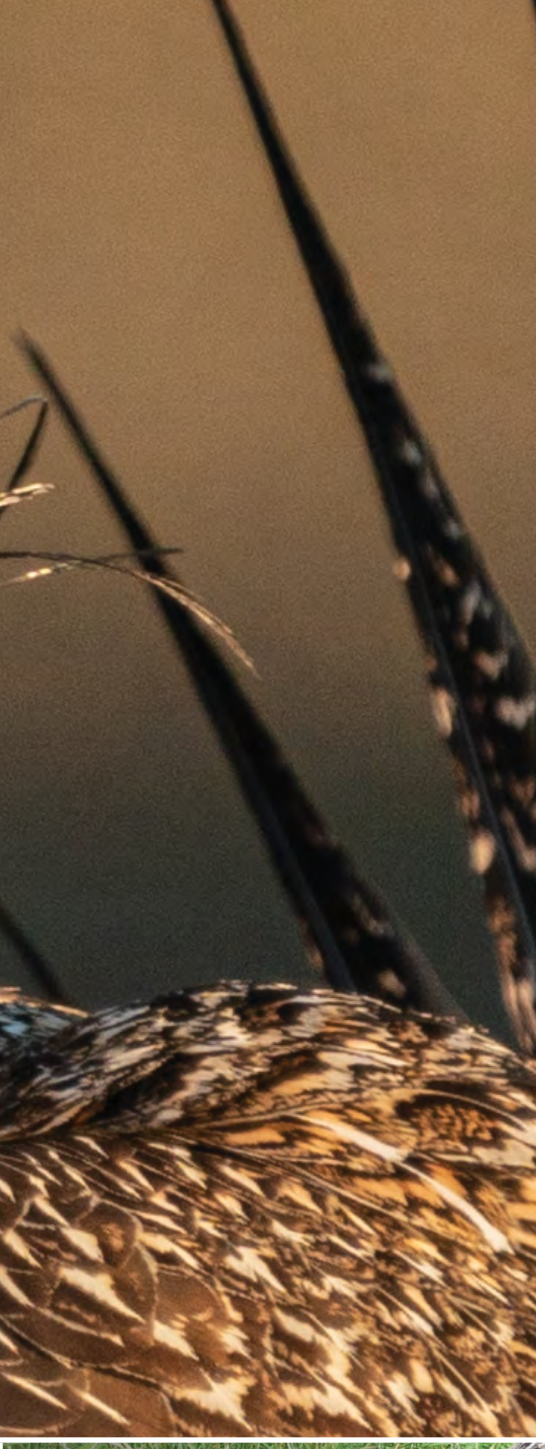


photos (opposite): ACA, Ed Kolodychuk
(this page): ACA, Sarah Bradley

photo: Christine Paige

photo: ACA, Mike Jokinen

Sagebrush
photo: AEP, Joel Nicholson



Resurgence

Boosting Greater Sage-Grouse Populations

► *by Karen D. Crowdis*

The greater sage-grouse (*Centrocercus urophasianus*) is recognized worldwide. While the male's distinctive plumage, calls, and dances attract a lot of human attention, what really makes this wild bird iconic is its relentless spirit despite dramatic, consistent population decline over the past 50 years. Fortunately, this species has government agencies, conservation groups, researchers, and the ranching community in its corner, working together and making a concerted effort to maintain and recover sage-grouse throughout their range.

The plight of the greater sage-grouse is almost an every-species story—facing ongoing changing environmental factors and other pressures, they persist as they have for centuries. These birds range across North America's sagebrush steppe, covering three western provinces and 15 American states. That range has drastically decreased in Canada. Currently, Canadian populations only exist in southeastern Alberta and southwestern Saskatchewan, at the northernmost edge of their range.

Not surprisingly, population numbers have dwindled alongside habitat, and the rate of loss is alarming. In the late 1960s, there were around 2,000 birds. Current estimates for Alberta are between 50 and 100, despite decades of conservation efforts.

While hunting did not cause the population decline, the Alberta government suspended hunting in 1995. The following year, the government declared greater sage-grouse to be *At Risk*. The status escalated to *Endangered* in 2000, and by 2013 the federal government placed crucial sage-grouse habitat under an Emergency Protection Order, a first under the *Species At Risk Act.* That order applies strict regulations and compliance requirements for all land use within designated habitat areas, protecting the vegetation needed to support a viable population.

No sagebrush, no sage-grouse

Greater sage-grouse need space. They require a mating area, a lek, where males parade and dance to win the female. "They are sensitive to their surroundings," says Joel Nicholson, senior biologist with Alberta Environment and Parks' (AEP) Fish and Wildlife Management Department. "They need large tracts of intact habitat. Anything that adds structures or noise to the land—they don't like it and will avoid it."

Industrial structures create noise that disrupts the courtship activities, causing the males to display more, or less, depending on noise levels. In some cases, structures will cause the birds to avoid the area entirely, which reduces their effective habitat.

photo: Calgary Zoo, Michelle Benzen

Then there's the all-important sagebrush. Having less natural vegetation is problematic. First, sagebrush is the primary component of their diet, making up 60 percent in the summer and 100 percent in the winter.

Second, it affects nesting and shelter. Sagebrush offers canopy protection from aerial predators and weather. It also offers lateral cover, making nests less visible. Natural short grasses camouflage nests from ground-based predators.

But, while it is easy to blame habitat loss solely on industrial and agricultural use, that is not the whole story. Yes, overgrazing and how we manage water (sagebrush needs occasional flooding to remain healthy) impact sagebrush, and by extension sage-grouse, but so does climate change and weather events like droughts, spring snowstorms, and extreme winter conditions. The interactions and interconnections between these pieces are intricate and varied, and there is still the predation piece to add to this puzzle.

Beyond habitat

The *Alberta Greater Sage-grouse Recovery Plan 2013–2018* explains that "habitat alterations may intensify the impact predators exert on sage-grouse populations if they increase predator abundance or modify diversity, reduce availability of protective cover, or if the alterations increase associated features that facilitate predator foraging." In layperson's terms, predation is natural in the wild and normally doesn't put a species at risk. What is different now is that human activities are inadvertently helping many of these predators.

Adult grouse face predation by eagles, great horned owls, coyotes, and red foxes. Power lines and other structures are prime examples of habitat alterations that provide premium perches for owls and ravens and give them a distinct advantage when hunting. Ravens, other predatory birds, and coyotes are all opportunistic nest predators whose populations have increased. The reasons why are complex, but some examples include abandoned buildings that shelter and attract rodents, a secondary food source. Or road development that increases roadkill incidents, feeding scavengers, along with artificial food sources like landfills. In short, greater sage-grouse have more predators than ever.

"In areas with healthy population numbers, predation is not limiting," adds Nicholson. "Habitat issues and low populations means it will have a big impact."

Disease is another factor that is not wholly controllable. Greater sage-grouse are highly susceptible to West Nile Virus. Alberta populations did not fully rebound from a 2012 outbreak, and suffered further in the 2019 outbreak. Disease increases stress on an already declining population.

International effort

These combined elements have converged into a perfect storm for the greater sage-grouse, but all is not lost. Researchers, several levels of governments, conservationists, landowners, and international groups are working together to help this grouse survive, and hopefully, thrive.

Greater sage-grouse in the United States are under similar pressures as their Canadian counterparts. In some areas, for example North Dakota, things are as dire as in Canada. However, in the core of their range, where large blocks of sagebrush habitat remain intact, they are still doing well. But even there it is far from perfect—invasive species and wildfires are huge problems in the Great Basin.

Since 2011, AEP and Montana Fish, Wildlife and Parks have undertaken a translocation program. The intent is to supplement the Alberta population and maintain its presence in our province, buying time for habitat improvements and industrial reclamation to promote population recovery. To date there has been three translocations from Montana to Alberta, with one additional translocation planned. Monitoring the success of these efforts is ongoing.

Baby steps

Another support for the beleaguered greater sage-grouse is a captive breeding program developed by the Calgary Zoo in collaboration with several partner organizations (see sidebar). A captive program propping up wild populations could potentially help population levels recover. The intent is to establish an assurance captive population, using the offspring to supplement wild populations. Between 2014 and 2016, wild eggs were collected from Alberta and Saskatchewan, and from translocated Montana hens that laid eggs in transit. In 2017, hens hatched from those eggs laid their own eggs, marking the first successful reproduction under the program.

Currently, the breeding program has about 30 females and 25 males. Captive greater sage-grouse are either hen-raised or keeper-raised. Hen-raised means the hen lays eggs, incubates them, and raises the resulting chicks. Keeper-raised means artificially incubating eggs and raising chicks in a group without a hen.

Birds then go to acclimation pens on a 160-acre site that was purchased by Nature Conservancy of Canada (NCC) and is being restored to native grassland. NCC manages the site, with advice from AEP and Alberta Conservation Association (ACA). The Calgary Zoo has partnered with NCC and uses the site to release birds due to its proximity to occupied wintering habitat and an active lek site. There is a second release site in Grasslands National Park, which has a wild greater sage-grouse population.

Juveniles are released around four months of age, when they would become independent from the hens, and are tagged with transmitters to help track them. In 2018, after spending two or four weeks in pens, 66 birds were released over two releases. Two hens survived, and one succeeded to hatch a brood. The following year saw two more releases, with a shorter acclimation time of one or two weeks. Releases took place in October to coincide with wild brood break up, increasing the likelihood of captive-bred juveniles being accepted.

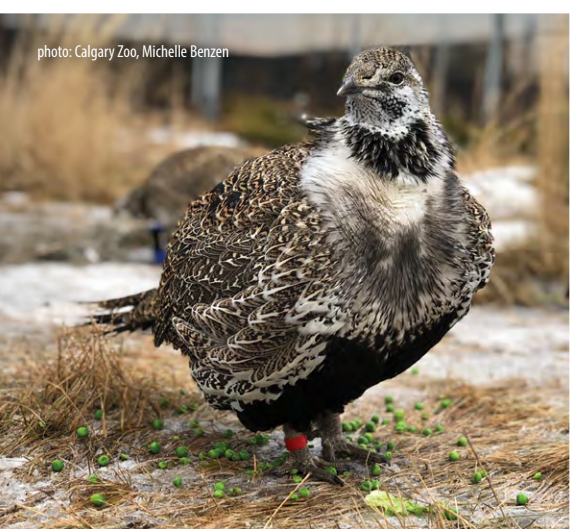


photo: Calgary Zoo, Michelle Benzen

photo: Calgary Zoo

Additional reading:

Alberta Environment and Sustainable Resource Development. 2013. *Alberta Greater Sage- grouse Recovery Plan 2013–2018.* Alberta Environment and Sustainable Resource Development, Alberta Species at Risk Recovery Plan No. 30. Edmonton, AB. 46 pp.

"Overall the modelling suggests the population will increase with releases and decrease if we stop," said Don McKinnon, conservation research population ecologist with the Calgary Zoo. "The releases buy time so the habitat can be improved to help the population recover."

One of the breeding program goals is to identify controllable factors that impact post-release survival to ensure successful future releases and ultimately increase populations—to "improve the odds," says McKinnon.

Cleaning house

Another important factor for greater sage-grouse survival is habitat restoration. ACA, with its partner organizations, have developed programs that successfully regenerate habitat for this grouse.

ACA acquires land based on several criteria: existing habitat quality and values, restoration requirements, recreational opportunities, and how it can fill in the gaps.

"We never know what land will become available, or what funding will be available," notes Tyler Johns, in land management with ACA. "Money that is set aside for land purchases is for the whole province, so we can acquire it as it becomes available."

ACA has worked closely with partner organizations and landowners to implement several land management tools geared towards helping species at risk. Silver Sage Conservation Site covers 2,371 acres and is home to 61 species of wildlife, including greater sage-grouse.

"One thousand three hundred acres have been reseeded on the conservation site to provide wildlife habitat and additional grazing opportunities to local producers," says Brad Downey, a senior biologist with ACA. "Restoring native grass on the Silver Sage Conservation Site has allowed us to fill in some of the holes in the native grasslands, create habitat, and reduce pressures on the greater sage-grouse."

Cattle producers play a significant role on this conservation site by grazing cattle and managing the grass. Local landowners are also involved with fencing projects, weed control, site cleanup, and seeding.

"We need working landscapes with well-managed cattle operations," says Downey. "Producers are out managing and conserving the land 365 days a year."

Beyond seeding, the project has seen the cumulative effect of removing old buildings, power lines, and orphaned wells to reduce predator habitat. Using grouse-friendly fencing, installing fence reflectors, and limiting industrial development on the land are also part of the stewardship. It is a collaborative and volunteer conservation project that works with producers to find solutions that work for people and wildlife. This local knowledge offers insights that help develop effective land management techniques.

Domino effect

While human influence impacts North America's largest grouse, it is the largest controllable factor. Collaborative efforts by governmental, environmental, and local producers are creating sustainable practices to ensure optimal opportunity for survival.

But, why so much effort to save one species? Because it shares the grasslands with many others. Protecting greater sage-grouse habitat protects elk, mule deer, pronghorn, and songbirds, in addition to several native plant species. It's not a stretch to say that this work helps all grassland-dependent species, many of which are species at risk, and many of which are adversely affected by the same disturbances in predator/prey ratios, development, and noise. Protecting this grouse is never about a single species—the ripple effect is exponential.

Calgary Zoo breeding program partners:

- Environment and Climate Change Canada
- Alberta Environment and Parks
- Snyder-Wilson Family Greater Sage-Grouse Pavilion
- Parks Canada
- Nature Conservancy of Canada
- Pembina Pipeline

ACA partners:

- Alberta Environment and Parks
- Environment and Climate Change Canada
- Nature Conservancy of Canada
- Landowners and Producers

Sagebrush
photo: Gerry Haekel


photo: Calgary Zoo


photo: Calgary Zoo, Michelle Benzen


photo: Calgary Zoo, Sergei Belski

Torin Hofmann

Torin wants to show Albertans that even if you are new to fishing, there is a great time to be had on the river.

From YouTube to You Fish

► *by Budd Erickson*

If you heard about a kid who sat around watching YouTube videos all day, you might assume they were wasting their time. Much like watching TV or playing video games all day, it's not great for your physical health, you aren't learning anything, and it can be socially isolating. But for Torin Hofmann and many others these days, YouTube is a deep pool of new skills and knowledge just waiting to be reeled in.

Torin is the modern, self-taught angler inspired by nothing more than his love of the outdoors and an endless library of online fishing videos. He tells me he was never introduced to fishing by a friend or family member. He painstakingly practised his first fishing knots in front of his computer with how-to fishing videos playing on repeat.

Let me tell you, watching someone else tie a knot in a video does not easily translate into a learned skill. Developing any competence takes a serious chunk of time, repetitive practice, buckets of motivation, and a little ingenuity. Luckily, Torin had all of that.

"It was really addicting."

While many love YouTube for its entertainment value, Torin successfully turned his time on YouTube into a real-life skill. Better yet, a skill that takes him to Alberta's outdoors. After convincing a few friends that fishing is way more fun than not fishing, he was inspired to teach as many wannabe anglers as he could.

"I taught five friends how to fish, but thought I could teach more with YouTube."

Now, Torin has come full circle. He is the one who stands in front of the camera and offers free lessons on the sport he has fallen in love with.

"River fishing can be intimidating, so I wanted to make it easier for new anglers."

More specifically, he wanted to make fly fishing and the Bow River more approachable for those just starting out, or anyone who has never fished a river. River fishing can be a tough gig, but also really rewarding. The Bow River is very accessible for anglers in Calgary, but it can be intimating when you start delving into what exactly it takes to fish there. But Torin makes it easy. No matter what your level of experience, his videos are methodical and carefully paced to ensure the audience can follow along. He covers everything from tying your first knot to using satellite imagery to look for promising pools. The lessons he gives can also be applied to any river system.

Fishing on a half-frozen river certainly comes with its own set of challenges.

"The bow river is open year-round for angling, meaning on a warm chinook day, you can be catching amazing rainbows mid-January."

While many anglers will drill holes in the ice to get their fishing fix during the winter months, Torin sticks to his fly fishing guns. He takes advantage of the warm water coming out of Calgary water treatment plants, which prevents the Bow river from freezing over.

Fishing on a half-frozen river certainly comes with its own set of challenges—even just getting down to the river's edge can be arduous. Torin wears a pair of waders in order to fish from the shallow water and avoid standing on the ice. The waders also prevent you from getting soaked with cold water should your feet break through the ice. He mentions that if you are fishing from the ice, ensure you are over a shallow area for safety. However, you will need to cast into slower, deeper water, as that is where the fish like to hang out. If you are a Calgary fly fishing enthusiast who suffers from angling withdrawals during long Alberta winters, Torin's "January Winter Missiles: Fly Fishing Bow River" video might help. In the video, he provides great tips to prepare you for this unique winter fishing adventure.

"There are many pessimistic people online about fishing. People don't want to share spots and help others."

In the fishing world, it's common to keep your favourite fishing spot a secret. This is understandable—when you work all day to find one good spot it can be hard to just give it away. However, Torin does his best to buck that trend. In one video, he goes into detail about how to find the best fishing spots along the Bow River. Torin wants to help others navigate the river because he wants to grow the sport. He wants to show Albertans that even if you are new to fishing, there is a great time to be had on the river.

Torin is quickly becoming the next Alberta fishing champion. He has been amazed by the response to his videos. Despite never offering guided trips, he has been contacted multiple times about such work. What started out as a passion for fishing and sharing knowledge is evolving into a real mentorship role.

"I plan to keep working on my channel, I mean, I love doing it. Here's to reaching 10K subscribers!"

Torin's story is uplifting and enlightening. While YouTube and social media may have their controversies, they are ultimately just tools—tools that Torin uses successfully to put a friendly spin on angling in Alberta and to introduce the next generation to a great outdoor sport.

Want to keep up with his new content? Subscribe to Torin's YouTube channel: Torin Hofmann Minnow Hunters.

photos: supplied by Torin Hofmann

► *by Elize Uniat*

When it's Time to Make Time

It's the third Saturday in November, two hunting seasons ago, and Sheila Campbell is standing next to a whitetail buck, texting.

Sheila: "Shoot first, ask questions later, right?!"

Dan: "Success?"

Sheila: "What time do I have to pick Jimmy up from hockey?"

After a quiet morning at a different site, Sheila's just one last look at Junction Lake Conservation Site has ended with a literal bang. This is her last day to hunt for the season, and the hunt that has just transpired would be on many a hunter's bucket list. As Sheila takes in the moment, she's over a kilometre from her truck, alone, and against the clock. She's also an hour and a half from home. And when Jimmy's hockey game ends, she needs to be there.

Sheila describes how this hunt began over coffee at her kitchen table in a quiet Edmonton neighbourhood.

"It had been snowing that day…just the perfect kind of snow for following fresh deer tracks. As soon as I walked in," she continues, "a whitetail doe and fawn jumped out of the bush and ran towards the larger bush where there were lots of game trails."

She knows the lay of the land from hunting there the previous day and gives the pair 10 precious minutes to settle. Sheila checks her watch—2 p.m. is the absolute latest she can shoot anything if she's going to be back in time—then follows their tracks deeper into the bush. Soon enough, she jumps a whitetail buck.

"Okay, this is for real!"

The buck bolts downhill, and her formerly firm 2 p.m. deadline is suddenly flexible. Sheila stalks him slowly, silently through the thick bush, following his freshly laid tracks, knowing if she puts a foot wrong, and maybe even if she doesn't, her last and best chance of the season will evaporate. She fights the urge to go faster.

This time, patience pays. She sees the buck standing in an open slough bottom. He knows she's there—after all, he is a wily whitetail—but there's a doe in the slough bottom too, and it's the peak of the rut. For Sheila and her quarry, it's decision time. While the buck is looking between her and the doe, Sheila carefully waits for the exact right moment. Deep breaths. Heart hammering. Clock ticking. She squeezes the trigger. The silence shatters, and the buck drops. First comes gratitude—Sheila is a meat hunter and he will fill the freezer nicely.

Then, the realization: "Oh boy! He— is—BIG!"

One might assume that Sheila grew up in a hunting family when she shares her story, but that is not the case. Sheila grew up hiking, biking, canoeing and skiing in national and provincial parks. Enter Dan, her partner, whose interest in hunting grew alongside their relationship—they've known each other since junior high. In her late twenties, newly married, Sheila started joining Dan when hunting season rolled around. And when Dan harvested a deer on her first day in the field, her immediate thought was, "Dinner." Up until that moment, she hadn't been sure how she would feel.

Dan, his brother Kelly, and their hunting buddies welcomed her into the fold and taught her what they know (which, if her whitetail buck story is anything to go by, is a lot).

On this day, over a decade later at Junction Lake, Sheila is tight on time, but she's prepared. She field dresses her deer and places a toque on it to add human scent and deter coyotes. She hikes back for the sled and when she hits the flats near the truck, Sheila knows she physically can't drag the deer as is.

"He didn't have the biggest antlers, but he was a big-bodied buck," she says.

Her plan comes together as she thinks about the previous year when she'd watched another hunter deal with a big buck far from the road.

Back at her nearly 200-pound buck, Sheila starts breaking it down. She hauls the first half to the top of the hill, unloads it, and returns for the rest. It's tough going—first there's the slough and then thick bush and a narrow trail to navigate. She takes a little breather on the downhill, and then tackles a really serious hill. She's sweaty. She's tired. She's determined. Finally, all of the deer is at the top of the hill. She loads everything onto the sled and tows it the last few hundred metres to the truck. Out of time, totally exhausted, driven by getting to Jimmy in time, Sheila lays ramps made with two by sixes on the tailgate.

"How I got the deer in the box I truly do not know. I was so tired at that point…I knew I was getting seriously close and there was no time to get the winch out, so I said some colourful words and just got it onto the truck somehow."

Not wanting to make anyone uncomfortable, she rushes home, hangs the buck in the garage, performs a record-breaking personal cleanup and heads to the rec centre.

"I was just in time for when Jimmy came out of the change room!" she laughs, before adding, "I was so sore for at least a week after that. Dan and I processed the deer in the garage, and that's the deer that fed us for the year."

What Sheila loves about hunting:

It's something to look forward to.

Between summers spent hiking, biking, canoeing, and camping, and winters skiing, there comes hunting!

It changed her perception of where wilderness is.

Instead of feeling the need to go west to the mountains for her wilderness fix as she did growing up, hunting has given Sheila more reasons to explore and appreciate the many different regions of Alberta.

It changed how she experiences nature.

Activities like hiking, biking and canoeing are about moving through the landscape, while hunting is about becoming part of the landscape and thinking like a deer ("It sounds cheesy, I know!" Sheila says). It changes your lens. A real challenge for Sheila, who loves hiking, is walking slowly, or not at all. Being still, waiting patiently—those two things are difficult to do well, but they play a major role in your success as a hunter.

It's grown into a family thing.

Sheila says, "Because it's inclusive, a thing we do as a family, it's motivated us to get into bird hunting and extending into some other seasons and species." Even when their two boys were much younger, Sheila and Dan would take them into the field to "hunt." They'd do lunch on the tailgate or a nearby hill and watch for deer. "Even if the kids were cold after 30 minutes, it wasn't a wasted effort because they got to feel like they were part of it," she adds.

More Than Meets the Eye

How Grazing Can Benefit Species at Risk

► *by Mike Verhage*

Ranchers know that what they're really farming is grass, because healthy rangeland means healthy cattle.

Healthy rangeland also translates into healthy ecosystems; after all, the prairies evolved with large herbivores grazing it. With no big herds of bison roaming the prairies anymore, livestock and ranchers play an important role in maintaining prairie ecosystems. The caveat is that grazing has to be managed well.

Direct benefits of healthy grazing practices include less soil erosion, more plant vigor, more nutrient cycling and plant diversity, better water retention, and carbon that stays stored in the soil. Obviously those are all good things, and native prairie (and, by extension, the ecosystem services it provides) need them to thrive. These benefits are also good for fish and wildlife. In fact, properly managed livestock operations don't just maintain critically important habitat resources for the many species at risk, they actually improve it.

Patch it up

One important advantage of well-managed rangeland—carbon storage—is invisible, perhaps explaining why it isn't talked about much. Carbon is stored in the plant roots beneath the soil. This is easy to see in forests and shrubland because most of the plant is above ground. Grasslands, however, sequester much carbon below ground. Just like we only see the tip of an iceberg because 90 percent is below water, we only see a small percentage of grasslands above ground. Over three quarters of plant biomass is beneath the soil—in their "deep roots."

Since grazing timing and intensity directly affect plant species composition, livestock grazing can provide a mosaic of varying vegetation structures, also known as "patchiness." Wildlife like this variability because it creates a diversity of structures that meet the various needs of different species. Grassland birds are a prime example. While McCown's longspurs *(Threatened)* prefer heavier grazed, short grass for ease of movement and foraging, Sprague's pipit *(Threatened)* prefer moderate to lightly grazed grasses for hiding cover and nesting.

photo: Ramblin Rose Creative
illustration: Liz Saunders

A sustainable ranching crash course

Good range management practices work within natural systems and foster sustainable, healthy native plant communities. There are four key principles of good range management.

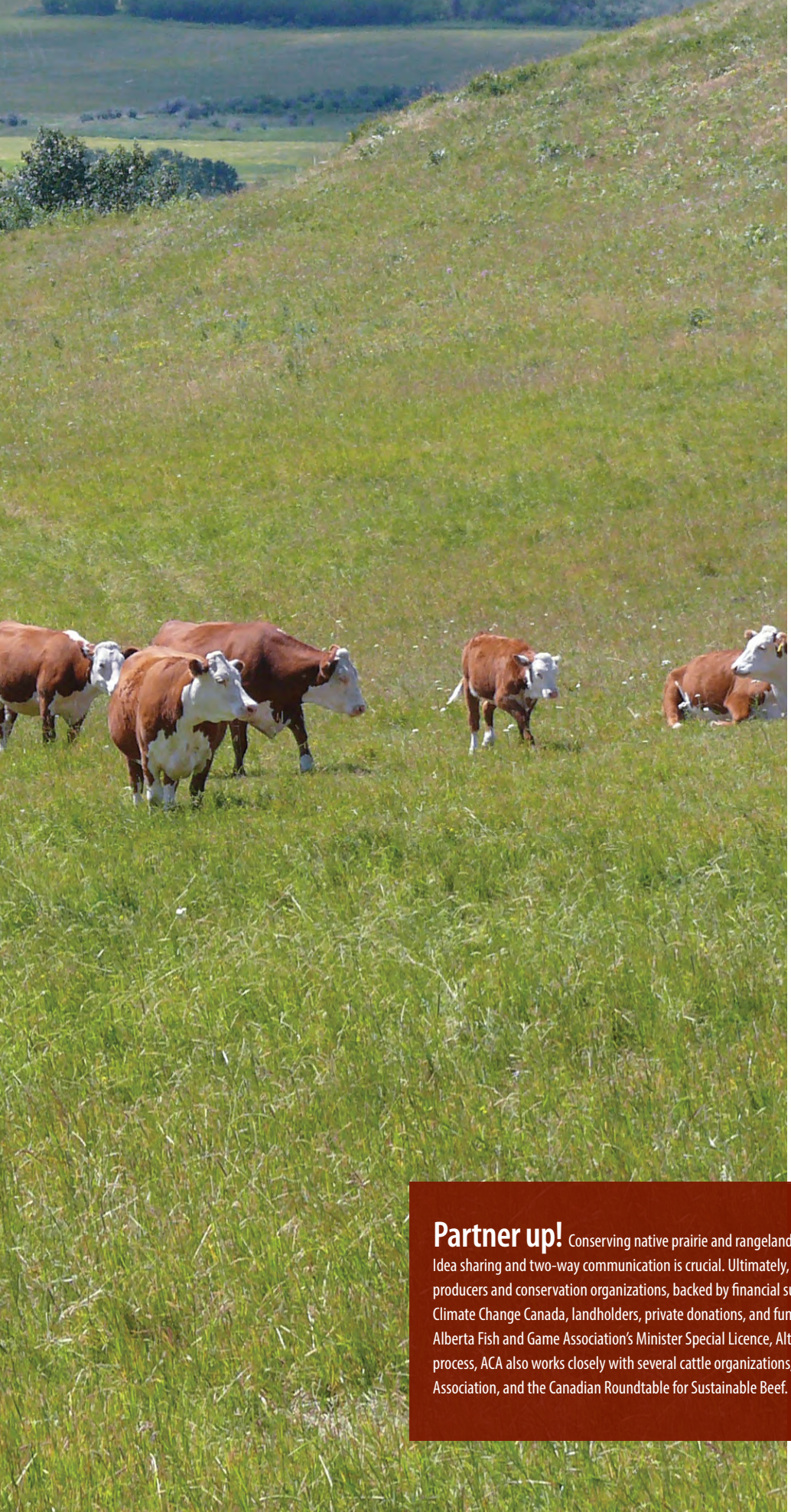
Balance livestock demand with the available forage supply. This means leaving carryover (the amount of forage left over when grazing ends) and adjusting stocking rates based on available forage for livestock, wildlife, and ecosystem services.

Distribute the impact of livestock grazing. Use salt, water, fencing, trails, and feed to spread the impact of grazing over the range, and don't allow livestock to linger too long in one area.

Avoid grazing during vulnerable periods. On native rangeland, this may include early spring when plants are using stored energy to promote above-ground growth, and during nesting periods for at-risk bird species. For riparian areas (sensitive areas along rivers, streams, and wetlands), vulnerable times include when streambanks are wet, or when root-binding shrubs (their plant roots provide structure and hold together the shore banks) are susceptible to browsing.

Provide effective rest for each part of the range after grazing. Plants need rest during the growing season to sustain themselves.

These four points are the big picture, but there are many details to sort out for the rancher who wants to operate sustainably. Through the MULTISAR program, Alberta Conservation Association (ACA) and several partnering organizations (Alberta Environment and Parks, Prairie Conservation Forum, and Cows and Fish) collaborate with landholders and ranchers to promote good grassland management.



What's the plan?

Together, they develop habitat conservation strategies on ranches that contain both private land and provincial grazing lease land in southern Alberta. First comes detailed range and riparian health assessments and multi-species point count wildlife surveys. There are also fish inventories when working near or within the home ranges of target species like westslope cutthroat trout or bull trout (both *Threatened* species). Next comes sitting down with the rancher to discuss and tailor the management recommendations even more. When time and money allows, the work also includes helping implement habitat enhancements that benefit both species at risk and the ranching operation. Some species at risk that benefit from these projects are sage-grouse *(Endangered)* and Sprague's pipit, but as is usually the case with habitat conservation, these improvements also benefit other wildlife, including game species.

It's amazing what listening to and learning from each other can accomplish. With the right encouragement, and armed with useful and specific-to-each-ranch information, making decisions that benefit fish and wildlife and their livestock become second nature for the hard-working men and women managing the native prairie landscape. Unique habitat features like dancing grounds for sharp-tailed grouse are appreciated and preserved. And monitoring trends on these ranches help biologists better understand the abundance and distribution of Alberta's fish and wildlife.

Most importantly, the on-the-ground habitat projects that landowners, ACA, and MULTISAR have implemented together tell a story of mutual trust and respect. It's a win for the ranch operations and a win for the species at risk that live there.

Partner up! Conserving native prairie and rangeland is impossible without buy-in from the ranching community. Idea sharing and two-way communication is crucial. Ultimately, this work depends on building strong partnerships between producers and conservation organizations, backed by financial support from Alberta Environment and Parks, Environment and Climate Change Canada, landholders, private donations, and funding and in-kind support from industry like Shell Canada, Alberta Fish and Game Association's Minister Special Licence, Altalink, Huvan Construction, and EQUS. Throughout this process, ACA also works closely with several cattle organizations, including the Alberta Beef Producers, Canadian Cattlemen's Association, and the Canadian Roundtable for Sustainable Beef.

illustration: Liz Saunders
photo: MULTISAR

Golden Ranches

A Decade's Worth of Accomplishments

by Nikita Case

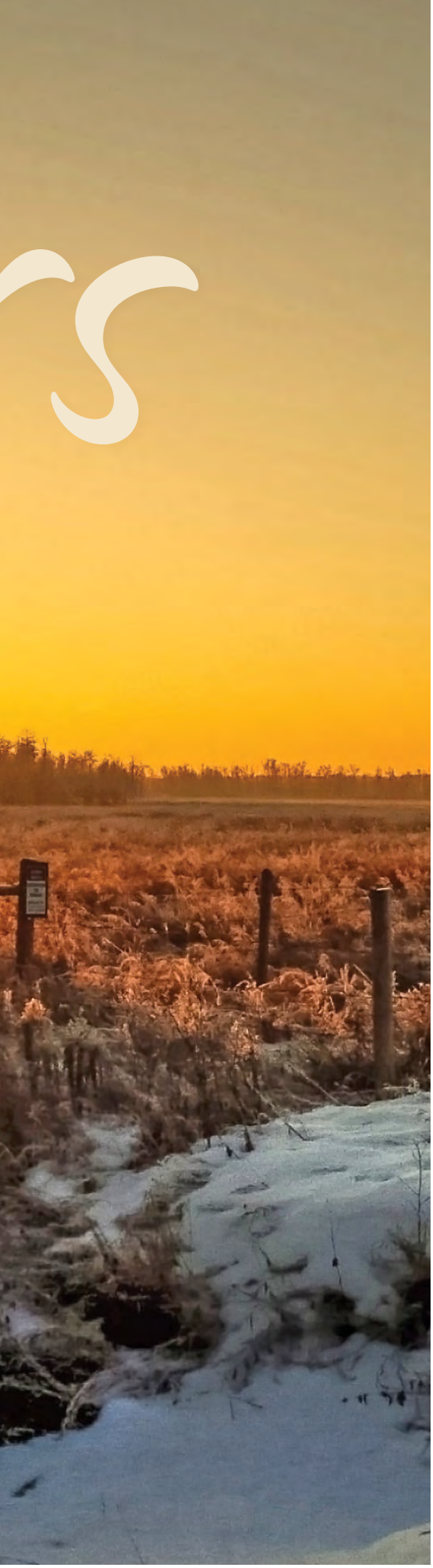
Twenty-twenty will go down as a landmark year for many reasons. One of them is the 10th anniversary of the extraordinary Golden Ranches Conservation Site. Ten years of transformation. Ten years of teamwork. And 10 years of conservation triumph. This is a story of hope, and it began, like most stories of hope, with the vision.

Strathcona County councillor and Beaver Hills Biosphere Reserve Association board member Glen Lawrence grew up in the Beaver Hills region, right next to Golden Ranches. He was friends with the owner, George Golden, fondly saying he was the "Big dawg of the family. He started the whole thing." The ranch began in the 1950s when pieces of land were bought and sold until the land was located in one spot and became known as Golden Ranches. The Goldens were avid rodeo people who participated in roping and quarter horse show competitions with their beloved Freddie, the first Canadian horse to make the World Top Ten. They lived by the motto, "You're not a cowboy or cowgirl until you fall off a runaway."

The owner's original dream was a working ranch, similar to a heritage ranch. However, multiple parcels of the land were under different titles and companies George was involved in, making the process difficult. "That's how I got involved with him as a councillor," remarks Lawrence. "As the county councillor, and knowing the area and the family, we started to pull all that together." Unfortunately, George passed away before this could happen.

photo: Edmonton and Area Land Trust

photo: Nature Conservancy of Canada, Jaimee Dupont



A rare opportunity

Part of the family wanted to sell the land outright, potentially fragmenting the rare patchwork of land for subdivision construction. But the remaining owners wanted to restore their ranch to its natural state. The Goldens, who were in contact with Strathcona County, had the foresight to recognize the significance of the ranch property for its location and ecological properties.

The decision to restore Golden Ranches to its natural state led Shannyn Morphy, a member of Strathcona County Planning and Development Services, to Brad Fenson, the habitat coordinator for Alberta Fish & Game Association (AFGA). The County and Golden family contacted Fenson about the conservation opportunity, who recalls his initial reaction: "It was scary. We'd never taken on a project of that magnitude; it almost seemed unrealistic, even when we pulled together our partners. But it's amazing, working in conjunction with people, finding common goals, and finding common objectives."

The next move for this opportune moment was finding and including other groups with similar conservation goals. Fenson rounded up all the interested non-governmental agencies, including Alberta Conservation Association (ACA), Alberta Fish & Game Association (AFGA), Ducks Unlimited Canada (DUC), Nature Conservancy of Canada (NCC), Edmonton and Area Land Trust (EALT), Beaver Hills Initiative, and Strathcona County.

What emerged was an unprecedented partnership between organizations committed to conservation; they became a unit with shared goals in restoring the health of the forests, wetlands, and wildlife habitat now called the Golden Ranches Conservation Site.

Three reasons

So what is it about Golden Ranches that inspired such collaboration? First is its proximity to the Edmonton region. Second, at over 550 hectares (1,400 acres), it's rare to have a large plot of conservation lands so near an urban centre. "To have that available that close to the city is almost unheard of because of the cost of the land," says Dan Sturgess, an ACA biologist. The closeness of Golden Ranches offers the opportunity for people to travel a short distance and enjoy the outdoors without having to make a significant trip. "Potential conservation lands are quite small in the Edmonton area because the area is fragmented," says Rebecca Ellis, the conservation manager for EALT. "To work on a project that conserves so much compared to what else is done in the area is really appealing." Hunting at Golden Ranches is another huge attraction. "It can be hard to find a productive place to hunt so close to town," explains Stefanie Fenson, a biologist and ACA representative for the ranch.

Third, Golden Ranches' location is packed with viable habitat for creatures ranging from waterfowl to whitetails, allowing biodiversity to flourish. It maintains a conservation corridor nearing some 377 square kilometers. "It's one of the few contiguous pieces of land out there," comments ACA President and CEO, Todd Zimmerling. The property runs right along the spine of the Beaver Hills Biosphere, essentially linking Elk Island National Park and the Cooking Lake-Blackfoot Provincial Recreation Area to the north, with Ministik Lake Game Bird Sanctuary to the south.

Like the Beaver Hills Biosphere (designated by UNESCO in 2016), Golden Ranches is comprised of characteristic moraine habitat and falls within the Prairie Pothole Region (PPR). A moraine is material left behind by a moving glacier (nearly 10,000 years ago), and prairie potholes are the shallow depressions created by receding glaciers. These potholes formed wetlands that now support more than 50 percent of the North American duck population (the majority being dabbling ducks). Specifically, the Cooking Lake Upland is vital habitat and a key stopover point for migrating waterfowl and shorebirds. It is classified as a regionally important site for breeding, moulting, nesting, and staging ducks: 5,000 to 20,000 individuals use Cooking Lake and surrounding wetlands at some point during the year. Like many agricultural landscapes in Alberta, nearly 60 percent of Golden Ranches' wetlands have been drained or filled, but wetland restoration is one conservation endeavour these groups have accomplished over the past decade.

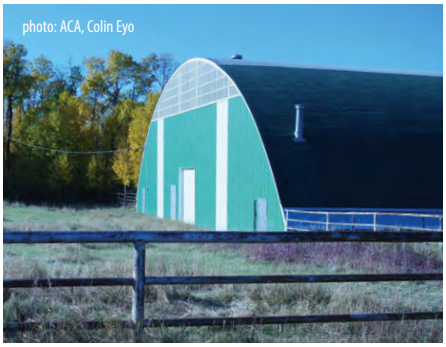


photo: ACA, Colin Eyo


photo: ACA, Colin Eyo


photo: Nikita Case


photo: ACA Colin Eyo

Mission restoration

Ducks Unlimited completed wetland restoration work last fall on a parcel known as "Area 5," located on the southwest corner of the property. Much of Golden Ranches is not pasture—there are trees, shrubs, and grasses—yet in Area 5, it's a monoculture crop field. Ditches were historically cut to drain the fields. On these plots of land, ditch plugs have been constructed to help restore the wetland basins by inhibiting the ditches' ability to drain the wetland. "It's a wonderful project," says James Olson of DUC, "protecting some valuable habitat in the Cooking Lake area."

To install ditch plugs, wetlands must be surveyed, the drain located, and then ditch plugs constructed. After that, the ditch is filled with clay, covered with topsoil, and seeded down to grass. The seeded (or upland) area prevents soil erosion and is crucial because many ducks nest in upland grasses. The northern pintail, for instance, nests in grassy uplands over a kilometer away from water. "Intact grasslands are extremely important for waterfowl production," says Olson. "We have just as much interest in protecting healthy grasslands as the wetlands themselves."

Nature Conservancy of Canada is the lead organization for Area 5 on which DUC has begun to restore wetlands. But the land is also being worked as a cereal crop. "It continues to be leased," says Carissa Wasyliw, the natural area manager of northeast Alberta for NCC. "They harvest a crop every year so it could be anything from oats to wheat to barley or canola." It was recommended to crop the field when NCC acquired it as there was a considerable number of seeds from weeds like common tansy. The impact of the cropping system or crop rotation diminishes the weed seed bank beneath the soil. "Sometimes agriculture can help rejuvenate decadent fields," says Stefanie Fenson. "If there are grasses piling up, and more dead mass accumulates, sometimes haying can help rejuvenate that, which is also good for wildlife habitat." Now that five years of cropping has passed, the seed bank has been reduced and NCC is looking to "return that area to what would be considered more natural vegetation cover. It could be a mix of tree species as well as more native grasses," Wasyliw explains.

Better together

Restoring habitat to its native state is no easy task, especially when there is so much reclamation to do. The solution to this problem was structured so each organization (ACA, AFGA, EALT, and NCC) takes the lead on different quarter sections, while the other organizations co-own it. Indeed, NCC is not the only owner of Area 5. "We all co-manage it together and by pooling our resources, energy, and time, I feel we're able to manage it effectively," says Wasyliw. Another example is EALT being the lead organization on three quarter sections with ACA and AFGA as co-owners. In turn, EALT co-owns other quarter sections with a different lead party. "From my perspective, that was to divide and conquer," says Ellis from EALT. "It just made it easier for all of us, that it wasn't too much for one group."

Much of how the parcels of land were divvied up depended on money. Any conservation initiative, big or small, requires time, yes, but also money. Answers must be found for questions like: how will partners and organizations secure funding? Where is it coming from? Who is going to put in how much? "A lot of it had to do with how much money was spent, and how much each organization brought for each parcel was often reflected in what proportion of the title they would hold," says Stefanie Fenson. "Partners have to decide what is fair to them and their organization and fair for the group as a whole," she adds. It's important to capitalize on each organization's strength; for some, that may be significant financial contributions, while others contribute in ways not measured by dollars like through an army of willing volunteers.

Creativity abounded for these groups to fund purchases of the ranch. NCC's Wasyliw voices the importance of funding for conservation

photo: Edmonton and Area Land Trust

projects: "Any reclamation project is a considerable chunk of change. When you start a reclamation project, you usually need to have the funding in place for multiple years to ensure you continue down the right track." Funds were provided by the organizations themselves and raised through various sponsorships or donations. "There's a lot of history in terms of how we were creative and worked together to generate more funds and bring in as many partners as possible," adds Brad Fenson.

Seeing is believing

The efforts by all organizations have paid off. Encroaching aspen are already spreading onto hay fields and, as mentioned before, Area 5 has had rotational crop cycles, and wetland restoration with ditch plugs has already occurred on four different parcels. But that's not all. Bat and bird boxes have been installed, fencing removed or modified with wildlife-friendly techniques, hundreds of thousands of trees planted, agricultural leases with locals have continued, weeds have been controlled, and unauthorized motorized access has been curbed. As Zimmerling points out, "People have to realize it's a big undertaking, and very costly, so we still have farming occurring on some of the quarters. It takes time to deal with that many quarter sections and time to raise the funds in order to convert them over to native habitat again."

"A decade later we own all of it." Brad Fenson's words sum up 10 years of accomplishments. It's been a process of people and organizations being contacted, countless meetings, the juggle of acquiring funds, the sale, and the rare partnership between people with the unanimous goal of conservation. The achievement of restoring Golden Ranches to its former native state is nothing short of amazing. "We partnered with great organizations to make this happen," says ACA's Stefanie Fenson. "We procured funding from so many different sources and basically have multiple conservation organizations that banded together and continue to coordinate and make it work."

Nothing happens overnight, and certainly not conservation, but ten years in, amazing changes are visible. Although it no longer looks like the historical and functional cattle operation, it resembles the moraine habitat it once was. Another decade, and more changes will be seen. Give Golden Ranches 30 years and the seedling aspen will have transformed into mature trees. "Restoration is a multi-year, multi-step effort so it takes some time to do all the things," says NCC's Wasyliw. The network of protected areas has expanded, including Golden Ranches, and this unique property has been reclaimed by people with the same dream: to enhance and restore it for both wildlife and people to enjoy. And that is worth celebrating.

Alberta Conservation Association

alberta fish & game association

Ducks Unlimited Canada

Edmonton & Area Land Trust

NATURE CONSERVANCY CANADA

Seduction by Vireo

The red-eyed vireo is a drab, greenish bird of the boreal forest with an eye as red as a wet cranberry. They sing incessantly on springtime breeding grounds; one Toronto bird sang his brief song 22,197 times over one 10-hour stretch. No wonder their eyes are red! Sounded out phonetically in English, the call seems to say, "Hear me? Hear me? Come outside! Come outside!"

It was just such a vireo that wore me down around the five thousandth time he called. I was so fixated on trying to stay isolated and not breathe moistly that I had become a couch potato. So, coffee cup in one hand, laptop in the other, I shuffled to our decrepit bench under Mr. Vireo's tree. The mosquitos were not out yet despite a warm spring morning, so it was easy to isolate outside amid birdsong and spring foliage. I instantly felt more hopeful, healthier, and more resolved to be patient and work through the COVID-19 virus era. I also wrote this column.

There is a similar allure from scampering pheasants, migrating geese, the tug to follow purposeful deer tracks, and a huge urge to run yelling at the bouncing white tail of our fleeing city jackrabbits. These stimuli call to me and when I respond, the rewards are calmly joyous. They may come from a fall hammock sit to watch hawks migrate over the city, a strenuous hike up to an early summer alpine trout pond, or a vine-tripping slither with bow in hand to head off a herd of mule deer. Sharing these times with those close to us makes them more special and memorable.

Sometimes it is wise to just let nature in. Though this takes time, the rewards are overwhelming. Some Japanese medical doctors prescribe *shinrin-yoku* or "forest bathing" to stressed-out, overworked Japanese businessmen. By requiring the workers to walk outdoors, breathe oxygen-rich air, and collect some vitamin D through sunshine, the doctors' orders result in healthier employees with lower blood pressure, improved sleep patterns, enhanced productivity, and better relationships. It becomes cost-effective too.

A 2001 study by Neil Klepeis, published in the *Journal of Exposure Science & Environmental Epidemiology,* found Americans spend 93 percent of their time inside a building or a vehicle, largely isolated from nature. I would guess Canadian winters mean even more inside time for us; however, we can change that with healthy activities essentially free of all political, ethnic, epidemiological, or financial baggage. You are outside just opening your senses to sounds, smells, sensations, sights, and maybe even tastes. Maybe you will take some of your clothes off for even greater immersion. You become a complete, elemental, unjudged person on the earth. No worries of acceptance, status, debts, bygone guilt, or anger. Just being.

Of course, it is most helpful to have some close by, nature-rich, and publicly accessible sites in city parks, woodlots, conservation areas, river valleys, and the federal and provincial wildlands. Even though we are the big winners, we still have to give a little to get a lot. We need to invest in the health and availability of the ecosystem if we are to be seduced into engaging with red-eyed birds, iridescent fish, industrious muskrats, or oblivious birch trees.

From medical isolation we can draw nature appreciation. During times of social strife, nature time conjures calm insights. During financial meltdowns, the gifts of health, appreciation, and relaxation are given to us freely beyond our doorstep. There is a reason New York's Central Park is the most valuable real estate in the state.

So sing on Mr. Red-eyed Vireo, and thanks for the reminder to leave that sheet rock and shingle box and do my work under your singing tree!

► *by Dr. Lee Foote*


Discover Guide
North Raven River
Conservation Site
E3-56
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Alberta Conservation
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HYO

Conservation is in the Bottom Line.

Forward-thinking companies set up for long-term success know this as fact.

AltaLink is a great example. By supporting multiple ACA initiatives—like Species At Risk projects that help ferruginous hawks and youth programs that teach families to fish with Kids Can Catch—they are making a pledge to communities across Alberta. Even more, AltaLink's commitment strengthens employee morale, sustainability goals, and stakeholder relationships.

A small commitment to conservation is a big commitment to your company's success. Become a Corporate Partner in Conservation today.

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Alberta Conservation Association

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