

# Conservation

**You can't  
just throw  
any kind  
of fish into  
any kind  
of pond**

**The Science Behind  
Fish Stocking**

**Deer Creek Ranch  
Working With Species at Risk**

**Invasive Species  
In a RUSH to  
Take Over**

**Where there's a  
Weir, there's a Way**



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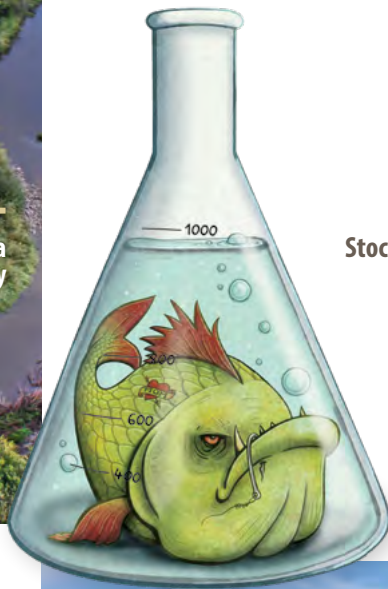


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**14**  
Where There's a Weir, There's a Way



# content

**12**  
Stocked With Science

Conservation Works	<b>8</b>
Not Taken for Granted Some of ACA's Most Recent Grant Recipients	<b>20</b>
Conversations Goodness Snakes with Sheri Monk	<b>28</b>

Site Seeing  
Dollar Lakes

**30**

Bloomin' Waterbody  
Lake Isle Fisheries Restoration

**34**

Spring Goose Hunt  
Tips & Tricks for Snow Geese

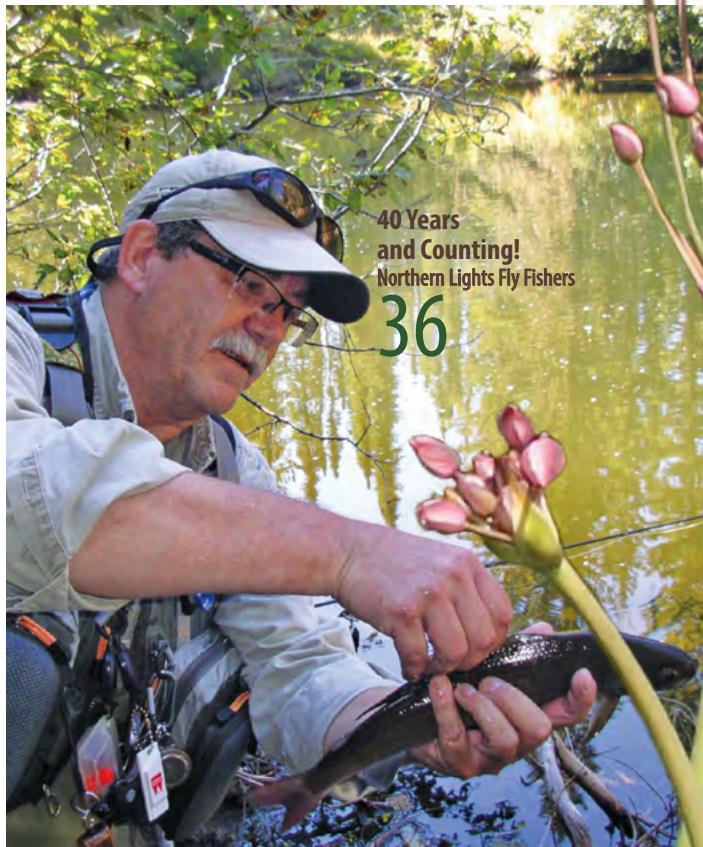
**38**

Footnote

**40**



**22**  
Deer Creek Ranch  
Working with Species at Risk



40 Years and Counting!  
Northern Lights Fly Fishers

**36**



**18**  
In a Rush to Take Over



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## 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.



ACA President and CEO Todd Zimmerling  
Photo: ACA, Charmaine Brunnes

## From the President

Spring has finally sprung across Alberta, after what has been one of the coldest winters in a very long time. I was lucky enough to spend the worst part of the winter (February) travelling around New Zealand with my wife. Family friends moved to Auckland seven years ago and they invited us to visit every winter. This year was finally the year we decided to take the 15-hour flight and explore the other side of the world.

I'm not going to lie, it was beautiful (it helped that temperatures at home were -30C while we were at +25C). The landscape was great, the people were friendly, and the fishing was awesome. While I was sipping my refreshment, waiting for another Lake Taupo rainbow to hit my line, I realized I was living the dream of every outdoorsman and woman, being able to explore the mythical country of New Zealand, with the huge trout, red stags everywhere, and of course Middle Earth on the horizon! It was indeed a fantastic trip and I am not going to spoil anyone's dream by telling you how big the trout really are or how many stags are actually running around; what I will say, is everyone in New Zealand had the same mythical image of Alberta. It was truly impressive the number of people we met that had seen photos of Alberta or heard stories of our wildlife—the mountains, the grizzly bears, the vast prairies, and even the large numbers of walleye in our lakes.

Often it takes travelling somewhere else to gain a greater appreciation for what you have in your own backyard. I have always been happy with what Alberta has to offer for outdoor activities but I am not sure I had true appreciation. Whether it is hunting or fishing or camping or hiking, these are activities Albertans do all the time, but I wonder how many of us would think these are "world class" opportunities right here in Alberta? Turns out that many people around the world, even those in mythical lands, think Albertans have some pretty special outdoor opportunities available to us. So now that the warm weather has returned, and the ice is melting, get out there and take advantage of the opportunities other people can only dream of having.

Todd Zimmerling  
President and CEO  
Alberta Conservation Association

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photo: Todd Ponich

## There's **CAMP** No Place Like

AHEIA'S Outdoor Women's Program

Last August nearly 150 women and 50 volunteer instructors celebrated 25 successful years of one of AHEIA's most popular and influential camps: the Outdoor Women's Program, hosted at the Alford Lake Conservation Education Centre for Excellence.

Although the women come from a wide range of backgrounds, they all share a love of the outdoors and a sense of adventure. Each day is packed—from fly-fishing, archery, and quadding to making walking sticks, learning firearms basics, and field dressing. The program strives to provide every opportunity to gain confidence and competence when it comes to outdoor skills. The educational component is important, but it's the inclusive environment that is really key to fostering learning and personal growth.

Since the program's inception in 1994, nearly 3,000 women have attended the four-day outdoor camp. It's distinctly Alberta: this last one had the ladies braving 39°C temperatures on Friday and 9°C with rain on Sunday. No matter the challenges, the skills don't stop!

This year's Outdoor Women's Program will be held August 7–11, 2019 at the Alford Lake Conservation Education Centre for Excellence.

**If you would like to attend or even instruct, email [info@aheia.com](mailto:info@aheia.com) or call 403-252-8474.**



If it's rare, the more we hold it in high regard. And considering lakes, rivers, and streams cover a mere 2.5 percent of Alberta, we all want a little slice of that lake life!

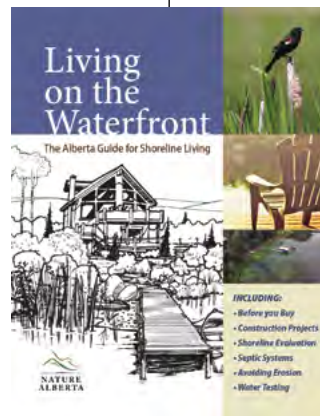
Life near water is picturesque, but the surrounding and subsequent development? Not so much. Every decision near or around a waterbody—construction projects, landscaping, cleaning products, visitors, pets, livestock, farming practices, and outdoor recreation—contributes to water health. That's why it's so important for anyone who is near Alberta's waterbodies to make informed decisions about products they use and the activities they do.

Nature Alberta is helping with that part, educating the public with *Living on the Waterfront*, an informative publication released this May. Understanding the regulations and science behind healthy

shorelines can help landowners save time, money, and frustration. It helps safeguard the wellbeing of family and visitors, protects the value of shoreline investments, and of

course, preserves the health and beauty of Alberta's watersheds. All of us can learn something. In most cases, it's surprising how small changes can create major long-lasting impacts.

There isn't much that beats life near the water. Let's keep it that way.



To get your own copy, please contact [www.naturealberta.ca](http://www.naturealberta.ca)



# When Life Gives You

## LEMONS...

When the Fort Lions Community Fish Pond tested positive for whirling disease in 2017, stocking trout was no longer an option. Not only could adding trout help perpetuate the disease, but the Fort Saskatchewan pond is on the floodplain of the North Saskatchewan River. The risk of infected trout making it into the river was just too great. The future of a popular community trout pond and its annual Kids Can Catch event was hanging in the balance.

When life gives you lemons, make lemonade. Yellow perch are a popular sport fish that may be a good alternative to trout in some ponds and, most importantly, are not affected by whirling disease. We had always been keen to try stocking yellow perch, but the right opportunity had never presented itself. ACA collaborated with Alberta Environment and Parks, and they stocked twelve hundred yellow perch into Fort Lions pond in the spring of 2018. Over the next couple years, our biologists will be monitoring the new fishery to help determine if yellow perch is a species we should consider for other ponds.

The fact that pan-fried perch fillets taste great with a squeeze of lemon is pure coincidence.

**Sundre Forest Products**, a Division of West Fraser Mills Ltd., is a founding industry partner in ACA fishery inventories, supporting various projects since 1998. They continue their support this year for the East Slopes Fisheries Inventory. Funding, detailed mapping, and remote access knowledge is significant for the success of our fisheries inventory work in the James River and upper Red Deer River watersheds. The data we'll collect feeds directly into Alberta Environment and Parks's Fish Sustainability Index (FSI) and Bull Trout Recovery Plan as well as harvest planning for Sundre Forest Products. **Partnerships define conservation.**



### Two hours | One quarter-section | Zero GPS coordinates | Go

Sometimes our biologists are tasked with the seemingly impossible—such as finding the place where snakes survive the winter (i.e., their hibernaculum; plural form: hibernacula) on a 160-acre riverbank property of natural habitat interspersed with a campground, golf course, and an old tree farm. This can be like finding a needle in a haystack! So where do you begin?

We start by following a set of survey instructions that provide useful tips for finding snakes and their hibernaculum habitats. The key is to time searches under proper weather conditions and when snakes are active at their hibernacula in the spring and fall. In the end, we win some and we lose some because our ability to spot snakes is not perfect.

Our work tends to spark conversations with landowners that often lead to the sharing of information about snakes that can aid

surveyors and foster stewardship. The work is quite rewarding, and it will ultimately help safeguard important overwintering habitat for snakes, which is a priority of the provincial government.

As a bonus, while visiting snake hibernacula, we can further snake conservation by documenting potential snake diseases and collecting snake tissue, in the form of shed snake skins or from freshly dead specimens. It isn't always pretty but it's important nonetheless. 🦋



conservation**WORKS**

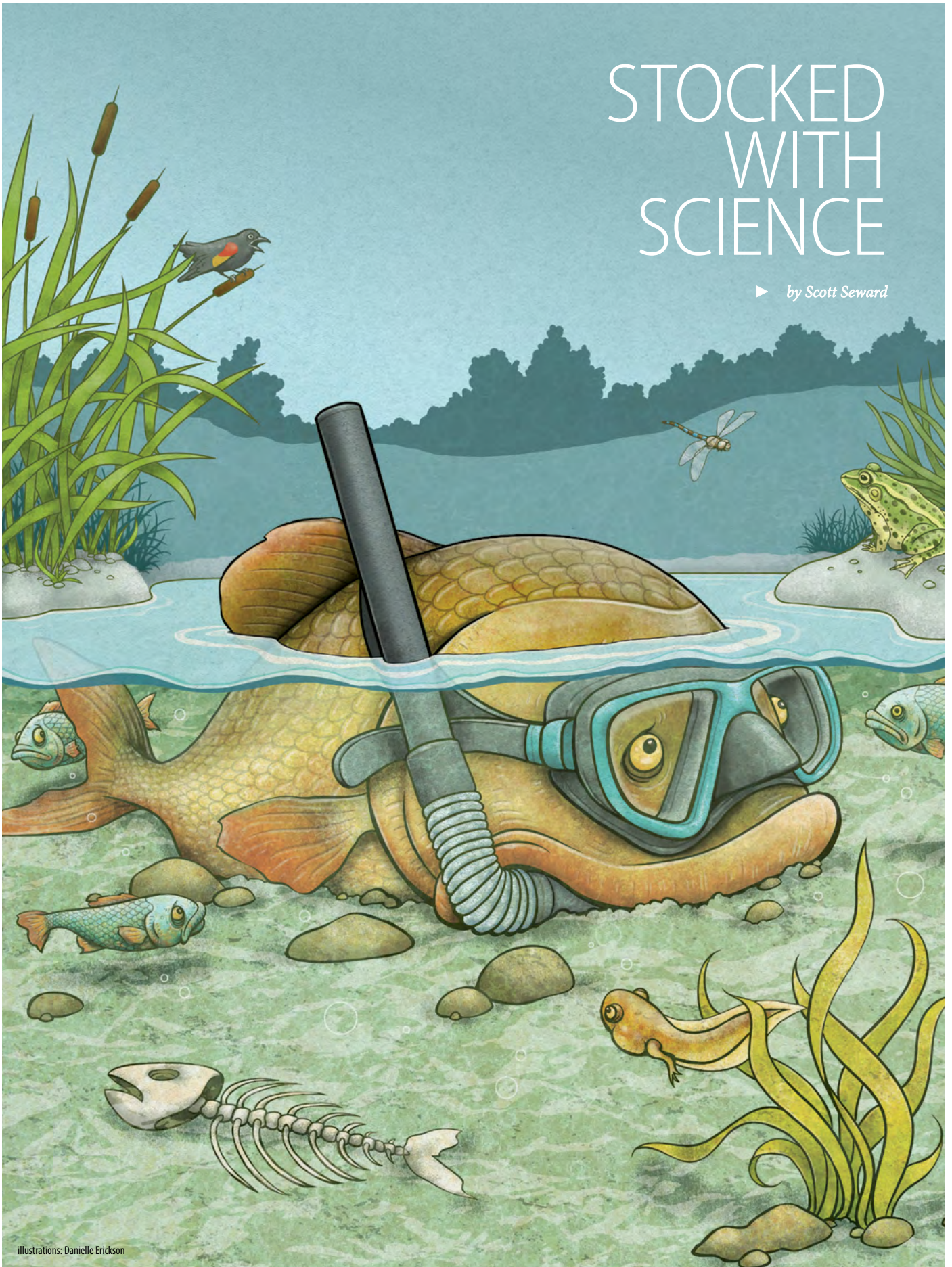
ACA staff conducting snake hibernaculum  
survey in southern Alberta

photo: ACA, Mike Jokinen



# STOCKED WITH SCIENCE

▶ by Scott Seward



illustrations: Danielle Erickson

# You can't just throw any kind of fish into any kind of pond; there is a science behind it.

ACA's Fish Stocking – New Lakes (AFS – New Lakes) project has been fine tuning the science behind what makes a pond suitable for trout stocking for several years. The primary goal of the project is to increase recreational angling opportunity in Alberta by creating fisheries near large urban centres and in areas of the province where angling opportunities would not otherwise exist. Since 2015, 219 ponds have been evaluated for fisheries potential, resulting in three new ponds being stocked and more ponds are being screened each year. So, what exactly do biologists look at to determine if a pond is suitable for stocking?

A lot of paperwork is required before ACA biologists even visit a pond they might consider for stocking. First and foremost, they must ensure that there is the possibility to secure public access to the pond. Next, they look for connectivity to other waterbodies and the risk of fish escapement that would make the pond unsuitable. From there they look to see if the pond is in an area where the presence of a stocked trout species could negatively impact any species at risk (such as northern leopard frogs). If the pond meets those three criteria, then biologists use aerial photographs to study the pond and the surrounding land uses. Aerial photos can give clues about water depth, algal growth, weed growth, nutrient sources, and water fluctuations that will impact water quality and, consequently, fish health. They also look for things like proximity to urban centres and proximity to other amenities that might make the pond an attractive destination (such as campgrounds). Most ponds fail to make it past the desktop stage of the investigation. More often than not, aerial photographs reveal that the ponds are too shallow and “choked with weeds” to be suitable for fish stocking.

However, each year a few ponds make it through the screening process and ACA biologists head into the field to get a

first-hand look at prospects. While on site, water quality, shoreline health, and water depth are all measured. Biologists also take note of things like shoreline slope that could be a cause for concern if an angler fell into the pond and could not get out. The shoreline slope is also an important indicator of what types of animal and plant life can live in the pond. Generally, gently sloped ponds with some shallow areas will have more food for stocked fish than ponds with steeply sloped shorelines. Biologists also look for the presence of animals that prey on trout species such as northern pike and cormorants and take note of what types of bugs are present for trout to eat.

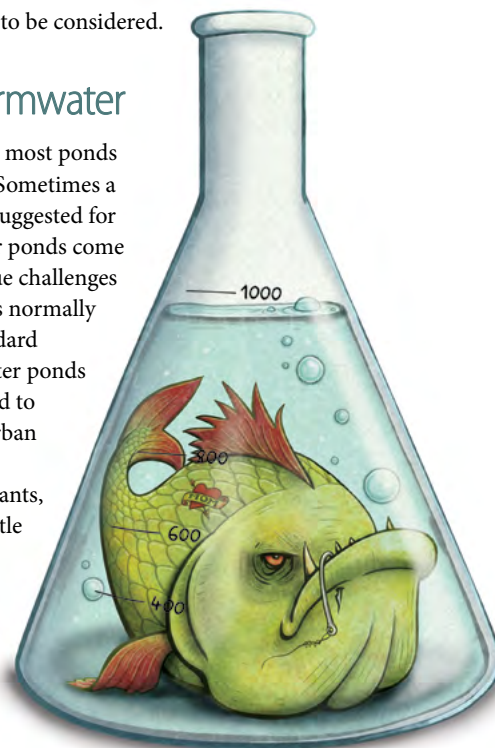
If ACA biologists are lucky enough to find a pond that has all the right ingredients for a successful fishery, they collaborate with landowners, local government, area stakeholders, and Alberta Environment and Parks biologists to determine how best to proceed. Stocking permits, amenities such as garbage cans and picnic tables, parking space, site maintenance responsibilities, and fish growers all need to be considered.


## Stocking Stormwater

That's the process for most ponds that ACA evaluates. Sometimes a stormwater pond is suggested for stocking. Stormwater ponds come with their own unique challenges in addition to what is normally completed for a standard evaluation. Stormwater ponds are, by design, created to temporarily retain urban runoff so that fine sediments, contaminants, and nutrients can settle out in the pond and “cleaner” water can be released at a controlled rate to

nearby rivers and lakes. Of course, the very function of a stormwater pond means that some special considerations need to be given to water quality and the potential for toxicant accumulation in fish tissues. That's why ACA analyses water samples from stormwater ponds for toxicants. If the water samples meet Canadian Council of Ministers of the Environment guidelines for the protection of aquatic life, the pond is considered safe for stocking. Once the pond is stocked, biologists monitor toxicant accumulation in fish muscle tissues and continue to monitor water quality.

A big part of the AFS – New Lakes process is finding new waterbodies to evaluate. You can help with the process by suggesting waterbodies for ACA biologists to assess; we know there are hidden gems out there. If you feel that there's a waterbody that could meet ACA's New Lake criteria, email [scott.seward@ab-conservation.com](mailto:scott.seward@ab-conservation.com). Who knows, maybe it'll result in anglers getting to drop a line in a newly stocked waterbody near you! 🐟





# Where there's a **WEIR** there's a way

► by Nyree Sharp

**T**he history of the weir on the Beaverlodge River (near Grande Prairie) goes back to 1981, when the weir was established to withdraw drinking water for the town of Beaverlodge.

A weir is a barrier across the width of a river; it is used to hold the water in a reservoir. It has a slope on the downstream side where water flows over once the reservoir is full.

Although the Beaverlodge weir secured drinking water, it was observed that fish were having difficulty moving upstream which kept them from their spawning grounds. Likewise, the weir was also limiting them from returning to their wintering grounds.

One species affected by this is the Arctic grayling, a *Species of Special Concern* in Alberta and an indicator of good watershed health. The Beaverlodge River once recorded the largest run of Arctic grayling in Alberta. In 1981, numbers began to decline and they have not been found there since 1994.

Various techniques were implemented to try to facilitate passage over the weir. Provincial Fish and Wildlife staff first moved fish using nets and buckets. Fish ladders were later installed, and initially worked well. However, maintenance was challenging and the fish ladders enabling fish passage soon became a seasonal barrier—fish could not navigate past the weir at lower flows and generally later in summer. A longer-term solution was needed.

Allowing fish to travel to their spawning grounds is one part of the larger fish habitat issue within the Redwillow River watershed, of which the Beaverlodge River is a part. Land use in the watershed has reduced water retention and subsurface recharge, resulting in flows greater and earlier than normal, and allowed cattle in waterbodies, leading to erosion and pollution issues. ACA has been working with landowners in this and other watersheds to improve riparian health. Examples include moving cattle away from streams by providing alternate watering sources and then fencing them out, as well as planting trees to reduce erosion and stabilize stream banks.

In 2013, the Redwillow Watershed Restoration Project Team was formed, spearheaded by the Mighty Peace Watershed Alliance. The alliance brought together a number of partners, including ACA, Alberta Environment and Sustainable Resource Development (now Alberta Environment and Parks [AEP]), the County of Grande Prairie, the Town of Beaverlodge, Agroforestry and Woodlot Extension Society, West County Watershed Society, and Cows and Fish. This collaboration blends several different perspectives, increases opportunities for funding, and allows for coordination of a number of important efforts. Partners working together is the best approach to safeguarding a range of interests, values, and uses of the landscape.

One of the team's first tasks was to complete a restoration plan for 2015–2040, the goal of which is to restore fish habitat in the Redwillow watershed. Part of this goal is the improvement of fish passage and habitat connectivity. The Beaverlodge River has

been identified as a “priority drainage” by both AEP and ACA. “Therefore,” says Lenore Seward, a biologist with ACA in Peace River, “the completion of the fish passage at the Beaverlodge weir was a big milestone for the team, connecting fish to their historical spawning grounds.”

In order to avoid any changes to the weir itself and protect the municipal drinking water, a natural rock passage design was used. The channel was sculpted so that it narrows at the level of the weir to sustain a passable depth at low flows, and two riffle sections (a rocky part of the river) were established so that fish could move up and down the height of the weir. This is a low-maintenance approach that is designed to accommodate multiple fish species at a range of flow levels. The fish passage construction was finished in September 2018, and for the next five years there will be a monitoring plan that includes sonar videography upstream of the weir to document fish successfully swimming through the passage.

Adam Norris, Watershed Coordinator with the Mighty Peace Water Alliance, notes that the establishment of the fish passage is one piece of the puzzle. Land use issues in the watershed

have resulted in deterioration in water quality—low dissolved oxygen, high water temperatures—to the point that Arctic grayling would not be supported. So while the establishment of the fish passage is an exciting first step, watershed improvement is an ongoing endeavour, one which the Redwillow Watershed Restoration Team is committed to work on into the foreseeable future. 🏞️

photos:  
top: ACA, Garret McKen  
middle: ACA, John Hallet  
bottom: ACA, Nikita Lebedynski  
opposite page: ACA, Garret McKen



**The completion of the fish passage at the Beaverlodge weir was a big milestone for the team, connecting fish to their historical spawning grounds.**

~ Lenore Seward

See the next page for an illustration of the fish passage at the Beaverlodge River.

# Fish Passages at the Beaverlodge River Weir

SPAWNING GROUNDS

Weir

Town of Beaverlodge Pumphouse

Former site of fish ladder

Riffle Fish Passage

FLOW OF BEAVERLODGE RIVER



## Healthy Riparian Areas

## Watershed Planning and Advisory Councils

The Mighty Peace Watershed Alliance is one of 11 Watershed Planning and Advisory Councils (WPACs) established under the Government of Alberta's Water for Life Strategy.

This strategy has three main goals:

- healthy aquatic ecosystems
- reliable, quality water supplies for a sustainable economy
- safe, secure drinking water

The WPACs, as partners in this strategy, support multi-stakeholder collaboration and community engagement at the watershed level, in the areas of education and outreach, environmental stewardship, watershed evaluation and reporting, and watershed management planning.

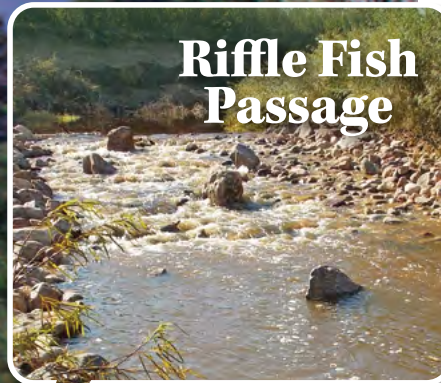
WPACs, representing the major river basins of Alberta are:

- Athabasca Watershed Council
- Battle River Watershed Alliance
- Bow River Basin Council
- Lesser Slave Watershed Council
- LICA-Beaver River Watershed
- Mighty Peace Watershed Alliance
- Milk River Watershed Council Canada
- North Saskatchewan Watershed Alliance
- Oldman Watershed Council
- Red Deer River Watershed Alliance
- South East Alberta Watershed Alliance

They are independent, not-for-profit organizations that bring a variety of activities and approaches to the management of watersheds. They work to achieve consensus on land and water management strategies among key stakeholders, including various levels of government, industrial sectors,

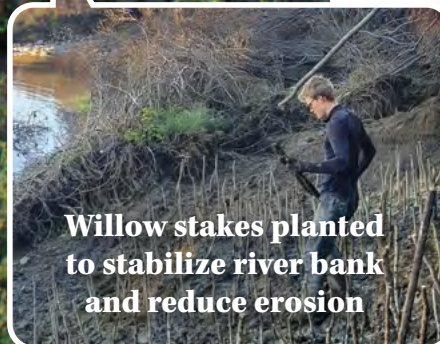
conservation groups, aboriginal communities, academia, and the public. This strengthens collaborative action and shared ownership in the management of Alberta's major watersheds.

photos:  
fish ladder: ACA, Lenore Seward;  
riffles: ACA, Garret McKen; willow stakes: County of Grande Prairie, Kolby Peterson;  
background: ACA, Nikita Lebedynski



### Riffle Fish Passage

Water level maintained using raised riffle passages that help fish swim upstream during low flow to reach spawning grounds



Willow stakes planted to stabilize river bank and reduce erosion

## Weak Riparian Areas

# In a **Rush** to Take Over



make a dent. Lake Isle, about an hour west of Edmonton, has a huge infestation of flowering rush that AEP has been trying to eradicate. One of the landowners on Lake Isle said it's so thick that it was like a mat you could walk on. (You can read more about Lake Isle and flowering rush on page 34, "Bloomin' Waterbody.")

The best defense against the beautiful but dangerous plant is prevention, of course. When that fails, a step-by-step approach is the next best option—identify it, report it, and follow AEP's instructions. 🐾

► *By Kelley Stark*

The Government of Alberta recognizes two different lists for invasive plant species: noxious plants and prohibited noxious plants. Those on the first list must be controlled because they can easily grow out of control. Those on the second are highly invasive and must be completely removed. Flowering rush falls near the top of the second list.

An exotic perennial, flowering rush can survive Alberta's harsh winters and droughts and is dominating some of our waterways. "Anytime an invasive species can create a monoculture that replaces natural vegetation," says Nicole Kimmel, Aquatic Invasive Species Specialist with Alberta Environment and Parks (AEP), "...it has impacts. Any open-water fish spawning species will lose access to open water and little other wildlife have been found in flowering rush stands for either food or shelter." Not only is it affecting fish, wildlife, and native plants, but it can also get tangled up in boat propellers and hinder swimming.

It's a really pretty plant—which is why it was used as an ornamental garden plant. Originally found in Africa, Asia, and Europe, it has now spread across Canada and the United States. It grows in an umbrella shape with light pink flower clusters at the top, and flourishes along shorelines as well as in lakes and rivers up to four metres deep.

Once flowering rush has established, it reproduces through an extensive root system (thankfully, due to Alberta's conditions, it

does not produce viable seeds here). It spreads easily when fragments are broken off by animals or boating equipment—even a change in water levels can move the plant around enough to invade new areas.

Unfortunately, this prohibited noxious plant is tough to get rid of. AEP has tried a few different methods. "We have researched control using hand pulling, barriers, mechanical harvesting, dredging, diver-assisted suction harvesting, and chemicals," says Kimmel. "In all our past efforts we have found small patches can be hand-removed effectively, if done carefully, and anything of large scale seems to warrant chemicals." This approach has worked well for other jurisdictions across North America.

But it's more than just throwing some chemicals at it and walking away. Every year, the infestation will become a little smaller, but it takes several years in some places to even





photo: AEP, Janine Higgins



photo: AEP, Nicole Kimmel



## DON'T LET IT LOOSE

*Don't Let It Loose* and *Clean. Drain. Dry.* are a couple of AEP's programs that give instructions on how not to spread invasive species through Alberta's waterways.

Says Nicole Kimmel, Aquatic Invasive Species Specialist with AEP, "Flowering rush is just one of many plant species that is and could continue to threaten Alberta waters." Zebra mussels, Prussian carp, and even goldfish are examples of others. Some quick reminders from AEP:

### *Don't Let It Loose*

- Never release aquarium or domestic pond water, plants, or dead or live animals into waterbodies.
- Be a responsible pet owner! Unwanted pets can be disposed of humanely by:
  - donating to schools or community organizations
  - giving them away
  - returning them to pet stores
- Make sure to bury your fish after it passes away—flushing it down the toilet can lead to the spread of unwanted diseases.
- Ensure all food purchased from live food markets is dead before leaving the store.
- If you are gardening ponds, select plants native to Alberta—they're more likely to thrive and are better for our province's bees, butterflies, and birds.
- Report any invasive species by calling 1-855-336-BOAT (2628) or online by using the Early Detection and Distribution Mapping System (EDDMapS Alberta).

## CLEAN + DRAIN + DRY YOUR BOAT

### *Clean. Drain. Dry.*

#### Clean

- Clean and inspect watercraft, trailer, and gear.
- Remove all mud, sand, and plant materials before leaving the shore.
- Rinse, scrub, or pressure wash your boat, kayak, or canoe away from storm drains, ditches, or waterways. Use hot water if possible (maximum of 60°C).

#### Drain

- On land, before leaving the waterbody, drain all water from:
  - Bait buckets
  - Ballasts
  - Bilges
  - Coolers
  - Internal compartments
  - Livewells, etc.
- Drain non-motorized watercraft by inverting or tilting the watercraft, opening compartments, and removing seats if necessary.
- Pull the plug (this is actually a law; it is illegal to transport a watercraft with the drain plug still in place).

#### Dry

- Dry the watercraft and gear completely between trips and allow the wet areas of your boat to air dry.
- Leave compartments open and sponge out standing water.

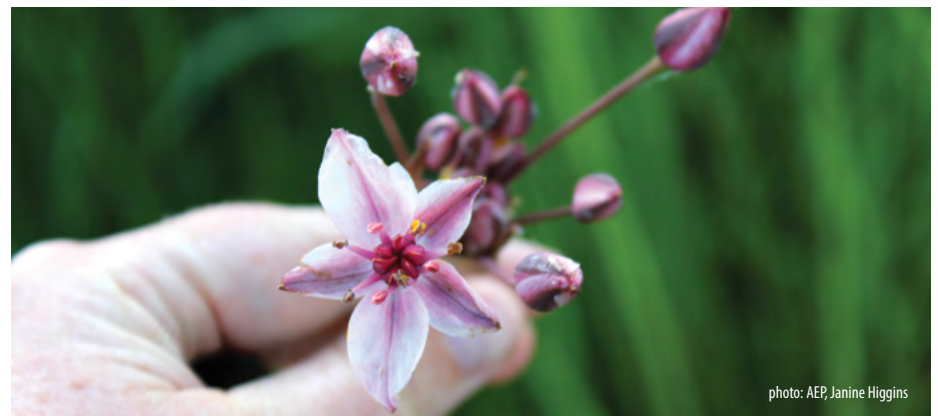


photo: AEP, Janine Higgins

# Not taken for GRANTED

► by Ariana Tourneur

## It's like a good ideas fund.

Because there are a lot of good conservation ideas out there, but without a financial boost, most of them are unable to turn into something tangible. That's why we get excited about our grants process every year. It means action. Funded by the province's hunters and anglers, ACA's grant programs help support projects that make a real difference—benefitting Alberta's wildlife and fish populations and the habitat they depend on.

To date, we've received more than 2,059 grant applications, with 1,178 projects receiving money. That adds up 18 million dollars granted to conservation-related projects throughout Alberta. Check out a few projects in the works now... and keep the good ideas coming.

## Confessions of an Angler

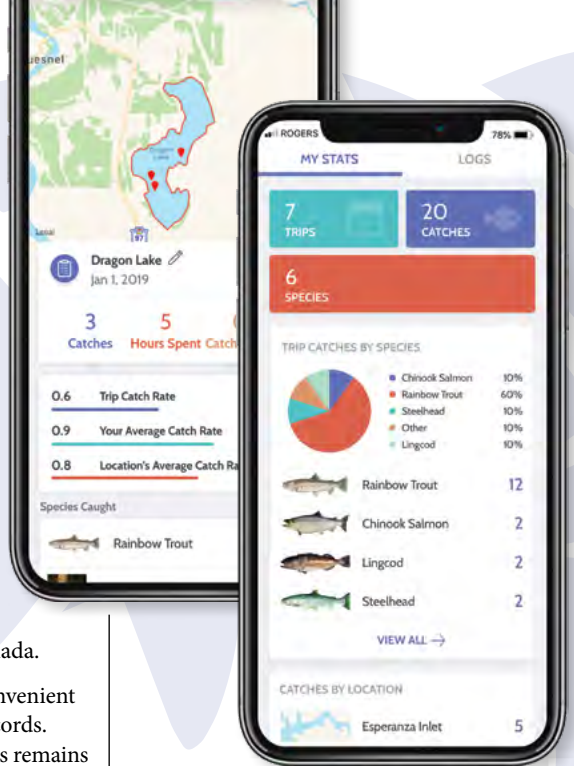
MyCatch

Have you heard of MyCatch yet? The mobile app by Angler's Atlas does double duty: it's not only a tool to help anglers accurately log their catches, but it's also a major data-generator for fisheries biologists. "We envision a new fisheries monitoring program for Alberta, and for Canada, that is built by anglers," says Sean Simmons, Founder and President of Angler's Atlas. The platform has more than 100,000 members who have catalogued hundreds of thousands of waterbodies across Canada.

MyCatch is a free app and offers a convenient way to track catches and save past records. And don't worry—information always remains private, so an angler's "secret spot" remains just that. "We know anglers won't share their catch data otherwise," says Simmons.

While that's definitely a major bonus, it's not what makes this app a potential game-changer. It's about making citizen science make sense. Anglers are serious players in fisheries conservation, and by taking just a minute or two to report their catches, they provide data for hundreds of lakes and rivers across Alberta. Ones that would otherwise go unmonitored.

Fisheries biologists can use the catalogued data for assessments, complementing aerial, creel, and netting surveys. Plus, anglers are typically attuned to the places they frequent—



they notice if there are any changes when out fishing. It might be invasive or endangered species, a fish kill, or any sign that something isn't quite right. If they see it, they can document it.

"Most anglers I know are passionate about conserving our fisheries," says Simmons. With their contributions, this new source of information can help fill major gaps in fisheries data across the province. In just one year, MyCatch collected data on over 300 lakes and rivers across Alberta. It will help managers better understand how fisheries are performing in near real time. Angler by angler, app users are supporting the long-term goal of more effective fisheries management.



## There's Dirt on Your Shirt

CPAWS Outdoor Programs

Nature Canada released a report in November, revealing 85 percent of school-aged children don't get enough sleep or physical activity, all while getting too much screen time. The long-term effects of high screen time are linked to behavioural issues and lower self-esteem.

But spending time in nature? The outcomes seem to be the opposite—showing improvements in kids' resiliency, academic performance, and social skills. It's predicted that children who spend time in nature are more likely to be creative and confident, inherently valuing and respecting the natural world.

## Chasing Parasites

Implication of Anthropization for Host Partitioning and Epidemiology of Emerging Zoonotic Parasites in Wild Canids

As our cities fill up and spread out, we continue to worry about the serious impacts humans have on habitat and wildlife. But every once in awhile, we are forced to address how this affects us.

Because right now, increased urbanization is facilitating the transmission of zoonoses to humans. Say what?

Zoonoses—infectious diseases that can be naturally transmitted between animals and humans—can become a problem when more people have more contact with wildlife. A particular concern here in Alberta has been *Echinococcus multilocularis*, a lethal tapeworm in several recorded cases. *E. multilocularis* and *E. canadensis* (we'll call them *Em* and *Ec* for short) are emerging as a serious concern, ranked by the World Health Organization as food borne parasites with the second and third greatest global impact! Introduced from Europe, the parasites can infect humans through the feces of coyotes and dogs.

To find out all we can, ACA is helping fund an assessment of the potential risk that these tapeworms pose to humans. Researchers from Kings University, led by Dr. Darcy Visscher, are examining the ecological and behavioural factors that enable transmission of these parasites between wild canid (most of the focus is on coyotes), definitive hosts, domestic dogs, and humans.

Dr. Visscher and his team compiled over 800 scat samples and completed genetic analysis on 135 fecal samples of coyotes in the Cooking Lake – Blackfoot Provincial Recreation Area. They found a prevalence of *Em* of 13.1 percent and a prevalence of *Ec* of eight percent, with only one case of co-infection.

Figuring out risk factors that could influence transmission to domestic dogs is essential—exactly how these parasites get close to humans. The team is pairing fecal analysis with surveys of dog walking and feeding behaviour. They have also compiled a year's worth of remote camera images from a survey grid set up across the Blackfoot—determining potential risk of transmission based on the overlap activity between coyotes and human visitors to the park, with particular attention on dog owners.

As landscapes steadily urbanize, we have to better understand the roles of recreational areas, wildlife, and human behaviour in the transmission of zoonoses. More knowledge means we're better equipped to build preventative actions—and reduce this serious infection risk in all Albertans.



That's why, with support from ACA, Canadian Parks and Wilderness Society (CPAWS), Southern Alberta Chapter felt the need to get “inside kids” outside. Through interpretive hikes and snowshoe treks, kids learn about healthy environments and fish and wildlife populations. Kids begin to understand that appreciating the outdoors can be done in many ways, such as nature photography, berry picking, hunting, fishing, and simply going for a walk. And all through an immersion experience—right in Alberta's beautiful parks and protected areas.

Since ACA began supporting these outdoor programs, CPAWS Southern Alberta has been able to take over 10,000 children out hiking or snowshoeing—that's more than 400 field trips! Connecting youth with nature and educating them about the importance of conservation isn't just about a fun trip, or even more awareness. It's literally building the next generation of conservationists in Alberta.

Let's keep encouraging kids to get dirty, breathe clean, and come inside with rosy cheeks...and maybe a new outlook too.



## Pass the Marshmallows and Hunting Licences

AHEIA's Youth Hunter Education Camp

Youth Hunter Education Camp continues to be one of Alberta Hunter Education Instructors' Association (AHEIA)'s most popular programs. We think it's pretty thrilling that outdoor and hunting-associated activities still matter to young people, so of course we want to support these camps.

AHEIA shares that its youth programs consistently draws groups of enthusiastic youngsters, ready to be part of the hunting and outdoor community. In fact, AHEIA runs four five-day camps every summer, and each one fills fast.

It makes sense: the affordable fee includes lodging, meals, expert instruction, course handbooks, and testing for the various certifications. If successful, students end up certified in the Alberta Conservation and Hunter Education Program and the Canadian Firearms Program. They then qualify to apply for their Wildlife Identification Number (WIN) Card and can apply for their Minor's Possession Licence for firearms.

No matter the certifications the kids are going after, all of the camp staff and volunteers are dedicated to building their skills and confidence. The camp-goers learn to hunt and fish with respect, understand the importance of wildlife conservation management, appreciate natural resources—all while carrying on our fishing and hunting heritage.

The Youth Hunter Education Camps are held at AHEIA's Alford Lake Conservation Education Centre for Excellence, west of Caroline, in the spectacular foothills of the Rocky Mountains.



Do you have children or know of someone who would love the camp? Check out [aheia.com](http://aheia.com) for more information or to register.

Photo: ACA, Colin Eyo

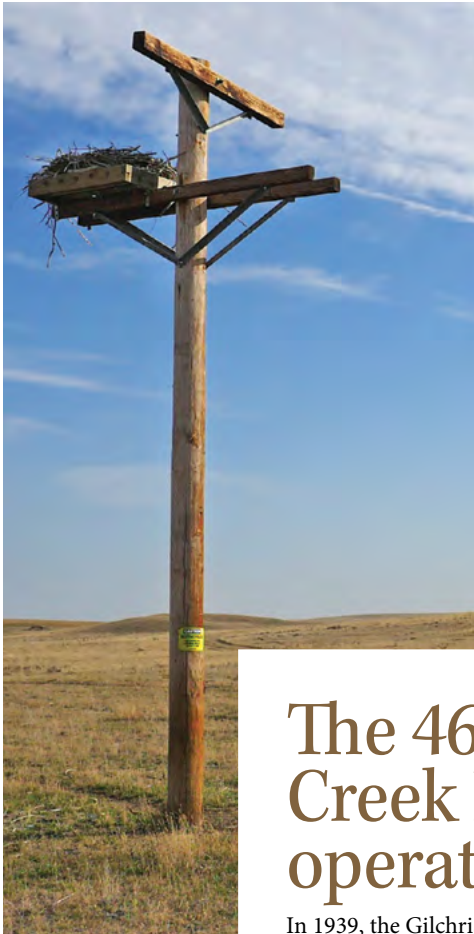


▶ *by Kelley Stark*

# Deer Creek RANCH

No downside to working  
with species at risk.





## The 46,000-acre Deer Creek Ranch has been operating since the 1800s.

In 1939, the Gilchrist brothers bought the ranch from George Ross. It changed hands again in 2011, when four local families purchased it. If you know about ranching, then you know Ross and Gilchrist are significant names in that community. So far, the owners of Deer Creek are filling those big boots admirably.

The Gilchrists (Tom, Lois, and Neal) began working with MULTISAR in 2009 and passed the program down with the ranch. The new owners have noticed improvements in their cattle and on their land. Just as important? The improvements implemented for wildlife haven't impacted Deer Creek Ranch's day-to-day business.

### What is MULTISAR?

MULTISAR is a collaborative program that works with landholders to conserve and enhance grassland habitat for the species at risk that call Alberta's native prairie home.

Ferruginous hawk (*Buteo regalis*)  
Status: *At Risk*

Visit our live cams to check out North America's largest hawks online at:  
[www.ab-conservation.com/hawkcam](http://www.ab-conservation.com/hawkcam)







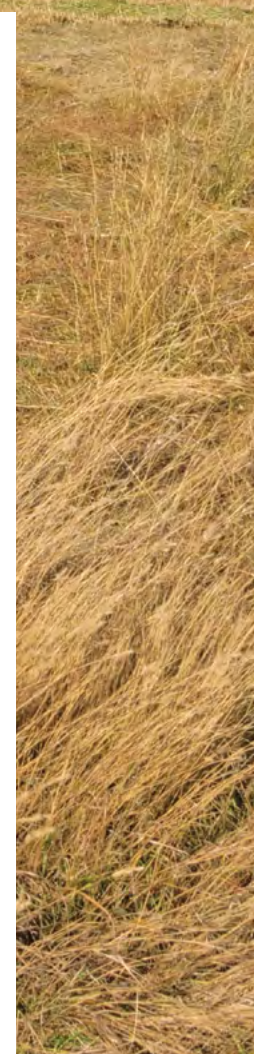
## They've done their research.

In the last five years, Deer Creek Ranch has increased the quality of beef from 80 percent to 90 percent AAA, maintained the finished harvesting rates, decreased the amount of feed to produce the same amount of beef (more efficient), and raised more cows on less grass. The point is not that MULTISAR necessarily made all this happen, but that enhancing the land for wildlife has not hurt operations in the least.

“We’ve managed to maintain or increase our operation down there without giving up anything,” says Jeff Smith, one of the shareholders of Deer Creek Ranch. “We still maintain a 1,480-pound steer, and cows are no different as far as having fewer cows or smaller cows. We’ve maintained our weight even using MULTISAR and increased our quality of animals.”

## Their success

shows how working within the four pillars of a MULTISAR habitat conservation strategy plan has benefits all around. Brad Downey, Wildlife Biologist with ACA and an ACA representative for MULTISAR, gives a great explanation: “The landholder is the core member of the team. We provide them with recommendations and ideas, but it’s up to them ultimately to decide what they would like to do on their land. And so, having that understanding right off the start is key. Building those relationships—having that mutual trust and respect—are all important to be successful in conservation.”





## Pillar ONE: Engagement

Getting landholders on board with the program isn't hard once they understand what's being asked of them. In the case of Deer Creek, MULTISAR projects were already implemented on the ranch before it was purchased by the four families.

"[Gilchrist] showed us some of the advantages and documents that [MULTISAR] provided," says Smith, and "...we saw the value right away." He says the first thing they focused on was grass management and grazing protocols to evaluate the different conditions—healthy or unhealthy.

Other changes they've made since taking over include solar-powered water tanks that keep cattle off riparian areas, solar-powered electric fencing to limit grazing areas, thereby giving the land a chance to revive, and smooth wire on the bottom strand of barbed wire fences so pronghorn can migrate across the ranch without injury.

They've also installed ferruginous hawk poles on the property, which benefits both a species at risk and the ranch. Gophers (officially known as Richardson's ground squirrels) are numerous in the area. They eat a lot of crop. Installing hawk poles gives the at-risk birds somewhere to raise their young, while keeping them well-fed.

There is huge buy-in from other ranches in the area too. MULTISAR is involved on over 600,000 acres of land, and with no signs of slowing down. A long list of landholders are interested in the program. It's just a matter of finding time and resources for MULTISAR to get out there and assess the needs for wildlife and the land.

## Pillar TWO: Respect

There is a mutual respect between landholders and MULTISAR. Downey emphasizes that it's about working together collaboratively and finding ways to benefit the operations as well as wildlife and habitat. "If there wasn't a benefit for the ranchers," he says, "then they probably wouldn't be working with us."

"There's no more land being built," adds Smith, "so we value the land. In order to maintain it and keep it established and operational, we've chosen as a corporation to work with MULTISAR to stay ahead of the management practices that we feel ranches need to, and do, look at."

It's not land and wildlife or the ranch. It's having those things work together and making sure that everyone involved is on board. At best, the ranch should see a benefit. At worst, a neutral. If a problem or negative pops up, it serves both parties best to know about it.

## Pillar THREE: Empowerment

Ideas and decisions about how to treat the land and wildlife don't come only from MULTISAR. The producers who manage the land often already know what it needs to thrive. It can't be stated enough: this only succeeds if the rancher and MULTISAR work together.

"We look at grass through the eyes of a rancher, where MULTISAR is looking at it through the eyes of scientific data and information," explains Smith. "It's reassurance of a different set of eyes looking at it from a different point. And it's changed the way we manage it, absolutely, but for the better for sure."

If, for example, a species at risk lives on the land, MULTISAR will ask the landholder for input on how to enhance the habitat for that species. "[The landholders] come up with their own ideas on how they can do that," says Downey. "If it works for both of us, then it may be implemented." The final say belongs to the landowner.

"Building those relationships—having that mutual trust and respect—are all important to be successful in conservation."

~ Brad Downey

## Pillar FOUR: Monitoring and Evaluation

We can't know if the program is working without checking the data regularly. Every five or six years, MULTISAR looks at range and riparian health on each piece of land to see how those things have changed over time (from the last reassessment, but also from the implementation of the program). For many producers, these reassessments are a valuable management tool.

Smith finds them quite handy. "We analyze our AUMs (the amount of forage needed by an animal unit/month) and management of grazing off the assessments and, if needed, change anything we need: whether we need to increase riparian areas or watering sites or give the grass a break." For example, the ranch had an area of very dry land due to drought, so they didn't graze it the next year. "It just needed a break," Smith says. "It paid off; it's definitely beneficial." 🏠



Photos, this page: ACA, Colin Eyo  
ACA, Dean Ostafichuk



Pronghorn Antelope  
(*Antilocapra americana*)  
Status: *Sensitive*



► by Paul Jones

## Multiple Species | Multiple Agencies | Multiple Resources

MULTISAR is a collaborative effort that began in 2002 as a partnership between Alberta Conservation Association (ACA) and what is now called Alberta Environment and Parks (AEP), with both Fish and Wildlife and Public Lands Branches. In 2009, the third partner, Prairie Conservation Forum (PCF), came on board. All three organizations are very active in the management and day-to-day delivery of the program.

MULTISAR's goal is to conserve species at risk through habitat stewardship, while maintaining viable ranching operations in Alberta's native grasslands. This is achieved through working partnerships and collaboration. MULTISAR has developed a process of working with landholders through the development of a Habitat Conservation Strategy based on the four pillars: 1) Engagement, 2) Respect, 3) Empowerment, and 4) Monitoring and Evaluation. This bottom-up approach is welcomed by landholders and has not only lead to recognition of leadership in species-at-risk conservation within Alberta but has resulted in discussions of our approach as an effective means to conserve species at risk at the federal level.

The governance of MULTISAR is achieved at two levels. There is a management team, affectionately called the MSC (Management Steering Committee), which provides direction and scope for the program as a whole. The MSC is made up of two representatives from ACA, three from AEP, and one from PCF. All representatives, while cognizant of the needs and limitations placed on them by their parent organization, strive to make decisions that are in the best interest of MULTISAR. While this at times has proven difficult, the fact that MULTISAR has been in existence for over 16 years highlights commitment to the program by the individuals and the organizations.

Below the MSC is the MULTISAR Team with staff from ACA, AEP, and PCF (number of staff varies from month-to-month and year-to-year) that deliver the program on-the ground day-to-day. The team meets on a regular basis to ensure the work and reports are being completed in a timely manner. Though MULTISAR itself does not have any staff per se, each partner organization contributes significant staff time to ensure the delivery of the program.

MULTISAR has achieved success above what each single organization on its own could achieve because of the collaboration. This is not only seen in the recognition MULTISAR has achieved in the eyes of the ranching community, through our work with the landholders, but also in collaboration with external organizations outside of the program. First is the long-term support from Environment Canada who has funded MULTISAR since its inception in 2002. Secondly is the ability to expand the program through additional support. Beginning in 2015, MULTISAR has expanded from the Milk River Basin to a larger area that now encompasses the South Saskatchewan Basin. The support of additional financial and technical partners provides credence to the good work MULTISAR is doing and provides stability to the program. 🏠

# goodness snakes

► by Karen D. Crowdis

**Sheri Monk:** paramedic, journalist, animal lover, hunter, and conservationist

As a paramedic, saving lives is just what Sheri Monk does. Logically, this compassion extends to all living things. Growing up an outdoorsy kid with a love of all animals, she still takes advantage of the prairie's unique outdoor opportunities. Tracking, hunting, and observing wildlife, particularly misunderstood species, in their natural environments energizes Monk. Just starting to work with Rattlesnake Conservancy, Monk continues combining her passion for outdoors and journalism, to share information, giving a voice to underdog species.

photo: Sheri Monk

**ACA:** How and why did you become interested in conservation?

**Monk:** The nature shows I watched growing up always had messages at the end with an urgent call to action which really fostered my empathy for animals, especially species that most people don't like. After moving to Saskatchewan, I began to learn more about hunting and the conservation connection. I saw that everyone living in the area had a vested interest in conserving it; all aspects of it. If we don't commit to preserving, we won't have it left to preserve.

**ACA:** What has surprised you as you learn more about conservation efforts?

**Monk:** I think I was most surprised by the lack of depth of understanding on all sides. Non-hunters don't understand hunting and how it works with conservation. Hunters need to see a more holistic view of things. Our best chance for having successful conservation is to look at things holistically, recognize that it is a lot bigger than us, and that we all must work together to achieve results.

**ACA:** How did you come to be interested in snakes?

**Monk:** When my son had an interest in Spiderman, we saw a tarantula at a local pet store which sparked my interest in venom, leading to an interest in snakes. Once I had seen my first rattler in the wild, I was hooked. Like birding, I want to find and see

as many as possible. The prairie rattlesnake is my favourite. Seeing my home species in its natural habitat is always a thrill.

**ACA:** Why should people be interested in snakes?

**Monk:** We need to talk about the animals that aren't popular. Snakes and insects are the base of most ecosystems. Combining my love of snakes with journalism allows me to tie ends together for people. Fragmented habitat is causing problems. It is not about individual species, but about the habitat that allows them all to survive. Using the best possible science and data to communicate to the non-science community will create the mutual understanding needed to work together. If animals are just in parks, then parks will be a zoo.

**ACA:** You are also a hunter. What got you involved in hunting?

**Monk:** I learned with my son and we did AHEIA training together. In fact, I was the first in my family in generations to own a gun. Tracking animals was a big interest we shared; we spent hours learning to sneak up without being detected. It was a great way to spend time together.

**ACA:** What has hunting taught you?

**Monk:** It is harder work than I would have thought. It has presented opportunities to have in-depth conversations with my son about it. There is an appreciation for the animals that we get from hunting.

I encourage all parents to take all kids out or find someone they can trust to do it. Don't dissuade them if there is an interest there—it's open for anyone and gender, in particular, need not be a barrier.

**ACA:** What do you wish people knew about hunting and conservation?

**Monk:** Really, I wish people knew hunting is informed by science and that it is about carrying and social capacity. Most people don't know that hunting licence fees support conservation projects that may impact farmers; they help compensate project costs. Even in urban settings, there is a need for people to adapt. We need to realize that we need to get out of our comfort zones to make a difference—but we can make a difference. ▲

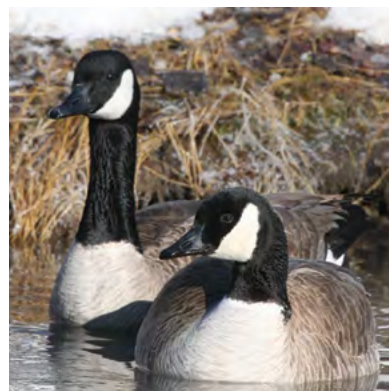
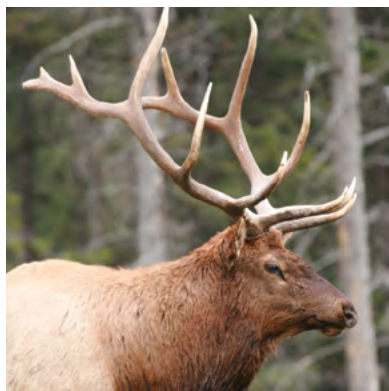


photo: Courtesy of Sheri Monk



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site seeing

# I'd buy that for a dollar

Two lakes, one site, plenty of opportunity

► by Karen D. Crowdis

Nestled roughly 30 kilometres north of Valleyview, Dollar Lakes is a 50-acre day use area with both fishing and wildlife-viewing opportunities. ACA has partnered with the Municipal District of Greenview No. 16 and Alberta Environment and Parks to enhance visitor experience with the lakes. Comfort improvements to East Dollar have increased interest in the lake and more recently, West Dollar has become a recluse for seasoned anglers. Both offer a great escape from the daily grind.



photos: Peace Country Flyfishers

**L**ocal anglers have made use of the East Dollar site for decades; it became part of ACA's Lake Aeration Program about 20 years ago. Because of its popularity, it became clear that the recreation opportunities could be improved.

"On the east side, ACA's Land Management Program has made improvements to make the lake more accessible," says Scott Seward, Fisheries Biologist with ACA. "We now have three docks installed and a walking path, making it more usable by many anglers, regardless of experience."

The enhancements add to the fishability of East Dollar and, as a result, increase its appeal to many anglers. "The type and number of anglers has changed," notes Dave Jackson, Senior Technologist with ACA. "In the past it was only belly boats heading there. Now, with the docks, there is more access for anglers. The docks go out past the weeds to where the fish are."

Jackson adds that "there are more people coming to the lake" and the improvements are "making it more family-friendly so there are more kids fishing." Other enhancements include garbage cans as well as several picnic tables, although open fires are not permitted.

"Anglers are very happy with the docks," says Seward. "We've aerated East Dollar for years, so adding West Dollar was a logical next step.

The little beaver run that goes through to West Dollar led us to bigger fish as some found their way over from East Dollar; they didn't face angling pressure and found an untouched food source."

## Trouble in the West

However, winter kill was a major concern with West Dollar, so aerating seemed a viable option for the additional angling opportunity. A plan was developed and approved in 2017. It was installed and operational in the fall of 2018 as part of the Lake Aeration Program with ACA.

"Without the oxygen, there is only half a season of fishing," observes Seward. "Logically, we have the infrastructure in place since we are aerating East Dollar and we are visiting the area anyway, so we wouldn't be starting from scratch."

Jackson notes: "We moved the power source to the area between the lakes to aerate both waterbodies." With aeration secure and functional, West Dollar will be added to the fish stocking program in 2019. Annually, the lakes will be stocked with rainbow and brown trout. "There is no size limit," says Jackson. "We encourage keeping caught fish because they are stocked every year, meaning we need fish to go out."

## Pulling Them In

Improvements are not diminishing the qualities of the lakes that are the draw for current users. While use of East Dollar will continue to increase, West Dollar will remain more of a challenge to access.

“East Dollar is really for everyone; people can easily take their families there to fish off the dock, but we wish people knew about West Dollar,” says Seward. “It still requires a boat for access or waiting for ice fishing.”

This moderate isolation “offers experienced anglers an opportunity to catch larger fish,” adds Jackson.

“With West Dollar, seasoned anglers can get away from crowds and get bigger fish,” says Seward. “It’s peaceful and gives a lot of solitude and a feeling of being alone.”

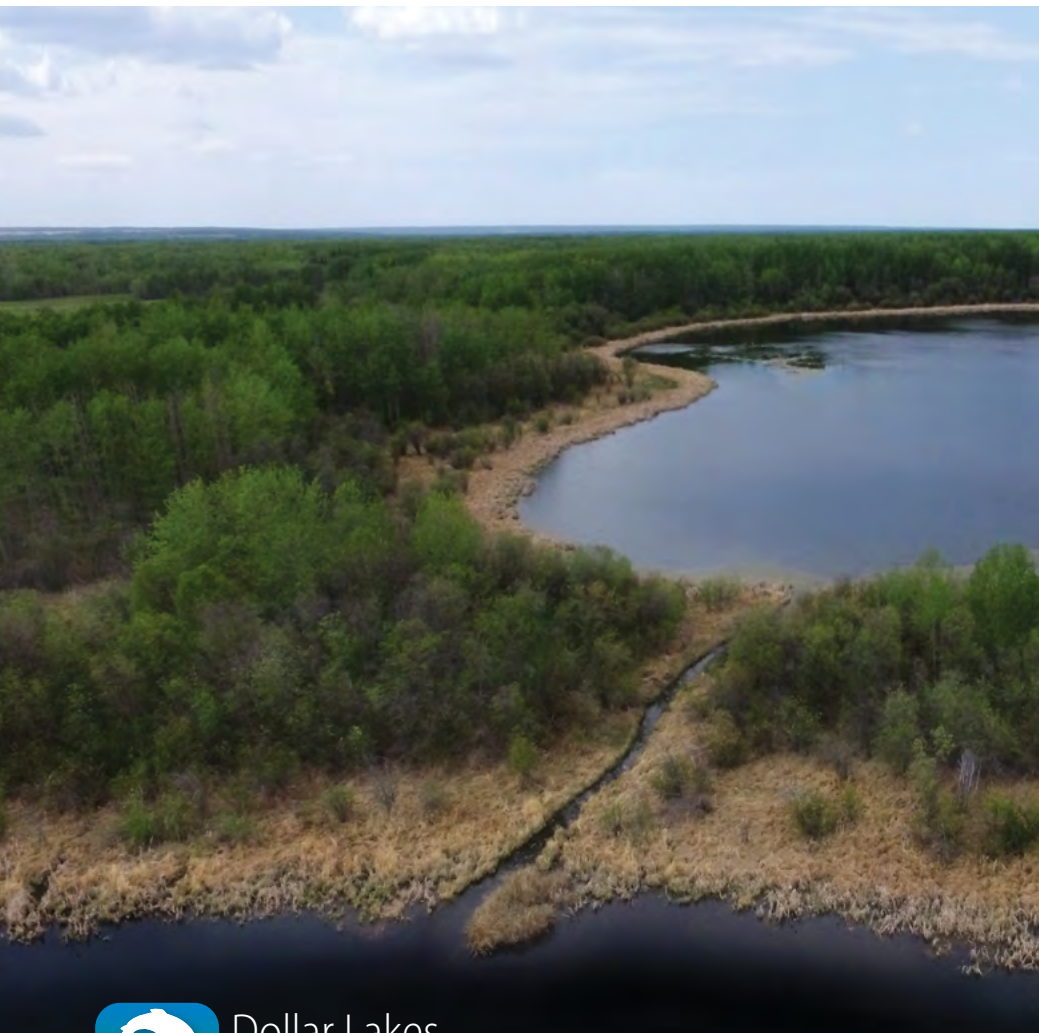
Non-anglers can get just as much pleasure out of a visit to Dollar Lakes. Wildlife and birdwatching opportunities are abundant. The lakes boast resident otters, moose, elk, white-tailed and mule deer, black bears, bald eagles, grouse, waterfowl, songbirds, and small mammals.

“It’s a nice lake to visit,” observes Jackson. “Definitely worth the effort to get to.”

Angler or not, a visit to the tranquil beauty of Dollar Lakes will not disappoint. The effort to reach the area will reward with great fishing and wildlife-viewing opportunities. For peace and quiet, Dollar Lakes fits the bill. 🏞️



photos from top: ACA, Jon Van Dijk, ACA, Budd Erickson



## Stock Opportunities

ACA wouldn't be able to stock quite as many waterbodies without the help of our partners. Partnerships make it possible for ACA to stock local ponds, creating fishing opportunities for new and seasoned anglers close to home.

Nutrien is one of these partners. They support six ponds in Alberta: Tees Trout Pond, Mitchell Pond, Len Thompson Pond, East Stormwater Pond, Kinsmen Lake, and Gibbons Pond. To find more stocked ponds across the province, visit [www.albertadiscoverguide.com](http://www.albertadiscoverguide.com).



Dollar Lakes  
Conservation Site C2-1  
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# Bloomin' Waterbody

## Lake Isle Fisheries Restoration

► by Ariana Tourneur

It seems inevitable: come summer, a handful of central Alberta lakes are listed as places to enjoy with caution. Considering the murky, scummy surfaces and rampant slimy vegetation groping your limbs, it's not like people are dying for a dip.

In some ways, Lake Isle has become the poster child for Alberta lakes gone bad: typically it's often the first lake to get slapped with a blue green algae advisory every spring. It suffers early and all season. The lake can have startlingly low levels of oxygen, even experiencing a severe fish kill in 2014.

Alberta's fertile soil, human development, roads, houses, farming, fertilizer use, septic fields...it all compounds the problem of uncontrolled blue green algae growth. And just when we thought we fully understood what we were up against, another plant—beautiful but suffocatingly invasive—has taken hold of the lake.

Does Lake Isle stand a chance of becoming a semblance of what it used to be? Maybe, if we can fully understand its (literally) growing challenges.

### The First Bloom

It's blue. It's green. And it's definitely seen. Blue green algae at Lake Isle are chronic, persistent, and make their appearance early in the season. They can outcompete other plants, and strains can be toxic.

Brendan Ganton, ACA Biologist who has studied Lake Isle calls the algae "phosphorous specialists." They grow and produce at a Hulk-like rate when fed extra nutrients—which is exactly what has happened.

“There is no silver bullet. Lake Isle is a large dynamic system that will require a large dynamic solution.”

~ Brendan Ganton

Although we haven't necessarily meant to, we've been fertilizing our lakes for years. "There has been many changes on the landscape," explains Ganton.

"It's death by a thousand cuts. Cabins, farms, general clearing, gravel pits, highways, golf courses...every land use you can think of is changing the chemistry of the lake."

Lake Isle was never an "ideal" or pristine lake either—at least not by standard of those deep, whimsical Canadian Shield lakes you see on fishing shows. Like many central Alberta lakes, it started out nutrient rich. Lake Isle is greener, more productive, and built on finer substrate, surrounded by rich soils.

Biologists refer to lakes like this as "hyper-eutrophic"—characterized by high nutrient values that allow microorganisms and algae to grow in large numbers.

This takes us to the whole concept of shortening a lake's lifespan as nutrients continue to accumulate (naturally and through human influences), a cycle begins

wherein more plant and algae growth, followed by decomposition eats up the lake's oxygen, which results in the nutrients being recycled and available for more plant and algae growth. This continuous cycle only speeds up with time, resulting in high volumes of sediment accumulation. We then have shallower water, higher water temperatures, and lower oxygen. The process drastically changes the chemical makeup of the water: this is Lake Isle to a tee.

photo: ACA, Brendan Ganton





photo: AEP, Janine Higgins

## The New Bloom

Flowering rush is an exotic plant, striking with tall stalks and pink flowers. It was brought here for its beauty but stays because it outcompetes native plants with ease.

Cabin owners around Lake Isle were the first to identify the showy flowering rush, a couple years before ACA's involvement. "People noticed a new plant in the lake, and realized it was spreading quickly," says Ganton. With help from ACA, Alberta Environment and Parks (AEP) mapped the spread in 2015, confirming flowering rush has spread significantly.

The most viable solution considered to date was a special herbicide, and AEP was close to making a large-scale spray reality. But concerns were raised over potential downstream effects. At the moment that's on hold, but plans are still in the works.

Learn more about flowering rush on page 18.

## The Community Bloom

As we learn more about both blooms, there is only one thing we're happy to see grow and spread: community effort.

The positive side is that the uptake in the Isle Lake basin has been high," says Ganton.

"Agricultural producers, cabin owners, community associations, both Lac Ste Anne and Parkland counties...there are multiple sources of support, and they all have confidence in each other."

With so many groups coming together, ACA is not reinventing the wheel, but working alongside the can-do effort. ALUS—a Canadian community-developed and farmer-delivered program—is recognizing the important role farmers and ranchers play as stewards of the land around Lake Isle. Many producers have been enthusiastic about making small changes on their farms (e.g., riparian fencing, offsite watering, and wetland protection) to help balance the landscape.

ACA reviews potential ALUS projects, provides advice to ensure ecological benefits, and helps secure funding to off-set costs for farmers. We have also joined the Sturgeon River Watershed Association (the Sturgeon River flows through Lake Isle) and are helping to provide the information needed for counties to make good decisions on zoning and development. It will never come down to one simple or short-term solution. Dredging, nutrient inactivation, water diversion...these are all possible ideas, but ones that bring additional challenges. 🏠

## Are the pike alright?

Anglers were the first ones to notice something wasn't right at Lake Isle. For the past four years, the sport fishery of the lake had been lost. But 2019 marks the year Lake Isle will be reopened for pike harvest. It's a perilous time, and we're moving slowly as the government continues to keep close tabs on Lake Isle as a fishery.



# 40 Years and Counting!

The Northern Lights Fly Fishers Chapter of Trout Unlimited Canada

► By Peter Little, Northern Lights Fly Fishers, TUC

Trout Unlimited  
CANADA



Northern Lights  
Fly Fishers



In the mid-70s, a group of Edmonton fly fishers started talking about doing something for freshwater conservation, stream rehabilitation,

and habitat protection in Alberta.

Led by author, musician, and “The Fishin’ Hole” founder, Russell Thornberry, and by fishing guide, Jim McLennan, they set up an Edmonton Chapter of Trout Unlimited Canada (TUC) in 1978, the first Chapter in western Canada. Its initial focus was on angling education and in ’79, the Chapter hosted a “Cold Water Anglers’ Conference,” featuring angling legends Lefty Kreh and Charlie Brooks.

A few years later, a group of local fly fishers, many of them members of TUC, began to meet regularly to share and demonstrate their common passion for the art of fly tying and who, in 1994, formed the “Northern Lights Fly Tyers Club.” There was a close relationship between Northern Lights and TUC and in the spring of 2010, a unanimous decision was made by both groups to merge into one entity, now known as the Northern Lights Fly Fishers Chapter of TUC.

## Community

The focus on education has continued throughout the years with annual conferences featuring the most well-known fly fishers on the continent. The Chapter has also provided numerous fly-tying opportunities, especially to youth groups, teaching approximately 6,000 kids over the years to tie a “wooly bugger.” Its guide for introducing fly-tying to children, “Kids Can Tie” is available to anyone interested through the contact information at the end of this article. Annual fly-fishing classes are often sold out and weekly meetings, open to anyone interested, feature members and guests demonstrating fly tying, presentations on fly fishing strategies, locations, equipment, fisheries management, or just talking flies and fishing.

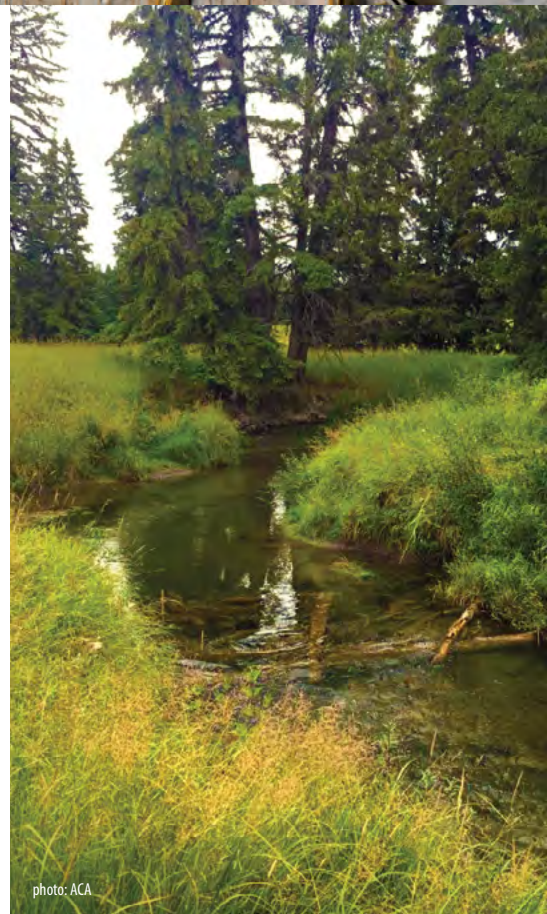


photo: ACA





photo: John Marple

## Conservation

The Chapter has a passion for conservation projects. One of the first projects the chapter was involved in was a survey of the grayling population in Sundance Creek followed by work to improve stream flow with the installation of v-weirs, channel deflectors, and log walls, as well as stabilize the banks by planting willows, spruce, and grass. This was followed by similar work on Little Sundance and Rat creeks. A five-year plan to assess grayling populations in the upper Pembina is now in its tenth year. It has involved temperature readings, fish tagging, fin samples for genetic analysis by the University of Alberta, and habitat work. The project received a National Recreational Fisheries Award in 2014.

The Raven River has been a favourite target of the Chapter, as a fishing destination and for conservation work. In 2008, a habitat study replicated data from 1977 to help determine needed restoration, and a further study determined the distribution and abundance of brown trout spawning redds and assessed fish population abundance. In the last few years, the Chapter has enabled protection of 87 acres of Raven riparian land by installing exclusion fencing to keep cattle

from trampling the river banks and providing alternative livestock watering facilities.

A lot of the education and conservation work would not have been possible without funding from the “Buck for Wildlife” program (precursor of Alberta Conservation Association) and then later from ACA’s Conservation, Community, and Education grants.

As the Chapter has evolved, it has become well known to the Alberta Provincial Government for its input on, and advocacy for, improving recreational fishing opportunities, conservation, and stakeholder input to fisheries management. It is currently represented on the provincial Fisheries Stakeholder Advisory Committee and communicates regularly with provincial fisheries management and ACA staff in pursuit of its goals.

If you’d like to get involved in the Chapter’s 41st year and beyond, or just want to talk fishing or learn to tie a fly, check out the Chapter website [www.nlft.org](http://www.nlft.org) for a time and place—no charge and coffee and Timbits are free. 🐾



# SPRING GOOSE HUNT:

► by Ken Bailey

# TIPS & TRICKS

for

# SNOW GEESE

With snow geese classified as *Overabundant*, you'd think hunting them would be easy, right? It's not. "Snows" are hunted during spring and fall migration, so they're highly educated on the habits of hunters, and those huge flocks mean lots of prying eyes. I asked three experts the answer to fooling them. Outfitter Claudio Ongaro, Ducks Unlimited's Mark DesRoches, and Emily Lamb of Delta Waterfowl had some suggestions.

**SCOUTING** Lamb suggests the majority of your hunting time will be spent scouting. A landowner map, quality binoculars, and a tank of gas are required. Ongaro prefers evening spotting, saying the flight is more spread out in the afternoon than in the morning. Blustery weather makes for the best spotting conditions as birds are more likely to be active all day.

DesRoches says to watch snows right until dark as they have a habit of jumping fields in the last hour. Available food is also key; look for birds walking slowly, a sign that there's

lots of food available. If they're running and hopping to get ahead, it can signal they're running out of feed and may not return.

Also consider the flock composition. The higher the percentage of juveniles, identified by their grey plumage, the more successful you'll be.

Once you've nailed down a field, seek landowner permission. Lamb reminds hunters to ask how and where to access the field. Spring fields can be muddy and that influences not only what gear you can haul in, but how long your set-up will take.

**GEAR** Snow goose hunting is gear-intensive. DesRoches says hunters should invest in as many sock-style decoys and the very best e-caller they can afford. “The sound of feeding birds is ultimately what pulls down approaching snows,” he says. If you have them, full-bodied and silhouette decoys add beneficial variety to your spread, providing the illusion of movement. Full-blown snow goose spreads include electronic rotary or flapping decoys, but a white flag is effective in simulating movement and helping geese finish—“finish” is a term that waterfowl hunters use to describe birds that fully commit to attempting to land in the decoys. Some change their minds last minute.

Our experts prefer to lay among their decoys in white coveralls, either on the ground or in low-to-ground chairs, rather than using layout blinds, saying it’s difficult to completely hide layouts from above. They admit, however, that layouts are a comfortable option in cold, wet, and muddy conditions.

As to guns and shells, 3-inch #1 or #2 loads through an improved cylinder or modified choke are recommended.

**WHEN TO GO** Sunny, windy days are best, understanding that winds usually pick up through the day. For morning hunts, factor set-up time into your planning; you must be ready for birds arriving at first light. Ongaro likes blustery afternoon hunts as the geese tend to arrive in smaller flocks than in the morning. On foggy days, compensate for the reduced effectiveness of your decoys by making more noise.

**THE SET-UP** All of our experts agreed that a modified U-shaped decoy spread, with the wings heading downwind, is best. The bulk of your decoys will be at the upwind end of your spread, and that’s where approaching birds will want to be; the wings serve largely to keep birds on the right track.

It’s influenced by the available number of decoys, but typical spreads have the wings extending as much as 200 metres downwind, about 150 metres apart between their ends. When the wind isn’t blowing, DesRoches runs his legs on a 45° angle, narrowing it to 30° on windy days. E-callers should be placed at the downwind side of the decoy “blob,” pointing downwind between the wings.

Position yourself near the downwind side of the decoy blob at the base of the spread, covered thoroughly by decoys. You can never have too many decoys placed around the hunters, says Lamb.

**SHOOTING** Ongaro recommends patience, waiting until birds are right on top of you before shooting. If they get past you, don’t worry, they’ll generally circle back, especially if there are lots of juveniles. As DesRoches cautions, however, adult snows get nervous when they fly over your decoys, so hunters have to be more aggressive with them.

Snows are faster birds than they appear, so be sure to get in front of them. Miss, and you’re probably not leading them enough.

When it all comes together, bags can be filled to the regulated limit. When it doesn’t work, you quickly discover where the expression “wild goose chase” originated! 🦆



photo: Brad Fenson

# What's Not There

► *by Dr. Lee Foote*

Five balls of fluff hunkered in the new spring grass while the hen sharptail skulked off like a nervous grassland parrot. I smiled and looked up to take in the expanse of wild Alberta grassland to notice there was not a single trace of human existence for 360 degrees. Not even a jet contrail.

I had found a large blank spot on the map. Sure, it lacked plains grizzlies and rollicking bison herds but where swift foxes and prairie elk return, others can't be far behind! Maybe we can't put the prairies entirely back together again but grizzlies are filtering from mountains back into the grasslands, abundant raptors streak the sky, and among beleaguered grassland birds, Pintails are recovering slowly. Humpty Dumpty is bruised but not broken. It is difficult to absorb the sweep and power of "The Big Empty" without your chest expanding and your wholeness feeling slightly small.

There is a sense of absent-presence like when one rolls a rock out of the ground and the remaining outline reminds us of the rock's previous occupation. Maybe the prairie's absent-presence is the millions of bison that fundamentally shaped this land or the expanses of prairie or the digging ground squirrels and coursing prairie wolves. Yet the openness and vastness, the billowing prairie wind has its own vacuous wildness.

Northward 300 kilometres, the aspen rich prairie parkland arose in a crescent from Calgary to Edmonton then over to Lloydminster. The crescent used to be much wider but between 1950 and 1970, farmers cleared and converted 200 square kilometres per year to open ground under the Government's "yellow zone" of homesteading and land-clearing programs. The same conversion continues in the Peace Parkland today and occasionally the Alberta government sells these public lands into private ownership. Although the dark soils in the low spots indicate former wetlands

now drained and remnant aspens may cling to coulees, we had let go of the fishers, black bears, and multitudes of songbirds that occupied these parklands in 1920. Absent-presence again.

In Alberta's mountainous regions, we treasure areas like Willmore Provincial Wildland Park abutting the northern boundary of Jasper National Park. Here it is easy to hike for 20 minutes and lose all trace of human footprint. From mountain goats to lake trout, Willmore still supports all species that were present in the year 1700. Is it pristine? Close, but certainly resilient and protected. Interestingly, protected doesn't mean off-limits. Hunters, anglers, hikers, horse riders, campers, and campfire lovers are welcomed without motorized vehicles. This access limitation seems sufficient to let species flourish and visitors have silence, clear streams, and untracked meadows. It becomes a high-quality experience but only for those willing and able to work for it. There are lessons to be learned here.





Further north, Alberta links to the largest contiguous ecoregion on earth; the boreal forest wraps around the northern hemisphere from 60 degrees north latitude to tree-line. The very intactness and massive expanses of the boreal protects its production of values to all humanity. Yet, survey lines, resource extraction, and river damming are ever more common.

Many Albertans crave wild settings for awe-producing escape and for personal immersion. Grasslands that seem endless, gallery forests that resonate as a natural cathedral, and clear rushing water are rare and profound ways to cleanse our senses. What price tag do we put on inspiration? Rejuvenation? Spiritual uplifting? Where do we find hope and inspiration? The grandeur of openness and emptiness of representative wild habitats resonate and fire the imagination and maybe motivate us to make the change from absent-presence to present-presence. 🏡



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# kids can catch



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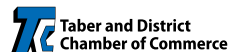
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