



The official publication of Alberta Conservation Association

# CONSERVATION

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*A Nest Rescue*

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## The Last Peregrine

*Why Surveys Matter*

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## Tradition or Technology?

*What Really Lands a Fish?*

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## Choked Out

*Losing Ground against  
Invasive Plants*



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# CONSERVATION



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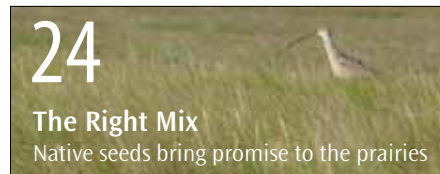
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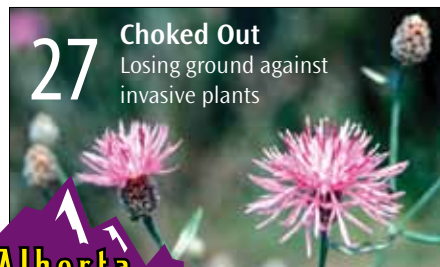
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"The great blue heron is not an uncommon sight in Alberta, but the bird rarely provides a chance for a really good look. Most of the time they are seen in flight, perched in trees near breeding rookeries, or wading in shallow wetlands. To study the beauty of these birds one needs to look at them under high magnification. A good spotting scope allows the viewer to appreciate the beautiful coloration of this animal, including the delicate plumes of the nape and neck. This portrait was obtained using a Nikon D 300 S digital camera on a Nikkor 600 F 4.0 AF-S lens."

- Gordon Court



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## From the Editor

Spring-cleaning reveals a lot of things, like too much dust that's collected over the winter and, sometimes if you're lucky, forgotten gems. That's how I came across Old Pal, my first tackle box. Beat up both inside and out, it tells a story of eager fingers poked by hooks, successful and failed casts, rigorous attempts to master the clinch and palomar knots, time with family, and of course, the pride and exhilaration of catching dinner.

The contents of that tackle box are long gone – the barbless red devil and five of diamonds spoons, Rapala and a frog lure that had enough hooks on it to catch an entire school of fish...but there is something about having had those experiences that outlasts any lure.

From trips to the old hardware store where the season's new hooks lined the wall to my old standbys – at the seasoned age of six, I was as dazzled as a magpie by the shiny bling. Today, the choices are mind-boggling and, as Ariana Tourneur writes, the marketing hype deployed to tempt you is worthy of P.T. Barnum (Tradition or Technology: What Really Lands a Fish?, page 17).

While you're scoping out your next fishing spot or great Conservation Site getaway, watch for the onslaught of feathered travellers arriving in our province. Some of these visitors, like the peregrine falcon, fly from as far as Brazil to Edmonton, Alberta and other parts of western and northern Canada to nest and rear their young. Their presence is impressive to witness – one that could have been lost to us almost 40 years ago. Internationally recognized peregrine expert, Dr. Gordon Court, tells us how the fastest species in the world, flying up to 300 km/h, is making a comeback to reign the skies once again (The Last Peregrine: Why Surveys Matter, page 6).

But not all travellers are as fascinating. In fact, some can be downright destructive. Be wary of those beautiful wild flowers you're preparing to plant: you just might be in love with a noxious weed. The impacts are costly to our economy, and at ACA we are particularly concerned about the effects on native vegetation at our Conservation Sites. Noxious weeds transport easily on footwear, vehicle tires and the wind. Writer Nicole Nickel-Lane will help you keep Alberta and Conservation Sites wild by getting you weed wise (Choked Out: Losing Ground Against Invasive Plants, page 27).

Tap into more of your wild Alberta with the 2011-2012 *Outdoor Adventure Guide* or download the iPhone app. If you've never gone fishing, maybe it's time to try. Tonight, eat local from a stream or try out our stocked lakes in the Guide. Imagine the taste of fresh pan-fried fish with homemade bannock cooked on a stick over the fire. Now that's gourmet cooking!

— *Editor-in-Chief, Lisa Monsees*

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**Editor-in-Chief:** Lisa Monsees, ACA

**Assistant Editors:** Elize Smit and Ariana Tourneur, ACA

**Editorial Committee:** Trevor Council, Lance Engley, Jeff Smith, Ken Kranrod, Robb Stavne

**Contributing Writers:** Gordon Court, Mike Jokinen, Paul Jones, Nicole Nickel-Lane, Randy Lee, Dr. Wayne Lynch, Ariana Tourneur

**Photo/Illustration Credits:** Gord Court, Julie Landry-DeBoer, Chris Evans, Colin Eyo, Richard Fyfe, Kirby Hamilton, Carlyn Iverson, istock, Darren Jacknisky, Mike Jokinen, Paul Jones, Dr. Wayne Lynch, Lisa Monsees, Richard Old, Photos.com, John M. Randall, Karan Rawlins, Michael Shepard, Roy Schmelzeisen

**Design:** Don Myhre, ACA

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For advertising sales information please contact:

**Ken Kranrod:** 780-410-1989

[ken.kranrod@ab-conservation.com](mailto:ken.kranrod@ab-conservation.com)

**Cindi Webster:** 780-410-1983

[cindi.webster@ab-conservation.com](mailto:cindi.webster@ab-conservation.com)

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We are lucky to live and work in such a precious place, surrounded by natural beauty and untamed character. Take advantage: be sure to enjoy some of the 260,000 acres of Conservation Sites and explore Alberta's great outdoors as much as you can. The breadth and beauty of our wild side is all around – let's work together to make sure it stays that way.

Keep conversations on conservation going...drop us a line, or visit us online and on Twitter and Facebook.



**Robert Seidel, Q.C.**  
National Managing Partner  
780.429.6814  
rseidel@davis.ca

**Colin Lipsett**  
780.429.6821  
clipsett@davis.ca

**Craig Rose, RPF**  
780.429.6807  
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The Last





*“Half fearful of what I knew I would not find, I raced up the hill, scrambled over the broken talus beneath the cliff and climbed up onto the ledge. Except for a shallow scrape through the moss in one corner and the remnants of a few feathers, it was empty and lifeless. It was then it all hit home to me, of man’s ignorance, of his foolishness, and of his state of apathy to the state of the world around him and what he was doing to it.”*

# Peregrine

■ photos and text by Gordon Court

## Why surveys matter

**K**eith Hodson wrote these words in 1970 at the age of 19, after finding yet another empty peregrine falcon nest. This nest was particularly meaningful to him – it was the first peregrine eyrie he’d ever visited back in 1966. Then, it had contained young falcons. Hodson was a summer student with Canadian Wildlife Service (CWS) biologist Richard Fyfe, one of the people racing against the clock trying to save the peregrine falcon from extinction.

Fyfe shared Hodson’s despair and frustration. In the early 1970s, Fyfe and his technician, Harry Armbruster, spent the last half of April and early May each year watching a very special pair of birds.

The male of the pair was a spectacular specimen, easily recognised by his jet black head and wildly pugnacious disposition. Nicknamed “Stud,” this bird singlehandedly drove pairs of prairie falcons off their eggs, dispossessing them of nesting cliffs. His hunting forays were legendary – Stud handily took anything from migratory songbirds to local waterfowl. He was paired with several different females during the early 1970s and, as a talented hunter, helped produce several broods of young.

But in 1973, Stud returned to his cliff alone.



*Stud brings food to his young in June 1972.*

Photo: Richard Fyfe

Just west of the tiny prairie town of Bow City, Fyfe and Armbruster took detailed notes on the breeding behaviour of the last pair of peregrine falcons reproducing south of the boreal forest and east of the Rocky Mountains in Canada. Several hundred pairs within this range had already died out in the 1950s and 1960s – a direct result of post-World War II use of the pesticide, DDT. The men watched the birds hunt, recorded details of their courtship, and monitored their breeding success. They knew they might well be among the last humans to enjoy such an experience.

## Chemical culprit

Although Stud courted female peregrine falcons flying by (probably migrants headed north), he could not entice them to stay. He held the territory for the spring of 1973, and the next one, and the one after that, but never again successfully wooed a female. Stud was seen for the last time on May 29, 1975. An *Edmonton Journal* article reported the demise of the Bow City pair in an article titled, “Rare Falcon Missing: Extinction Feared.” Technically, with the loss of Stud, peregrines had been *extirpated* in Canada, east of the Rockies and south of the boreal forest, but for biologists and others who

*This juvenile female peregrine was injured when she hit a window. She is now cared for by the Valley Zoo, Raptor Program (Edmonton, Alberta).*



passionately cared about raptors, the fear of eventual *extinction* was real.

At the time, Canada had already banned the use of DDT. The United States was about to follow. Unfortunately, populations of species like the peregrine, bald eagle, and osprey had already been decimated. In the United States, not a single peregrine falcon pair could be found breeding east of the Mississippi River and the bald eagle was all but gone from the lower 48 states. In other parts of the world, bird- and fish-eating raptors had suffered a similar fate. Despite bans on using DDT in the western nations, the outlook was still bleak. With typical first world hypocrisy, the manufacture of DDT and other harmful organochlorine pesticides had been exported to the third world. These compounds would be used in developing nations by the mega-ton for decades. Global levels of DDT did not start dropping until the late 1980s, when better pest management regimes, informed concern, and DDT-resistant pest species saw fewer people using it.

Back in 1973, Fyfe and Armbruster had no idea what lay ahead in terms of global DDT residue trends, but they certainly knew the compound's effects on Canada's raptors. It must have been with heavy hearts they witnessed the saga of Stud and that of countless other peregrine pairs along the river systems in western Canada. They eventually documented the extirpation of the peregrine along the Bow, Milk, Oldman, South Saskatchewan, North Saskatchewan, Pembina, McLeod, and Athabasca rivers in Alberta.

## Emergency measures

A nation-wide survey in 1970 established the severity of the peregrine decline. At a federal provincial wildlife conference in the same year, it became clear that emergency measures were required. And so CWS, along with provincial wildlife agencies and private falconers, began consolidating a captive population of peregrine falcons to archive the remaining genetic resources in a controlled environment. Theoretically, the captive population would be maintained until the world was clean enough to support reintroduction. This was a remarkably ambitious undertaking – only a handful of peregrines had been bred in captivity to that point.

In the early 1970s, young birds were taken from the few remaining nests in western Canada, including offspring produced by Stud and his mates. Additional birds were donated to the program by falconers who recognized captive breeding as a last resort. Through the dedicated



labour of people like CWS falcon technician, Phil Trefry, the crew at the peregrine breeding facility (located on CFB Wainwright) achieved the unthinkable. They produced their first baby peregrines as early as 1975. As Albertans, we can be proud knowing that many of the techniques for producing endangered raptors in captive settings were pioneered right here in our province. Young birds produced by the Wainwright "flock," and a few smaller sister breeding programs elsewhere in the country, were available for experimental reintroduction as early as 1976. Large-scale reintroductions followed for the next two decades. With DDT residue levels declining globally, the scene was set for a remarkable population recovery.

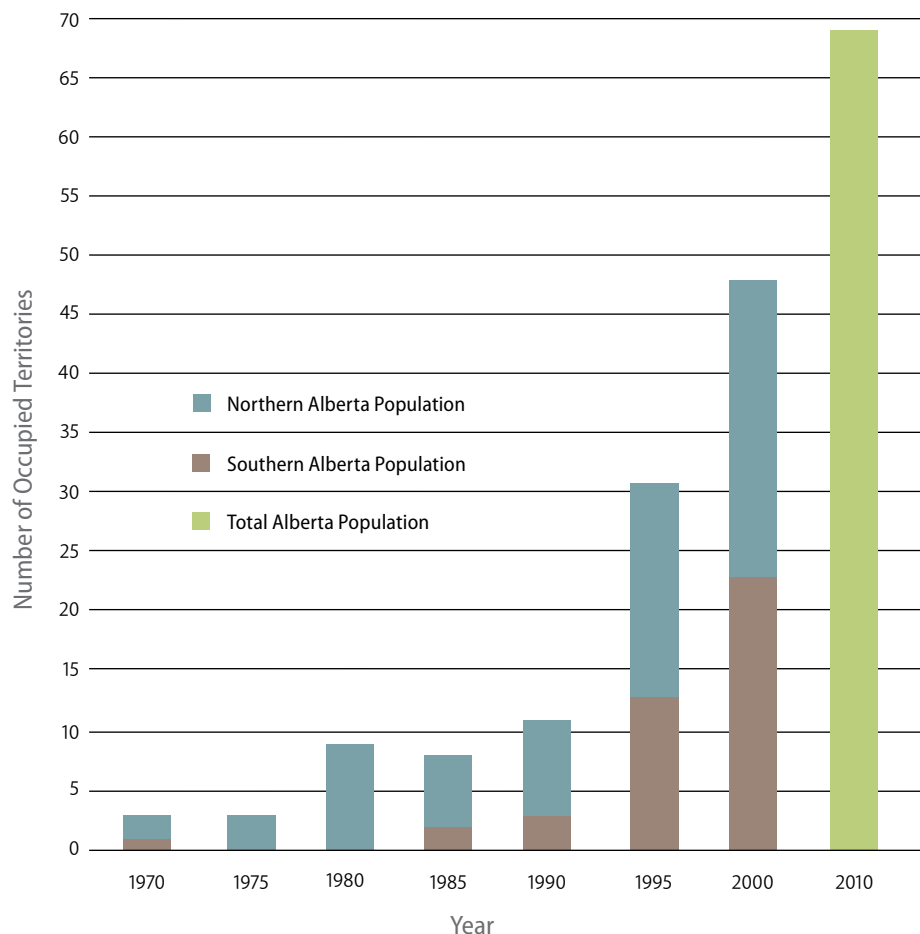
## Survey says

Since 1970, national peregrine falcon surveys have been done every five years in Canada. The goal each time is to check all historically

occupied nest sites for peregrines, giving us a good handle on the speed and magnitude of peregrine recovery. In the last 15 years, surveys across the country have documented a strong recovery, driven mainly by the reintroduction of captive-bred peregrines. Happily, about two-thirds of the peregrine population has returned to natural, historically occupied nest sites in Alberta. What's more, these surveys have documented peregrines at many new sites, including a substantial number of pairs nesting on man-made structures. Over 70 cities in North America these days boast at least one pair of nesting peregrines. In Edmonton, we have had as many as eight pairs, in Calgary three, and in Red Deer two.

Surveys for peregrines are expensive. But monitoring populations of species at risk is extremely important. It's the only way to evaluate if management programs are effective and when a species can be considered recovered.

*Figure 1. The number of occupied peregrine falcon territories in Alberta since 1970. The first release of captive-raised peregrine falcons in Canada occurred at the O.S. Longman Laboratory Building on the University of Alberta Farm in June of 1976. The first documented success of such releases came with the establishment of peregrine pairs in downtown Edmonton in 1980, and Calgary in 1982. The first captive-raised peregrine to return and breed in the wild anywhere in the world was identified north of Fort Chipewyan in 1977.*



## Why is DDT so bad for peregrines?

DDT interferes with peregrine reproduction. A fat soluble chemical, traces of DDT remain in animal tissue in a metabolized form called DDE. These traces are transferred from one species to the next up the food chain. With few enemies and long lifespans, peregrines sit at the top of a food chain, and so they accumulate large amounts of DDE in their bodies. Female peregrines exposed to DDT can't produce enough calcium, causing their eggs to have thin shells. Easily breakable, few eggs hatch.

## A recovered species?

Last summer, surveyors checked 158 of 172 historically occupied nest sites in Alberta, and followed up many reports of pairs possibly nesting at previously undocumented locations. By late August, crews had found 68 occupied peregrine territories, up from only three (with only one productive) in 1970. Almost two-thirds of these were at natural nest cliffs, most in northern Alberta. The recovery in Wood Buffalo National Park (WBNP) and the Canadian Shield eco-zone north of Lake Athabasca has been particularly impressive.

I was lucky enough to accompany CWS biologist Geoff Holroyd and park ecologists Rhona Kindopp and Mike Vassal on the survey of the northern population. I first worked with peregrines in that part of the world in 1977. Back then peregrines in the region occupied only five territories; last summer we found 40! There exists a 30 kilometre section of the Peace River in WBNP where good peregrine cliffs abound. In 1977, the area hosted a single pair of peregrines. This year we found no fewer than eight pairs! Choppering our way back to the Fort Smith airport at the survey's end, I thought about the many biologists who worked on peregrines in northern Alberta over the years, including some of Alberta's first female field biologists like Lizzane Johnstone-Beaver and Ursula Banasch. They would all be delighted with the recovery news and likely a bit proud!

At 68 occupied territories, the peregrine falcon is well on its way to recovery in Alberta. In fact, the primary goal for the *Alberta Peregrine Falcon Recovery Plan* (approved in 2004 by the Minister of Sustainable Resource Development) was to achieve 70 pairs by 2010. Pairs have been re-established at other natural cliffs on the North Saskatchewan and Red Deer Rivers, and we hope these populations will expand in the coming years. With luck they may well repopulate other drainages in the historical range. Presently there exists interest in bolstering such recovery by releasing captive-raised young in the area.

So...the peregrine is back. Impressively, a study of the lineage of Alberta's wild peregrine falcons shows that approximately 95 percent of the genetic diversity once archived at CWS Wainwright now exists in the wild population. Stud may have been considered the last peregrine by some, but – happily – that condition was temporary. His descendents are alive and well and flying in Alberta today. ■

*Dr. Gordon Court is a frequent contributor to Conservation Magazine. He has studied the breeding biology and toxicology of predatory birds at both ends of the earth. His Ph.D. involved the study of marine pollutants in sea birds breeding on Ross Island, Antarctica. Earlier in his career, he completed a Master of Science degree on the toxicology and breeding biology of Tundra Peregrine Falcons in the Canadian Arctic. This study continues today and is one of the most intensive research projects ever undertaken on the peregrine falcon.*

*Gordon has also worked for over three decades on the recovery of the peregrine falcon in western Canada and is recognized internationally as an expert on this species. Gordon is formerly the Canadian Director of the U.S.-based Raptor Research Foundation. Presently, he is the Provincial Wildlife Status Biologist for Alberta Sustainable Resource Development.*

ACA and Nature Alberta procured sponsorship from Bell Mobility Network and Penn West Energy Trust for the 2010 peregrine survey. Together, the corporate sponsorship money; seed money from an Alberta Sport, Recreation, Parks and Wildlife Foundation grant; and assistance from Wood Buffalo National Park helped the 2010 peregrine survey be one of the most comprehensive ever done in Alberta.

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# Heron Outpost



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See more stunning photos of the great blue herons taken  
by staff biologist Mike Jokinen.



# A Nest Rescue

■ by Mike Jokinen and Randy Lee, ACA

*The once reigning poplar tree has decayed over the years. Continuously battered by strong winds, the few branches that have managed to endure the elements are feeble and tired, drooping in defeat.*

## One Tree, One Chance

Every spring, great blue herons merge onto a small island at Fincastle Reservoir, just east of Taber, Alberta. While Fincastle Reservoir has several islands, only one of them boasts a poplar tree large enough for nesting herons. This sole poplar's branches were originally the perch for 12 nests constructed by herons. After years of pitiless weather combined with the weight of the nests, the troubled tree had lost the strength to support all of the herons' homes, and it wasn't long before only eight remained.

## Response and Recovery

During the winter of 2000, with the help of several agencies and donated equipment, Alberta Conservation Association (ACA) created supplementary nesting sites for the herons by installing poles and nest structures on the island adjacent to the deteriorating poplar tree. We made a total of 12 nests using four poles, each with three nest structures. The poles were close to one another since herons prefer crowded quarters during nesting.



### Did you know?

A heron nest is heavy and bulky; their stick nests are typically a metre in diameter, with a central cavity 10 cm deep. A nest's success fluctuates over the years depending on human disturbance, weather, water levels and predation by reptiles, ravens, gulls, hawks or owls.

The following spring blew in a flurry of activity – the herons began settling into our manmade structures immediately upon their return. Last year, after 10 years of consistent use, a few nest structures had disconnected from the poles, so ACA staff set aside a day to repair them. With the nests up to par again, we know the great blue herons can continue with their regular nesting patterns.

## Heron Habits

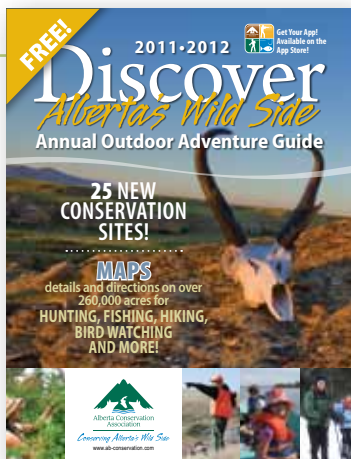
Spring and fall migrations are closely related to the availability of open water. The herons arrive early April, lay clutches of four to five eggs and incubate late April to early May. By mid-June, young are visible in the nests. They leave the Fincastle nesting colonies in late July or early August to begin their migration south.



photos: Mike Jokinen

Hérons feed along shallow waters, primarily on small fish, supplemented by amphibians, reptiles, insects and small mammals. They often travel several kilometres from the nesting colony to feed. Standing eerily still in the water, the heron will wait patiently until prey is within striking distance – and then quickly scoop up the target with its bill, eating it whole.

Remember that the great blue heron is easily disturbed, particularly when nesting, and may even abandon nests and young if distressed. However, the heron colony at Fincastle Reservoir is easy to enjoy – grab some binoculars and safely watch the spectacle from the water's edge.



## Discover Fincastle!

Discover Alberta's Wild Side: Outdoor Adventure Guide

Map Grid **F4** **3**

A fisheries access site was initially created at Fincastle Reservoir through the Buck for Wildlife habitat program during the mid 1980s. Randy Lee originally spearheaded the Buck for Wildlife property project. With assistance from several agencies, individuals and volunteers over the years, the 33-acre Conservation Site has been maintained as wildlife habitat with fishing access. Fish species in Fincastle Reservoir include northern pike, lake whitefish, white sucker, yellow perch and walleye, as well as a few minnow species.

# A Snake Seduction

## The mating of red-sided garter snakes

■ photos and text by Dr. Wayne Lynch

*Everywhere snakes were crawling, sliding, searching. Some climbed skyward, wrapping the lower branches of leafless bushes like serpentine garlands. They seeped from the frozen earth in a stream of black, sinuous bodies. Many of them moved in animated braids, with dozens of excited males entwining the cold, sluggish body of a single unmated female.*

### Paint the province red

Red-sided garter snakes (*Thamnophis sirtalis*) are one of seven snake species found in Alberta. As the most widespread of all the species, the red-sided garter spans Waterton National Park in the south to Wood Buffalo National Park in the north — the farthest north of any other snake in North America.



When the females climbed the banks of the pit to escape their determined suitors, the weight was too great, and the tangle of snakes slid backwards in a heap of writhing coils. The roughened ridges on the snakes' scales made the grass and dried leaves whisper their presence, and in the aspens overhead, migrating yellow-rumped warblers, white-crowned sparrows and American crows added their own music to the rhythmic swish of the wind in the treetops.

### Solar powered

Snakes first evolved in the tropics and, as all reptiles, they rely on the sun's warmth to energize their bodies. The sun powers them like a fresh battery, so they can slither about, catch their food, digest their meals, court, mate and raise young. How garter snakes survive in a cold country like Canada, with its numbing winters and stretches of cool weather even in the summer, is a story of ingenious adaptability and survival.

### Conquering the cold

Researchers in Canada have studied the biology of the harmless red-sided garter snake for over 40 years and continue to shed light on their fascinating lives and the special adaptations they have evolved to survive in our frosty climate. To avoid freezing, all snakes in Canada must hibernate underground for at least six months every winter. Typically, they seek refuge in a location that is relatively humid and safe with access to an area below the frost line. There are many places that can serve as an overwintering den, called a hibernaculum: rocky outcrops, tree roots, sinkholes, animal burrows, cracks in building foundations, cisterns and basement cellars. The best sites can attract hundreds, sometimes thousands, of garter snakes.

### Mating game

After spending many months at near-freezing temperatures underground, the first snakes usually emerge in spring, around early to mid-April. A multitude of males are the first to surface and their intertwined bodies appear in seething clusters around the den's entrance. Adult females surface soon after but they emerge singly or in small, staggered groups. As soon as a female garter snake emerges, she is encircled by a clot of male suitors all trying to mate with her.

The females are chilled and torpid when they first arrive above ground and their sluggishness



works to the advantage of the courting males. Biologists call the aggregations of courting snakes a “mating ball” – as many as 50 to 100 males may crowd a single female. Like a potent perfume, a chemical odour circulates in the female’s blood to attract the males. A male detects this chemical when he caresses the female’s back with his forked tongue. Larger-bodied females can bear more young, and they produce more of the intoxicating perfume. As a result, they receive more attention from the delirious males who find them irresistible.

Eventually one among the snarl of suitors succeeds in mating with the female and they stay coupled for 15 to 20 minutes. Amazingly, during mating the male deposits a gelatinous plug in the female’s opening, emitting an inhibitory chemical odour. This dampens other snakes’ ardour and they ignore the mated female for at least 24 hours. During this time, unhampered by the attention of courting males, the female garter snake usually leaves the winter den area and travels to her summer feeding area. Her temporary unattractiveness benefits both sexes: the female escapes without wasting any more energy fighting off males and the males don’t waste their time with a female that has already mated.



## Mix-up in the makeup

Surprisingly, some male snakes mimic the same odour chemical females produce. These males are vigorously courted just as if they were females. Called “she-males,” these males behave like other males; they just smell differently. Still, a female-hunting she-male may smell so good that he may spend considerable time courting himself. In fact, they may fool rival males by diverting attention from real females, improving a she-male’s chances of mating.

## Summer bustle

In summer, red-sided garter snakes spend as little as three months away from their winter den. These are crucial months for feeding and fattening up in preparation for hibernation, when they often lose as much as one third of their body weight. A red-sided garter snake hunts frogs, tadpoles, earthworms, leeches, small mammals and nesting songbirds around marshes, pond, dugouts, sloughs, and the shorelines of creeks and rivers. In Alberta, denning sites are often far from summer feeding areas. For example, in Wood Buffalo National Park, a garter snake may travel as far as nine kilometres to reach its summer feeding areas, and in Manitoba the distance may exceed 17 kilometres – a remarkable feat for a snake that may be less than a metre long.

Pregnant female garter snakes give birth to live young in late summer, usually while still on their feeding grounds. Worldwide, the majority of snakes lay eggs in a secure nest which they immediately abandon. The eggs are left to incubate and hatch on their own. In Canada, 15 of our 26 snake species give birth to live young, as do four of the seven snake species in Alberta. Giving birth to live young means the pregnant female must carry the 10 to 15 young inside her body while they develop: a heavy burden which reduces her mobility and lessens her ability to hunt, and also increases her risk from predators. These costs are offset by the mother snake’s opportunity to bask in the sun, raising her body temperature to an optimum level so that her young develop quickly and she can birth a new generation of snakes before the winter.

## Toss out tradition

Forget bouquets of flowers, chocolates or the spa – on Mother’s Day in Manitoba, tens of thousands of people gather to visit the garter snake hibernaculum at Narcisse. Indeed, for families in Manitoba, snake den viewing is a long-standing tradition: each year 35,000 ophidiophiles visit the den.

Albertans can also witness this great wonder of the natural world. The awe-inspiring spectacle is free, fun, and sure to thrill young and old alike. Hundreds or even thousands of snakes of the same or different species may gather together at a hibernaculum. Because snakes gathered at hibernacula are vulnerable, these communal sites are protected from disturbance under Alberta’s Wildlife Act.

*Alberta Conservation Association delivers the Alberta Snake Hibernaculum Inventory, which solicits information from interested landowners and naturalists on the location of hibernacula occupied by all snake species in Alberta. The program also welcomes information on general snake sightings and snake road mortality. Learn more at [www.ab-conservation.com](http://www.ab-conservation.com) or call 1-877-777-3764.* ■

*Dr. Lynch is a popular guest lecturer and an award-winning science writer. His books and photography cover a wide range of subjects, including the biology of owls, penguins and northern bears; arctic, boreal and grassland ecology; and the lives of prairie birds and mountain wildlife.*



WILD ON THE WEB  
[ab-conservation.com/mag](http://ab-conservation.com/mag)  
Find out more with the *Reptiles of Alberta* booklet.

With a satisfying plop, the lure hits  
the murky water. Is there anything  
in life simpler or more wholesome  
than the sport of fishing?

A line, a lure, and the landscape...  
it's all you need.

*Or at least we used to think so...*

photo: Lisa Monsees



# Tradition OR TECHNOLOGY

## What really lands a fish?

■ by Ariana Tourneur, ACA

Some of us might still say fishing is a sport that hasn't changed a lot. After all, fishing is classic in every sense of the word. You need only the very basics to bait, cast...and wait. Fishing makes time for tradition; we enjoy the slower pace to soak in our peaceful, wild surroundings. Alas, technology is a bigger business and leaves nothing unscathed in this day and age, and fishing equipment, particularly lures, are no exception.

It began innocently enough: we needed to eat and fish looked delectable. And it didn't take long to learn that the way to a fish's stomach is through its eyeballs. The concept of lures couldn't be simpler – objects that resemble any of the naturally occurring foods fish might find attractive. Using movement, colour, and vibration, the purpose of the lure is to grab the fish's attention and entice it enough to bite the hook.

## From Bones and Stones

We've come a long way from the crude lures fashioned out of bones and stones. The art form slowly advanced, with individuals carving out wood lures and painstakingly hand-painting them. But by the 1830s and 1840s in both England and America, the making of fishing tackle began shifting from the individual craftsmen to larger-scale manufacturing. The firm of Heddon and Pflueger in Michigan led the production of commercially-made lures. These lures, dubbed phantoms and demons, were typically designed from proven lures that were modestly pounded out of old kitchen spoons or whittled from pieces of wood.

As rod and reel production also became commercial throughout the 1870s and 1880s, lure-making experienced many technical improvements. After World War II, advances in fishing line brought braided nylon followed by monofilament line, improving the success rate in all types of fishing. Aided by the availability of more leisure time and a family of new technologies, fishing exploded as a hobby and sport.

And in all the years since, it hasn't let up. Over three million Canadians (238,824 in Alberta) enjoy fishing recreationally – making the sport one of our country's national pastimes. Thanks to the continuous growth in popularity, lures have a sparkling future. Computer technology has leapt into lure design, and some of the latest innovations include scent-bearing lures, laser-honed hooks, and finishes that are photographically imprinted and amazingly realistic. While the past saw lures made of wood, metal, plastic – even shells, bones, and paper – we're introducing new materials and newer technologies. From high-tech uber-realistic lures to the kitschy (customized beer bottle cap lures anyone?) to the pricey (a million dollar lure dripping with three pounds of precious jewels), you just never know what you might see next.

## Come Together

In fact, there's a time and place to preview all the latest and greatest from mastermind manufacturers around the globe. Fishing tackle companies descend upon Las Vegas (where else?) for the International Convention of Allied Sportfishing Trades, or ICAST. Among the excess of flashy rods, reels, clothes and celebrities, you can count on finding some wild new fishing lures.



©iStockphoto.com/Kirby Hamilton



photo: ©iStockphoto.com/Pinkybird

The conference has introduced lures that bank on ultraviolet rays fish can supposedly see but humans can't. Other companies showed off hardware that glows – technically called photoluminescence – just like a glow-in-the-dark stick. Pheromones (or scent technology) are another buzzed-about commodity that is basically a soft lure soaked in another species' juices. But perhaps the most striking are the ultra-realistic lures that rely on high-resolution digital imagery, like the incredibly convincing exoskeleton that looks and feels like a fleeing crawfish. Some even boast life-like movement; the patent-pending "Rage Tail" technology, gives each crab leg and claw its own unique action.

The detail is phenomenal, and you have to admit the combination of workmanship and technology is flawless. If they impress you, they'll surely impress your friends. They'll impress almost anyone.

**But...do they work?**

## Tackle Lust

Are they really helping us catch more fish? The starbursts and exclamations behind every claim attempt to convince us it's so. Take a quick look at the packaging or marketing material for these new lures and you'll see statements like: "400% more visibility in murky water!"; "PROVEN formula for high-catch rates!" and "Patented lure out-fishes live bait 3 to 1; could be banned!"

At the moment there doesn't seem to be any scientific literature to support such claims for the latest roundup of lures, apart from the studies paid for by the companies themselves. Until some credible evidence and research becomes available that supports the claims, it's up to us to decide how we want to spend our dollars and if trial and error is worth it. As with camo underpants, some might wonder just how useful some of these items are. Is it for the thrill of the catch, or the thrill of bagging new goodies?

An anonymous poster on a fishing forum likely

isn't alone when he supports the if-it-ain't-broke-don't-fix-it school of thought. He muses, "What's wrong with the old stuff!? My tackle box has three lures: a Mepps, an unbroken Rapala, and biga\*\* spoon... and I've *never* wished for more."

Many people would agree that the plethora of new lure technologies and products make fishing – celebrated for its pureness and simplicity – complicated and confusing. It isn't uncommon for us to second-guess ourselves, hemming and hawing as we switch colours or types of lures back and forth...when our best bet just might be to spend that missed time on the water.

Others consider the latest technologies a form of cheating, relying on cheap tricks when we should be vouching for the "old way" of depending on pure patience and skill.

*"What's wrong with the old stuff!?"*

*My tackle box has three lures: a Mepps, an unbroken Rapala, and biga\*\* spoon... and I've never wished for more."*

## The Fishing Fundamental

No matter what side you fish on, it can't be disputed that people are creating enough buzz around the latest lure-making for the market to continue ballooning. There will always be those willing to pay a good amount to have the next "sure" thing or to be one step ahead of the competition...just as there will be those who choose to watch from the sidelines and stick with the tried, tested and true.

If a new innovation works as well as they say, it shouldn't take too long for the market to sort it out. For now, all we hope is that anglers fish enough to discover what works best for them time after time, to develop their own consistent favourite that makes every experience as enjoyable as possible. In the meantime try not to compare: what might work for you may not work for someone else, and vice versa. Whether we fish competitively or do it for simple relaxation or as family pastime, it is a journey – one to enjoy the whole way through. And if it just so happens that a flashy lure at quadruple the price is able to spice things up every once in a while and keep fishing fun...then who are we to judge? ■

*Over three million Canadians (238,824 in Alberta) enjoy fishing recreationally – making the sport one of our country's national pastimes.*

photo: ©Photos.com



# The Tackle Box 10

What should be in your tackle box? Behind the brand-spanking new products that find a home on store shelves every season, there are some tried and trusted must-haves that will never get old. While everyone's preferences vary, here are our top 10 basics that we think *every* angler – from novice to pro – should have packed up. The *Alberta Guide to Sportfishing Regulations* is ALWAYS on the list....

1. **Knife.** Include a quality stainless steel knife that won't rust. A sharp blade can cut bait, open cans of sardines, cut line and clean or filet fish.
2. **Needle-nosed pliers.** Pliers or a similar multi-tool will take hooks out of fish – and out of you sometimes! It's a handy tool to depend on.
3. **Toilet paper.** There really isn't an ideal substitute for toilet paper! Keep it dry in a baggie.
4. **Your fishing arsenal – barbless hooks, bobbers, sinkers, bait and your favourite lures.** Have your own personal combination of tried, tested and true on hand.
5. **Lighter or matches.** You never know when you might need a fire. A lighter can also melt plastic worms and seal up rope ends.
6. **Bug spray.** They may be small, but pests can be the *biggest* aggravation on a fishing trip. Arm yourself!
7. **Fishing ruler.** Handy to measure your fish so you follow any necessary regulations.
8. **Extra line.** The one time you don't bring it, you'll need it.
9. **Small first aid kit.** At some point small injuries are likely to happen, like getting a hook in your thumb or tripping and getting scraped up. For that, a basic first aid kit is perfect: just throw in bandaids, antibiotic ointment, a few small bandages, aspirin and waterproof medical tape to take care of most fishing-related injuries.
10. **Small trash bags.** Carry out what you bring in, and while you're at it, why not throw in any other garbage you see?



## Lures We Lust After

With an office full of avid anglers, we found out what's popular in our own backyard when it comes to lures.

### Elk Hair Caddis

"One of my favourites is the elk hair caddis – it's simple to tie and works everywhere, and all through the open water season."  
– Ken Wright, Senior Technician, ACA



### Rattlin' Rapala

"In the firetiger pattern, it's my go-to for any unknown water. It can be trolled, or cast, retrieved slow, bottom bounced, or stripped in. It's a reliable producer for walleye and pike and can often induce a strike when fishing is slow."

– Brendan Ganton, Fisheries Biologist, ACA

### Jig

"I've been fishing my whole life and have tried virtually every type of lure out there. The most versatile, catching more species and more fish in general, is the jig. My personal favourite is a pink jig head with a white twister tail – I've caught the most walleye with this combo by far. To target another species, all I do is change the size or colour of the jig."

– Shane Wood, Fisheries Biologist, ACA

What's your favourite? Like us on Facebook and let us know!









■ by Ariana Tourneur, ACA

## Gateway to Gouin...

Is it the towering lime-green palm tree that vainly attempts to blend in among the spruce, the intricately spiked cactus guarding the streambank, or the birch teepees slyly tucked in groves of trees that gives away this Conservation Site's unique nature?

While the Gouin Conservation Site's eccentricities provide for a fun surprise – and certainly the perfect reason to explore and discover – there's a question begging to be answered. What is the story? Besides the obvious time, effort and passion poured into the property, these handmade symbols represent a message long-time owner Bob Gouin hopes will continue far beyond his lifetime. Metaphors and messages in their simplest form echo: *we all have a responsibility.*

Referring to himself as a “conservationist by nature,” Bob Gouin has an impressive amount of knowledge about Alberta's wild side and conservation. He's immensely proud and passionate, and makes it clear his philosophy

has always been that people are stewards of the land. It's our responsibility as human beings to leave it in better condition than when we found it. Bob has spent endless hours working to enhance his property, and then generously donated all 480 acres. Never-ending rows of nest boxes, miles of winding trails, and the intriguing carvings he's created makes the Gouin Conservation Site a special place.

# Gouin

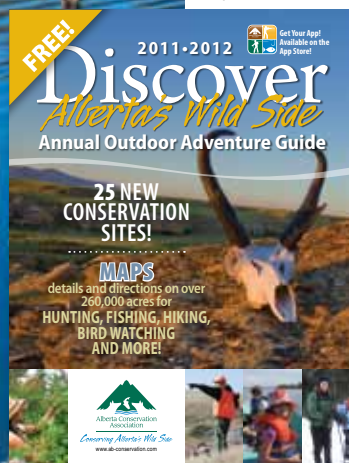
photos: Colin Eyo

Map Grid **D3**

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For maps and directions, or to get a copy of *Discover Alberta's Wild Side: Outdoor Adventure Guide*, visit [ab-conservation.com/guide](http://ab-conservation.com/guide). Remember to get your app!







## GETAWAY AT A GLANCE

**Property:** Gouin Conservation Site

**Location:** 85 km north of Edmonton

**Highlights:** From wildlife to woodlands to wetlands, this site is an ecological smorgasbord

**Go there if:** You enjoy nature, outdoor photography, wildlife and bird watching, and hiking

**Restrictions:** Access to Gouin is by permission only. Please call ACA at 1-877-969-9091 before your visit.

**Partners:** ACA

### WILD ON THE WEB

[ab-conservation.com/mag](http://ab-conservation.com/mag)

See additional photos and learn about the messages and inspiration behind Bob Gouin's symbols.



## Details, Details

Everything on the property has a purpose. Bob explains, as merely one example of dozens, that the trails he carved out are not the shortest routes, but rather the most interesting and vivid pathways to take for a full appreciation of the blankets of moss and scurrying wildlife. Aside from his carvings, signs, and other curious symbols and structures, Bob the bird-lover has spent much of his time constructing and putting up “nesting facilities” — they span as far as the eye can see in every direction.

Beyond Bob's handiwork over the years, there's much to experience. After all, the Gouin Site is 480 acres of picturesque possibilities...from wildlife to wetlands to woodlands, the property is rich in ecological resources. Two small lakes span all three quarter sections, totalling 15 acres in size and split by a dam Bob helped create with Ducks Unlimited.

Pack a picnic lunch, indulge your camera with exceptional photo opportunities, watch wildlife, or hike. It's impossible *not* to find a peaceful spot where you hear the wind whistling through the trees, the gentle lapping of water, and the singsong of birds. Bob recommends you get up close and personal — take your time on the trails; bend low to investigate the plant life. “Really get in there,” he advises, “because it's the only real way to enjoy nature.”

## Addicted to Nature

While donating land is a perfect way of leaving a legacy, it's not the primary reason why Bob decided to let Alberta Conservation Association care for his land after 27 years. He *needs* to give back to the natural world that has provided

for him, excited him, and driven his passions his entire life. Bob hopes his donation will accomplish even more: educating and inspiring the people who care about conservation in the way he does, for years to come.

Donating land isn't only a gift, but also a remarkable pledge to our future. Thanks to Bob Gouin's generosity, this property will be enjoyed and appreciated for generations. Mentioning one particular unconventional feature of his property — a cut-out of arms embracing the burly trunk of tree — makes Bob light up. “Purely and simply loving nature,” he says with a smile. “*That's* what it's about, isn't it?”

## Make a Day of It

If you plan to visit Gouin and would like to spend a full day in the area, the neighbouring town of Westlock serves up several activities. Besides stopping in for a satisfying lunch or dinner, roll into the Canadian Tractor Museum to see the world's largest weather vane, plus a massive collection of vintage tractors. Westlock's other museum, the Pioneer Museum, prides itself on a stunning collection showcasing pioneer life — including unique collections of Aladdin lamps, guns, and sound machines that will appeal to the whole family. And if the weather is cooperating and you've made the time, why not enjoy a round of golf at Westlock's Golf Course? For more on Westlock, visit [www.westlock.ca](http://www.westlock.ca).

## Hi Neighbour

The Grieve Conservation Site, also generously donated to ACA, lies directly south of Gouin. The site consists mostly of deciduous trees with a small tract of coniferous forest on the northeast side and a three-acre field in the southeast corner, providing year-round forage and cover for mammals and birds. ■





# Natural.

As Albertans, we are lucky to have one of the biggest and best natural backyards for outdoor recreation. Some of us are even fortunate enough to call certain natural areas home.

Maybe it's a marsh where you've enjoyed watching waterfowl come and go, or a wooded area that your children have spent countless hours exploring, or a secluded pasture where wildlife can find retreat.

By donating your land to ACA, you will create an enduring natural legacy for generations of Albertans to use and enjoy. It may be the best gift you can make to the environment, wildlife and the community.

For more information, visit [www.ab-conservation.com](http://www.ab-conservation.com) or call 1-877-969-9091.



Alberta Conservation  
Association

*Conserving Alberta's Wild Side*

photo: Roy Schmelzeisen

*Significant tax benefits are available for qualifying land donations under Revenue Canada's ECOGIFT program.*



# The Right Mix

## Native seeds bring promise to the prairies

■ by Paul F. Jones, ACA

In Alberta, it can be a tricky balance. With about 3.4 million hectares of grazing land used by livestock producers, it's vital that we plan cycles of harvest and renewal to not only protect our ranges as a resource, but also to maintain the many benefits that rangelands provide – like supporting Alberta's species at risk.

J BAR J Ranch is an admirable example of a landowner seeking to balance the aims of his ranch along with the health of our ecosystem. Together, MULTISAR and the owner developed a strategy that incorporates the needs of species at risk (and other wildlife) with grazing management goals.

### Testing, Testing...

To get started, Alberta Conservation Association (ACA) biologist Brad Downey completed a bird survey on a predominantly cultivated field at the ranch. He didn't have high expectations of finding native species and for the most part was right – the only species identified were horned larks and at the periphery McCown's longspur. But there was a glimmer of promise, "The fact that we heard McCown's longspur was encouraging," explains Brad, "as it means the pieces for a native wildlife complement are still there, if we can return the field back to native prairie."

This field is relatively small at 241 acres, with 140 acres cultivated. The area surrounding the cultivated portion consisted of a needle-and-thread, low sedge wheat grass community with a relatively intact native wildlife composition. As part of the partnership – or habitat conservation strategy – the cultivated area would become a test plot and be seeded back to its native prairie.

### The Need for Seed

But homegrown doesn't come cheap: "Thanks to a grant from the Federal Government's Habitat Stewardship Program for Species at Risk, MULTISAR was able to purchase the native seed," says Brad. "It cost \$23,000 for just the seed – but it was money well spent." In 2008, the transformation back to native prairie began.

### The Grades Are In

And now, two years later, surveys on the established grass have revealed how wildlife is responding to the reclamation. "We were shocked but very excited with what we found," says Darryl Jarina, biologist with the Prairie Conservation Forum. Typical of the prairies, horned larks, western meadow larks, vesper sparrows, chestnut-collared longspurs, sharp-tailed grouse and Richardson's ground squirrel were all recorded.

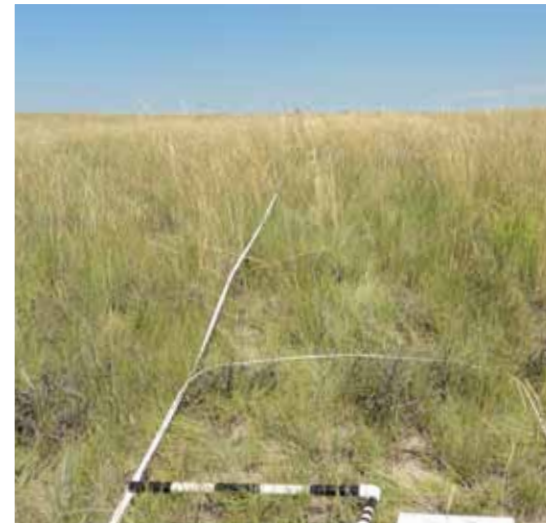
### Pipits on Plot

The Sprague's pipit is a grassland-dependant species that has declined in all the Alberta range and most of the North American range since 1996. Sprague's pipit is threatened by habitat alteration and is currently designated as a "Species of Special Concern" in Alberta.

And so, the presence of Sprague's pipits at four of the five survey points is exciting. Darryl explains, "Although more charismatic species like the endangered ferruginous hawk were spotted, the Sprague's pipit is a species that was somewhat unexpected after only two years since seeding, especially at the levels that they were recorded. It's more about what the species tells us about the grassland, rather than the species itself."

Sprague's pipits are closely associated with native grasslands, and rarely found in cultivation and tame pastures. In fact, they are often associated with grasslands that are functioning well, where there is a solid structure and ample amounts of litter. "To hear the pipits calling and know these grassland birds are actively breeding on this piece of land gives us a sense of just how successful this reseed has been," Darryl sums up. "This 'new' native pasture is on its way to becoming a productive grassland."

*With the success of the initial reseeding, the landowner is taking on the next phase of the project with MULTISAR – we'll tackle another 160 acres using a similar approach. MULTISAR is a partnership between Alberta Conservation Association (ACA), Alberta Sustainable Resource Development (ASRD) and the Prairie Conservation Forum (PCF). Visit [www.multisar.ca](http://www.multisar.ca). ■*



#### ▲ PHOTO 1 - BEFORE

*In May 2008, a seed mixture consisting of 17% needle and thread grass, 16% June grass, 27% northern wheatgrass, 20% western wheatgrass, and 20% blue grama grass was broadcast seeded at a rate of 9 lbs/acre followed by a light harrow. After seeding, the landowner added fencing to keep cattle out and allow the grass to establish. Nature pitched in too. "We were lucky – just after we seeded we received approximately 65 mm of rain," recalls Brad. By August it was evident the reseeding had taken hold.*

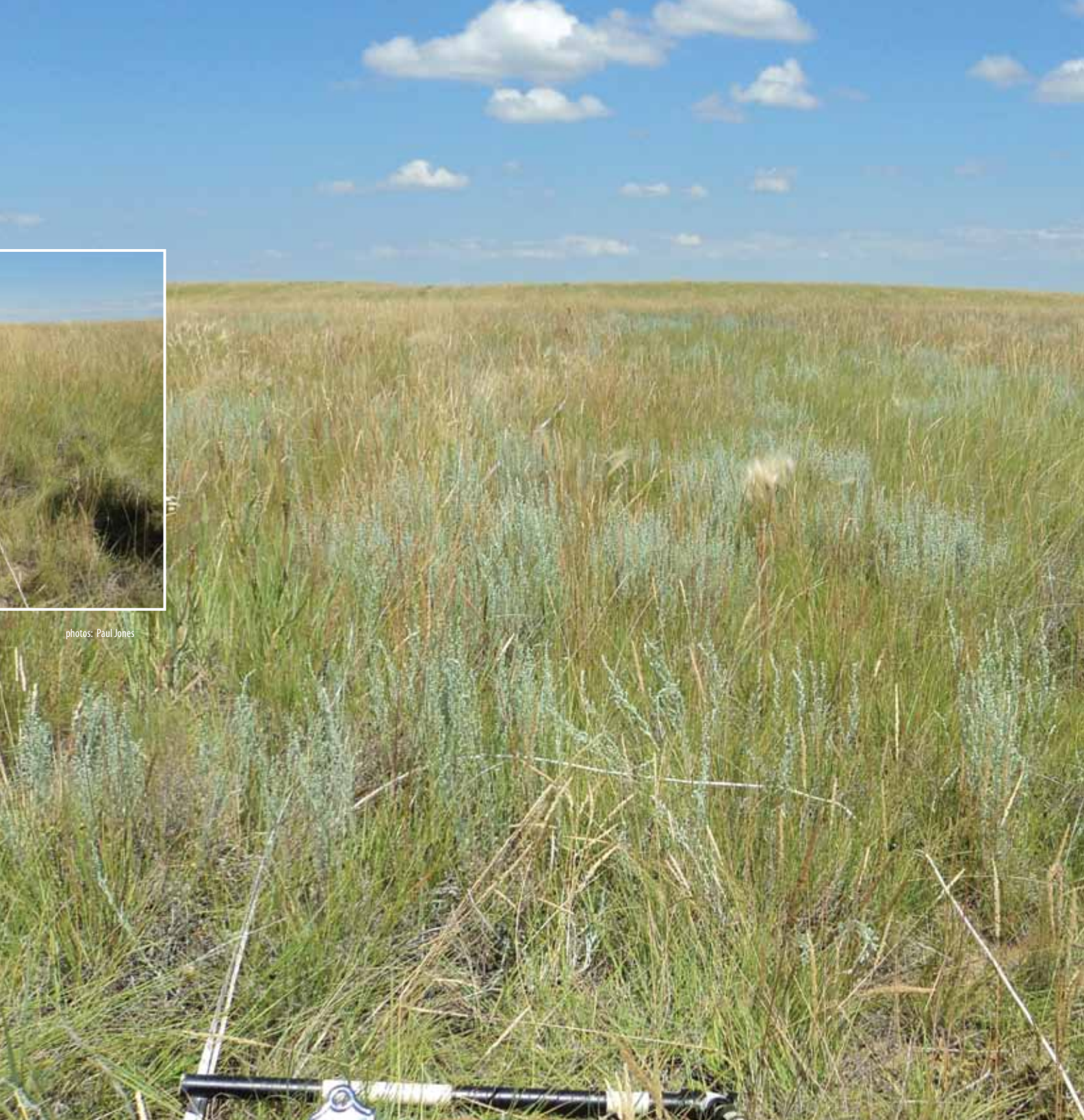
#### ► PHOTO 2 - AFTER

*Two detailed transects were surveyed by the MULTISAR range team in July 2010 with encouraging results: the transect on the west side of the reseeded area was determined to be in a high healthy range with a score of 72%, and the east, 64%. There was also 250 lbs/acre of litter (last year's growth) on the site – another good indicator of successful reseeding. "Hopefully over time the native grasses begin to fill in the bare soil between rows and the pasture appears more natural," says Brad.*



*Sprague's pipit*  
photo: Gordon Court





photos: Paul Jones

**WILD ON THE WEB**

[ab-conservation.com/mag](http://ab-conservation.com/mag)

View photos of other birds that rely on native grasslands.

*Long-billed curlew*

photo: Julie Landry-DeBoer





## Writing-on-Stone Provincial Park

## Alberta Conservation Association Speaker Series 2011



Alberta Conservation  
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*Conserving Alberta's Wild Side*

July 1	Doug Manzer	Life of a prairie dancer: The sharp-tailed grouse
July 8	Layne Seward	An alien invasion: Alberta's ring-necked pheasant
July 15	Brad Downey	Winged assassins: Raptors of the prairies
July 29	Paul Jones	Head and legs above the rest: The pronghorn antelope (plus field trip on the Saturday)
Aug 5	Kris Kendall	It's not easy being green... or legless: Introducing Alberta's amazing amphibians and remarkable reptiles!
Aug 12	Paul Jones	Head and legs above the rest: The pronghorn antelope (plus field trip on the Saturday)
Aug 19	Julie Landry-Deboer	"Do you hear what I hear?" A tour of a birder's morning

For more information call 403-647-2364.



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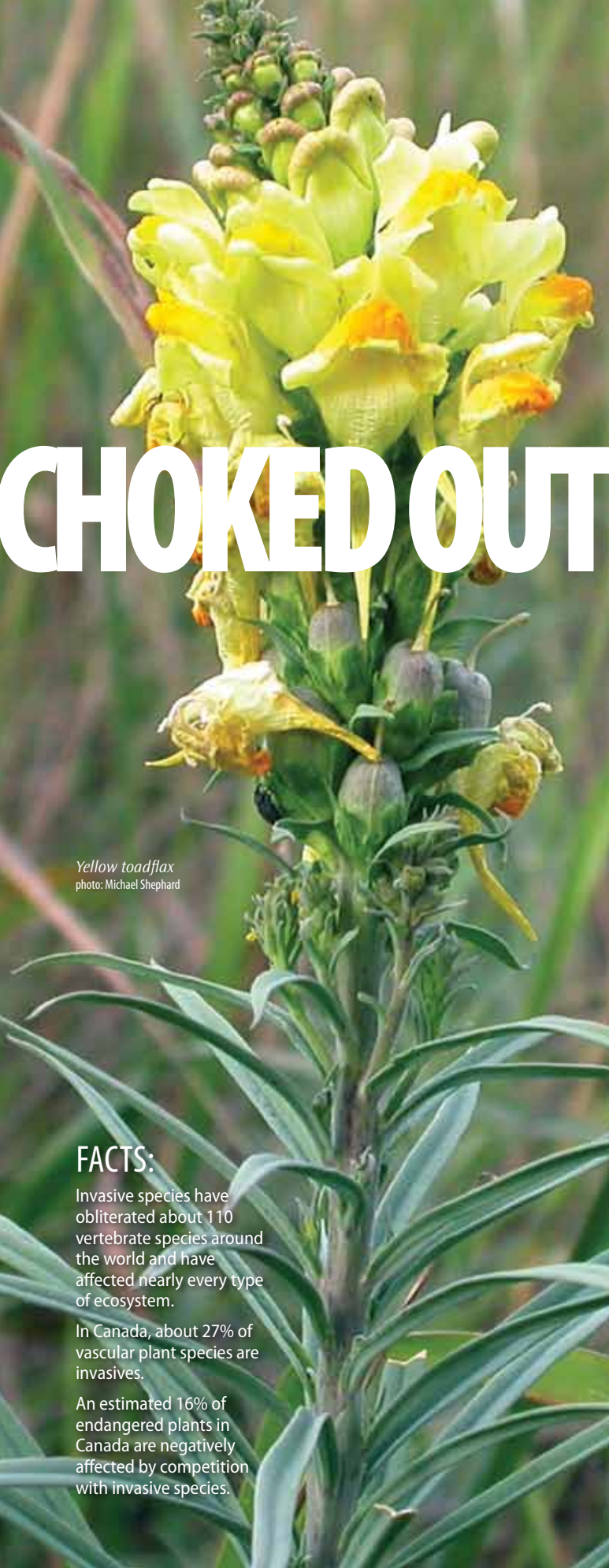


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Alberta Conservation Association  
780-410-1989  
[ken.kranrod@ab-conservation.com](mailto:ken.kranrod@ab-conservation.com)**







■ by Nicole Nickel-Lane

## LOSING GROUND AGAINST INVASIVE PLANTS

**H**uman mobility, changing weather patterns, and our increasing demands on the land for food, development, resource extraction, and transportation have created the perfect storm for the spread and infiltration of invasive plant species in Alberta. The second greatest threat to biodiversity after habitat loss, invasive plants claim millions of acres of land annually and cost millions of dollars in lost productivity and chemical control.

Weeds designated as “noxious” are non-native or invasive species introduced to an area through typically artificial means such as human transport, imported accidentally from other areas, or planted as ornamentals. An invasive species quickly becomes a significant enough threat to local ecology so as to be termed noxious because it has no natural predators, is highly variable and adaptive genetically, and is aggressively competitive, taking advantage of any weakness in the integrity of the land in order to establish itself and spread.

Because of their aggressive, opportunistic tendencies, invasive plants are extremely difficult to eradicate through biological or otherwise environmentally friendly means. In some cases, as with the toadflax infestation at the Silverberry Conservation Site, innovative methods like grazing by herds of goats or sheep can be effective; however these are new approaches that at present cannot keep pace with the dozens of invasive plant species rapidly spreading across Alberta. The most common fall-back treatment is chemical: costly, hazardous, and infrequently effective in the long term.

With ACA Conservation Sites neighbouring rangeland and grazing land throughout Alberta, removing invasive plant infestations on these sites has become a significant issue in terms of cost and manpower. But the issue of non-treatment is even greater: invasive species threaten the health and ecology of protected grasslands and wetlands, affecting not just plant life but countless organisms up the food chain dependent on the delicate interplay of native species to survive.

### The big three

The following three weeds are major threats to rangeland in central and northern Alberta.

#### Leafy spurge, *Euphorbia esula*

Leafy spurge has been an Albertan prairie invader since the 1800s. Highly adaptive, leafy spurge can tolerate a wide variety of soil and weather conditions. It reproduces through an extensive root system that spans metres deep and prolific seed production of more than 100,000 seeds per plant. Toxic to horses, cattle and humans. Wear gloves when handling leafy spurge to prevent skin rashes.

photo: Richard Old



Yellow toadflax  
photo: Michael Shephard

### FACTS:

Invasive species have obliterated about 110 vertebrate species around the world and have affected nearly every type of ecosystem.

In Canada, about 27% of vascular plant species are invasives.

An estimated 16% of endangered plants in Canada are negatively affected by competition with invasive species.



## Scentless chamomile, *Tripleurospermum perforatum*

Like leafy spurge, scentless chamomile was likely introduced as an ornamental or contaminant in crop seed. Given the opportunity, scentless chamomile will quickly take hold in disturbed areas and is tolerant of a variety of growing conditions, but it is a poor competitor to healthy native vegetation. Once established it can be extremely difficult to eradicate as plants bloom, form seed and germinate throughout the growing season.

photo: Richard Old



## Spotted knapweed, *Centaurea × psammogena*

A major threat to rangeland throughout the northwestern United States and western Canada, spotted knapweed is extremely difficult to eradicate as it is highly adept at creating its own monoculture. Its roots exude a chemical compound that inhibits the growth of other plants, seeds can be viable for up to 10 years, and seeds are easily spread by farm equipment and grazing livestock and wildlife.

photo: John M. Randall



**WILD ON THE WEB**  
[ab-conservation.com/mag](http://ab-conservation.com/mag)  
Stop the spread with these extra resources and links.

# BEWARE THE NEWCOMERS

Several new varieties of invasive plants have been spotted across Alberta, threatening to further degrade our native rangeland and riparian areas. Keep on the lookout for these species while recreating on ACA Conservation Sites, and report any sightings to your local ACA office or the Alberta Invasive Plants Council. Currently, there are 64 plant species designated as noxious or prohibited noxious in Alberta. The best defense against the further spread of these plants is prevention: it only takes a moment for the seed of an invasive plant to settle, but it can take years to stamp it out. Know your weeds, clean your equipment and clothing (and pets!) meticulously, and leave native vegetation intact.

## Downy brome, *Bromus japonicus*

A rampantly spreading weed across rangeland in the United States (where it is known as cheatgrass), downy brome has become a significant threat to rangeland and grassland in southern Alberta. It competes with anything annual and spreads extremely quickly because of its early, prolific seed production and high plant density. Downy brome goes tinder dry in late spring, becoming ideal fuel for wildfires.



photo: Chris Evans

## Flowering rush, *Butomus umbellatus*

An aquatic plant that is spreading rapidly through the Lake Wabamun, Mile Lake and Sturgeon River systems. An ornamental believed to have escaped domestic water gardens, flowering rush quickly replaces native rush plants. However, it's not as beneficial to local aquatic and avian species. Flowering rush is easily broken off by boats, propellers and wading gear and transported to new areas.



photo: John M. Randall

## Meadow Hawkweed, *Hieracium caespitosum*

Meadow hawkweed spreads extremely quickly through mowing and shipping, making agricultural land and roadside ditches prime dynamic targets for this invader. Recently spotted in west-central Alberta, it is believed to have been transported in from agricultural operations in British Columbia. Meadow hawkweed establishes itself through a dense mat of plants, eliminating native broad leaf species in pasture. Extremely costly to eradicate. ■



photo: Karan Rawlins



## Goats on trial at Silverberry – Toadflax Update

ACA has employed the appetites of over 400 goats for a three-year trial to help rid the Silverberry Conservation Site of toadflax, another designated noxious invasive plant in Alberta. Every season brings different growing conditions and noxious weeds are notoriously hardy, so 2011 will be the last cycle of the trial. Read our article about the Silverberry goat experiment (published in the Spring/Summer 2011 edition of *Conservation Magazine*) at [www.ab-conservation.com/goats](http://www.ab-conservation.com/goats).

photo: Lisa Monsees



## Conservation in Action

### Grow the right thing: Alberta Invasive Plants Council

■ by Nicole Nickel-Lane

Whether you've been obsessing about your garden since last fall or will haphazardly throw a few plants together and hope for the best this spring, the *Weed Wise Gardening in Alberta* brochure should be on your reading list before you plant anything. Perhaps you've noticed a pretty plant in your garden and haven't bothered to find out more about it. Or you may have bought some plants in the past and are now the unknowing caretaker of an invasive species. The reality is that your pretty plant may be considered a noxious or even prohibited noxious weed under the Weed Control Act introduced in 2010. Fortunately, the Alberta Invasive Plants Council (AIPC) is ready sort out what should and shouldn't be growing in Albertans' gardens.

#### Getting started

In the early 1990s, land managers and agricultural fieldmen along Alberta's eastern slopes got together to tackle the area's increasing weed problem. From its grassroots inception as the Eastern Slopes Invasive Plants Council, the group broadened its role and became a provincial organization. In 2006, the AIPC was incorporated as a non-profit organization. Its goal? To educate and increase awareness of the growing problem of invasive plants in the province.

#### Shifting focus

Recognizing the connection between invasive plants, habitat loss and human activity, the AIPC's focus has broadened to involve environmental and land conservation issues. This has led to forming relationships with stewardship and conservation groups across Alberta such as Alberta Conservation Association (ACA). Since the introduction of the Weed Control Act, the AIPC also targets gardeners and the horticultural and landscaping industry to raise awareness and curb the use of ornamentals (such as flowering rush) that can quickly become invasive plants when released into the wild.



#### Watch your garden grow

The number of invasive plants designated as prohibited noxious has increased from seven to 46 with the introduction of the new Act. Some of these plants may still be available for sale in gardening centres. So

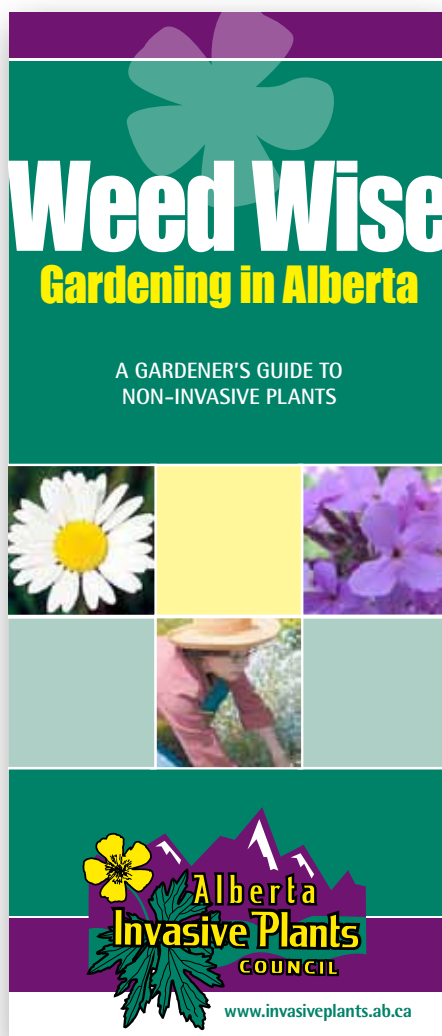
how does a gardener know what to avoid? The AIPC created the *Weed Wise Gardening in Alberta* brochure to help well-meaning gardeners from unknowingly propagating the invasive plant issue in Alberta. Weed Wise provides gardeners with options for flowering plants and other ornamentals.

#### Protecting Alberta's landscape

Recently, the AIPC adopted a new vision statement: "Inspiring and empowering Albertans to work together to protect the integrity of Alberta's landscape from invasive plants." The invasive plant problem is simply too big for one landowner, one conservation group, or one association to resolve. As in the 1990s, the Council's role is to bring these groups together, facilitate dialogue and help them formulate their own plan to weed out those species that impact them directly.

#### Get Weed Wise

The popular *Weed Wise Gardening in Alberta* brochure is available through gardening clubs and associations and municipalities throughout Alberta. Numerous additional weed education resources are available on the AIPC website at [www.invasiveplants.ab.ca](http://www.invasiveplants.ab.ca). The Weed Wise project was funded through ACA's Grant Eligible Conservation Fund. For more information on invasive plant initiatives in your area, contact the AIPC at 403-982-7923. ■



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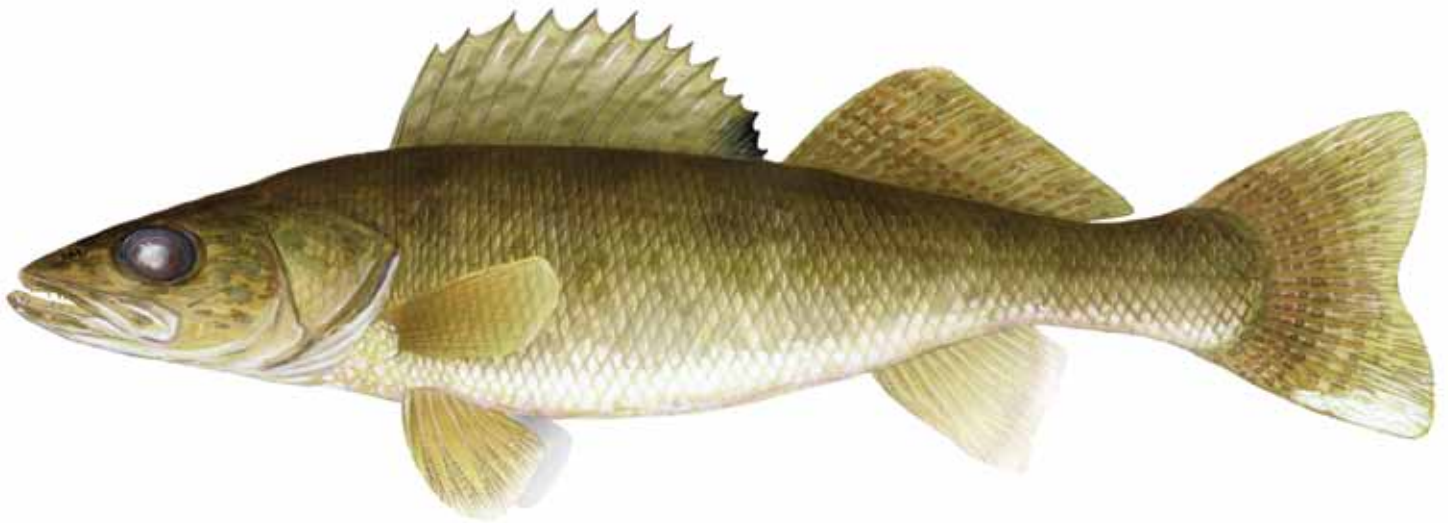


illustration: Carlyn Iverson

## *Walleye* (*Sander vitreus*)

■ by Lance Engley, ACA

A walleye's most extraordinary feature is its eyes. Large and pearl-like in appearance, their eyes have a special light-reflecting membrane that gives this fish exceptional vision under low light conditions and in murky water. They use their impeccable sight to their advantage, catching unsuspecting prey – primarily small fish – and enjoying deep, cool water during the warm summer months.

Native to Alberta, walleye is the largest of the five members of the perch family found in our province. They are often wrongly identified as pickerel – in fact, true pickerel are found in eastern Canada and the United States and are members of the pike family, which makes them more closely related to northern pike than walleye.

Walleye are prized in Alberta, and so it's important to ensure the longevity of the species. The Special Walleye Licence, a fisheries management tool, helps the province carefully regulate the number and size of walleye being harvested. The licence also allows anglers to enjoy fishing for walleye from specified lakes with developing or recovering walleye populations. ■



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