The official publication of the Alberta Conservation Association

FALL/WINTER 2009, VOLUME 13

ONSERVATION

Hunting and Fishing More Than Food on the Table

Beavers and Muskrats Strategies for Survival

Conservation Site Getaway

Pouce Coupe River Winter Range

Conservation's Golden Opportunity

Securing a Prize Piece of Alberta's Wetlands





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"It was early October in Banff National Park when I photographed this sub-adult mountain goat that was part of a herd of four animals moving across the face of a very steep cliff. This photograph was

taken with a Nikon camera, Nikkor 500mm lens."

Dr. Wayne Lynch



Our Mission

ACA conserves, protects and enhances fish, wildlife and habitat for all Albertans to enjoy, value and use.













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Wolverine (Gulo gulo)

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From the Editor

The last of the seasons' berries are plump and plentiful. They're ready for canning, eating at the table or devouring madly by the handful. It's harvest time. It's the unofficial bittersweet end to summer that signals the need to prepare for the long winter ahead. Not only do we plan for those winter months, but so do other species, in order to better their odds against the cold. This is illustrated in *The Beaver and the Muskrat: Strategies for Survival.* After reading that article, you will appreciate what these aquatic mammals do to survive under the ice.

The changing seasons compose a new palette of colours, smells and light that encourages us to get out and re-experience the outdoors. This new perspective is exactly what Alberta Conservation Association's Mike Jokinen encounters when he treks to his special angling spot in, *Rocky Mountain High During Winter's Lows: Ice Fishing Alberta's High Mountain Lake.* If you are feeling adventurous, the ultimate outdoor enthusiast's dream is featured in *Conservation Site Getaway: Pouce Coupe River Winter Range.* Located 75 kilometres west of Spirit River, the sheer remoteness of this property offers up recreational opportunities like none other.

Alpine Adventures at Caw Ridge: Nature Plays Out Above the Treeline, gives you a glimpse into a place that author Brian Bildson is enamored with. His wildlife observations and encounters with the mountain goat research team keeps bringing him back for more.

Fall also beckons the hunter within. You may relish in the cooler nights and the prospect of heading out in the field with your trusted human and canine companion. In *Dogs: Hunting Ambassadors and Family Companions,* Colin Gosselin introduces us to his bird dogs: "Bad Ass Bob," "Sue" and "Cecil," and how their skills benefit conservation. Shooting instructor, Steve Lockham, Sr. helps you stay on target with *Sharpen Your Shooting Skills* to ensure a successful season where your shooting skills and hunting skills are more evenly matched.

Last year a study was conducted to measure the impact of hunting and fishing on Alberta's economy. The study, released this summer, is the first of its kind for Alberta. And the results are timely as they were released during a recessionary period. Be sure to read, *Hunting and Fishing: More than Food on the Table*. The complete study results are available online at www.ab-conservation.com.

On September 1st we began selling raffle tickets along with our partner, Sherwood Park Toyota for a 2010 Toyota Camry. Proceeds from all ticket sales go towards securing Golden Ranches, a sprawling 1,509-acre property bordering North Cooking Lake just 27 kilometres east of Edmonton. Find out why this property has united seven organizations in *Conservation's Golden Opportunity: Securing a Prize Piece of Alberta's Wetlands*. To buy your tickets, see page 8 for details.

The fall season prepares us for much more than the winter days that lie ahead. It makes us grateful for those beautiful summer days, the multitude of food choices that are so readily available and the opportunity to experience all four seasons, in all their splendour.

Here's to making the best of all seasons. Live life to its fullest and get outdoors! — *Editor-in-Chief, Lisa Monsees*

Letters to the Editor: Address letters to *Conservation Magazine* Editor by e-mail, fax or mail. Include your name, address and daytime telephone number. Letters may be edited for clarity and length.

Conservation Magazine

Conserving Alberta's Wild Side

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Conserving Alberta's Wild Side

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4



Chances are you will never see the Sage Grouse in Alberta again. Alberta's sage grouse

population is in crisis. Loss of habitat continues to threaten its already fragile future. From a species that used to number in the tens of thousands, fewer than 200 of these majestic birds remain in Alberta today.

Your contribution to Alberta Conservation Association (ACA) is critical to ongoing conservation efforts and research including Alberta's species-at-risk. Without it, the booming call of the sage grouse will be just a story to tell your grandchildren – rather than an experience to share with them.

For more information and to make a donation to ACA, please visit our website at www.ab-conservation.com.





Albertans, we can't help but feel secure in our province's growth, development and bright economic future. But as conservationists, we strive to find ways in which we can coexist with our neighbours in the natural world, to minimize the ecological impact of development and bring cautious forethought to discussions surrounding land use and expansion of urban areas.

Conservation's

Securing a Prize Piece of Alberta's Wetlands

by Nicole Nickel-Lane



Such is the situation with Golden Ranches, a sprawling 1,509-acre property bordering North Cooking Lake just 27 kilometres east of Edmonton. Privately owned and operated as a working ranch since 1950, the family has agreed to hold the land for the conservation community to try and purchase before they put it up for sale. This represents a once-in-a-lifetime conservation opportunity that has captured the attention of numerous local and national land trust organizations including Alberta Conservation Association (ACA), the Alberta Fish and Game Association (AFGA), the Beaver Hills Initiative¹, Ducks Unlimited (DUC), Edmonton and Area Land Trust (EALT), Nature Conservancy of Canada (NCC), and Strathcona County.

These organizations have partnered in an attempt to save an internationally significant piece of Canada's Prairie Pothole Region for Albertans. "It's a challenging, exciting exercise in open communication among the partners and the willingness to try something new," says NCC's Juanna Thompson. "For a project of this magnitude, we need to take a creative, outside the box approach to ensure everyone's priorities and goals are met. But all the partners share the same essential conservation objective: to protect this prize piece of Alberta's wetlands."

1 The Beaver Hills Initiative consists of numerous conservation groups, government agencies and industrial partners with interests in protecting the ecology of the Cooking Lake Moraine. More information on the Beaver Hills Initiative can be found at www.beaverhills.ab.ca/initiative/partners.html. "It's not that often that a conservation opportunity unites seven organizations. For there to be so much common ground there has to be something special about the place," explains AFGA's Brad Fenson.



The missing link

While Golden Ranches is an area more than worthy of protection in and of itself, its location makes it such a valuable opportunity for conservation in the province: the property essentially links Elk Island National Park and Blackfoot Grazing Reserve to the north with Ministik Bird Sanctuary to the south, thereby creating a conservation corridor of some 377 square kilometers. Miguelon Lakes Provincial Park and the Strathcona Wilderness Centre are also close neighbours to this corridor. "It's not that often that a conservation opportunity unites seven organizations. For there to be so much common ground there has to be something special about the place," explains AFGA's Brad Fenson. "It is located right within key areas already designated and ties everything together so well."

slightly embarrassed to admit – stumped by the names of wildflowers and falcons just minutes from our doorstep. Just goes to show how nature never ceases to awe and surprise even us socalled expert enthusiasts.

Golden Ranches presents a wonderful opportunity for the million-plus area residents to have free, convenient access to one of the largest protected areas in the province – literally minutes from Edmonton. The site will be unique in that it will support a broad range of low impact visitor activities without the limited access and designated use restrictions of neighbouring protected areas. This low impact, minimal management approach will also help conserve the habitat in its most natural state.

Golden Opportunity

Home on the ranch: who lives here?

Golden Ranches is located within the Cooking Lake Moraine Natural Area (CLM), an area with a lengthy pedigree of conservation designations. CLM is located in the Prairie Pothole Region of Canada, an area internationally known for its highly productive wetlands, and therefore falls within the North American Waterfowl Management Plan (NAWMP) program boundaries. CLM has already been designated a high priority conservation area by the partnering organizations. Golden Ranches specifically lies within the North American Wetlands Conservation Act targeted area, providing important habitat for migrating and nesting waterfowl.

The property features an impressive eight kilometers of shoreline, a haven for diverse rare avian species and globally significant migratory birds. The upland riparian area, grassland and mature forest also support a broad range of wildlife. The wonder of Golden Ranches is that this abundance of wildlife has remained largely intact in spite of its present-day function as a working ranch. The partners have already begun to piece together this enormous conservation project with the recent purchase of two quarters of land on the shores of Cooking Lake. Suncor Energy provided early endorsement and financial support of this project.

Recreational opportunities

Golden Ranches is a place that simply invites you to slow down for a while and enjoy the tranquility and space the property has to offer. Even during the brief hour spent on site, we witnessed several varieties of waterfowl on the shores of Cooking Lake and found ourselves – The recreational and educational opportunities presented by Golden Ranches are almost endless and are sure to be of value to numerous user groups and individuals. Visitors will have frontrow access to some of the best bird watching in Canada, including migratory birds such as various waterfowl, song birds and birds of prey. Upland, the property's grassland and mature forest provides the opportunity to witness big game such as moose, white-tailed and mule deer. Foot access for recreational opportunities including hunting will also be made available. The long-term stewardship of the project will be more fully defined in a Property Management Plan to be co-authored by all project partners.

Because the property is so close to the congested city life that we live in day-to-day, Golden Ranches is an easy, convenient way for area residents to access nature and connect to the outdoors.

Common pink wintergreen, Golden Ranches.

Make a donation

Alberta Conservation Association is accepting donations on behalf of the partners.

To donate online, visit www.ab-conservation.com or call toll-free 1-877-969-9091.

2010 Camry Toyota raffle ticket proceeds are also going toward the purchase of Golden Ranches. Purchase your ticket through Alberta Conservation Association.

A lasting legacy for the community and the environment

There is never any shortage of species to protect or habitat to conserve, but all Golden Ranches project partners agree that fostering collaborative working relationships is its own kind of conservation in action: through sharing the workload and leveraging fundraising dollars, agencies are able to maximize their resources to help as many ecologically sensitive areas and species as possible.

For corporations and the general public, Golden Ranches represents a once-in-alifetime opportunity for a tremendous gift to the community and the environment that will be enjoyed by countless generations. But the reward of a conservation initiative of this magnitude has its price. Whether ACA and the partner organizations are successful in securing this vast expanse of Alberta's wetlands depends on our collective success in securing significant corporate and private donations. Fortunately, there are numerous incentives already in place for the project including federal Eco Gifts Program tax benefits for corporate donations and 3:1 dollar matching programs for private donations.

Because the property is so close to the congested city life that we live in day-to-day, Golden Ranches is an easy, convenient way for area residents to access nature and connect to the outdoors. As long as nature continues to be something that happens 'out there' we stand no hope of reaching a deeper understanding of the wonder of it, nor of educating our children of the importance of healthy ecosystems and the need to protect and invest in the natural world that surrounds us. The proximity of Golden Ranches is therefore perhaps its greatest attraction, and what makes it most worthy of our immediate attention and action.

For more information on Golden Ranches, please contact: Brad Fenson, Alberta Fish and Game Association at 780-437-2342.

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Hunting Ambassadors and Family Companions



by Colin Gosselin

I grew up in rural Saskatchewan, and the fall often meant duck and goose hunting. You could hunt birds literally within five minutes of home. My high school buddies and I made do with borrowed shotguns, beat up old decoys, cheap shells and not much else. Field shoots were preferred because if someone shot a bird over water, it meant stripping down to your drawers and going in yourself. I distinctly remember doing that one time while it was snowing. That experience convinced me that there had to be a better way.

Author with "Sassy Sue."

My first introduction to great pictures of hunting dogs were in the Ducks Unlimited (DU) magazines my older brother used to get after attending a local Greenwing youth day. I discovered that these dogs actually went out and brought the birds back for you! The dogs always looked like they were having the time of their lives. It was then I knew this had to be the way. So after college and a stint in the army, I finally purchased my first hunting dog, Club Mead's Badass Bob. Bob was a striking, yellow lab, with a passion for birds and hunting. When the shotgun came out of the closet, he'd park himself by the front door, and then sprint to the truck as soon as it opened. For field shoots I had a dog blind for him that looked like a little camouflaged tent. Even when the birds weren't flying, he'd get in it and scan the sky. He knew that's where he was when the birds came, so he'd figure he'd better get in there to hurry things up. He especially liked ducks over watermud, cattails, snow and all. This definitely was the way to hunt birds.

Bob and I were blessed to share some excellent, unforgettable hunting adventures together. There were sharp-tails on the Milk River Ridge, greenheads along the Bay of Quinte on Lake Ontario and giant Canada's back on the pea fields of my youth near Melfort, Saskatchewan. Badass Bob was soon joined by Sassy Sue, another yellow lab. Bird hunting with a dog quickly became the only hunting I did. There's just something about hunting with a dog. They soon learn their "job," and they absolutely love doing it. They're great field or blind companions too, with plenty of shenanigans to entertain you when the birds aren't flying (be sure to keep track of your sandwich or Rice Krispie square: "No Sue "...uh oh, too late!).

While hunting dogs are a personal passion for me and many other bird hunters, they also offer broader benefits for the hunting community when it comes to our conservation and hunter recruitment and retention efforts. A well-trained hunting dog means fewer lost birds. And fewer lost birds means fewer shot birds in the real world. I know first-hand how my dogs have used their noses and hunting instincts to find downed birds that I would have never found on my own. They earn their keep, and those tough retrieves are always an impressive sight.

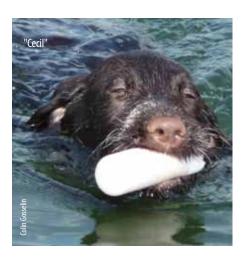
I think the dogs are also a great addition to the hunter recruitment and retention tool box. Well-trained hunting dogs are going to increase your success and enjoyment in many field situations. Pheasants really come to mind. If you try and hunt pheasants by yourself or with a buddy, and you're without a dog, odds are they'll just keep running away from you without ever flying. Other birds will just hold tight while you walk right on by without even knowing that they're there. And of course, a good hunting dog eliminates the need to wade into the muck or mire yourself to retrieve a bird.

The dogs also mean more time out hunting and outdoors, period. You definitely find the time to get your dog out hunting or they'll never let you live it down. When it's not hunting season, they're always game for a walk and training sessions. There are dog clubs with training days, hunt tests and field trials. This can be a great way for a new handler to learn more about training from experienced dog owners.

Hunting dogs help recruit new hunters. There are many women that get into hunting as adults through their dogs, and it's a great way to involve the kids. The family golden retriever does some agility and then moves on to a hunt test or two. Before you know it, it's out doing the real thing with its owner.

Dogs are excellent ambassadors for hunting. I think back to those great pictures in my brother's old DU magazines that originally sparked my own interest. I know that there are lots of people that don't hunt and are not interested in it, but they're still impressed by watching a hunting dog work. The retriever demonstrations at the Edmonton Boat and Sportsmen show are always a crowd pleaser. When you see the passion these dogs have for hunting and the companionship they have with their owners, it's hard not to be sold on it.

My own journey with hunting dogs entered a new chapter in 2009. My wife Amber and I brought home a new eight-week-old Deutsch Drahthaar pup, Luthar vom Tapferen Herzen (better known as "Cecil"). Cecil is a versatile German pointing dog that will point upland birds and be an excellent water dog for duck and goose hunting too. Now it's Sue's turn to put up with the new recruit. And even at eight-yearsold, she's still game for playtime.



It has been quite the dog year at ACA. Randy Lee, Southern Region Manager brought home "Emma," a darling and determined Brittany Spaniel. Todd Zimmerling, President and CEO and his wife Linda, guided their children in choosing their newest edition, "Pepper," a Black Labrador Retriever to complement "Houston," a wily two-year old Chesapeake Bay Retriever. ACA Board of Director, Ward McLean of Pheasants Forever Calgary has two new hunting companions, "Maggie and Jill," both are Springer Spaniels.

In depth profiles of the owner's thoughts on each breed and the impact on their lives and conservation can be found online at www.ab-conservation.com.



Sharpen Your Shooting Skills

century ago, a large number of North American bird hunters had become highly skilled wingshooters, probably due to an apprenticeship involving heavy bird populations and a lot of triggers being pulled. Back then, great shooting skills were revered, even more so than great hunting skills. Today an interesting "evolutionary turn" has occurred with hunting skills now being at the forefront of hunter interest. This may be due in part to major increases in more effective hunting accessories, and birds that are generally harder to come by.

Even though current bird limits are quite satisfactory for the intermediate to advanced gunner, the bad news regarding the relative beginner or casual shooter of today is he or she will find it difficult to become suitably proficient with a shotgun if no other gunning is being done between seasons. Fortunately, there is a present day solution that is available and viable for most everyone.

by S. Lockham Sr., National Sporting Clays Association Certified Level II Shooting Instructor Learning to shoot at a higher skill level will result in fewer wounded birds, cleaner folds, more positive retrieves, and a greater window of opportunity for shots previously considered beyond one's ability. All of this is as possible now as it was then, without excessively large daily bag limits. We now have a considerable number of sporting clay gun clubs that offer many different types of migratory and upland type targets. There are also a growing number of certified shooting instructors capable of improving one's skills, helping to put the icing on any duck hunter's cake. Should you take part in this journey of enlightenment, you will be pleasantly surprised how your "in field" level of enjoyment will increase when your shooting skills and hunting skills are more evenly matched.



12

Four tips to stay on target:

How well we see determines how well we shoot.

Our best focus is called "primary focus." This is when you visually zero in on a smaller, specific part of an object rather than the whole object. To obtain your best visual feedback that will result in the most precise gun move, mount, and trigger pull timing, follow this essential rule: look firmly at the bird's head, not the whole bird, right through trigger pull and follow through.

2 It is an absolute must to determine visual dominance.

Well over 70 per cent of women and ten per cent of men are cross dominant when it comes to sight. This means a right-hand shooter will have a left dominant eye and a left-hand shooter will have a right dominant eye. If you are cross dominant, where you look and think you shoot is not where the shot actually goes. One can overcome this problem by choosing one of the following: a none-cross dominant front sight, a small circular dot correctly placed on one eyeglass lens, or the squinting or closing of an eye.

3 Gender counts when it comes to determining forward allowance or lead.

Most men perceive lead out where the target is, whereas most women perceive lead in where the muzzle is. As a result, most women require far less perceived lead than what most men do in order to hit the same target or bird, a fact most field gunners know little about. So ladies, if both you and the individual teaching you how to shoot are near ready to call it quits, get hold of someone who truly understands this anomaly.

4 Select and commit to a core gunning method that suits the type of gunning you intend to do.

Few field gunners fully understand the method they use to shoot birds. Without knowing how and why a certain method works, getting the most out of that method is difficult. I teach several different shooting methods for good reason. Some are best suited to certain types of gunning and for certain types of individuals. When matched properly, greater improvement always follows.



If you are tired of buddies giving you a whopping each time you venture out, or want some really good bonding with younger family members, get involved with a target gunning activity between seasons. Seek out certified instruction at a suitable gun club and make it fun for all involved. My son and I began a similar venture when he was seven. Today, 43 years later, we still shoot together. How much better can it get?

To locate a Certified Shooting Instructor, contact Hunting For Tomorrow at 780-462-2444.



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In Alberta, hunter access to private land is not a right.

It is a privilege.

This hunting season watch for *Use Respect - Ask First* signs posted on private land. They provide the information you need to contact the landowner and gain legal access for hunting. Without permission you are trespassing and poaching.

The Use Respect - Ask First program is designed to aid hunters, anglers and other outdoor enthusiasts in gaining access to private land, while maintaining a respectful relationship with landowners.

Contact us for more information. Call toll free: 1-877-969-9091 or visit www.ab-conservation.com



Conserving Alberta's Wild Side

Stategies for Survival

The Beaver and Muskrat

Muskrat (Ondatra zibethicus)

14

American Beaver (Castor canadensis)

photos and text by Dr. Wayne Lynch

o mallards attack and eat muskrats? I wondered for a moment as I watched a large mallard drake rush across the water and viciously peck a muskrat that had just surfaced nearby. It was winter in southern Alberta and the muskrat was diving for aquatic plants, digging up the roots, then surfacing to eat its meal. The water was too deep for the mallard to reach the roots on the bottom so it was resorting to piracy. Whenever the muskrat surfaced with a mouthful of vegetation, the aggressive attack by the duck, which weighed more than the muskrat, startled the animal into dropping the food in its mouth and the mallard would quickly gobble up the goods.

If you are an aquatic mammal like the muskrat, the winter season can present much greater challenges than dealing with the occasional thieving duck. Rivers, lakes and marshlands are locked in ice, food is in short supply, and temperatures can be extreme. These same challenges are also faced by the beaver, the other large aquatic mammal living in the province. Neither of these roly-poly rodents hibernates for the winter and each has its own strategies to survive the stresses of the season.



Did you know?

In the summer, beavers pad their bodies with fat, adding as much as 40 per cent to their total body weight. Half of the fat is stored in their tail, and through the long cold days of winter the volume of a beaver's tail actually shrinks by a half, as the animal consumes the energy stored within it.

A muskrat can hold its breath for no more than 58 seconds. In that time it can swim underwater about 46 metres. Compare that to an Olympic-size swimming pool, which is 50 metres in length.

Rather than hibernating, the muskrat and the beaver eat their way through the season, but they do it in two different ways. Beavers

plan ahead. Beginning late in the summer, all the beavers living together in a colony build an underwater pile of freshly-cut branches near the family lodge. Until the ice freezes, they continue to add to their underwater food stash. Researchers in Wood Buffalo National Park analyzed the winter caches of six different beaver families. One family of five had a storehouse weighing 278 kilograms, 90 per cent of which consisted of willow branches. Another family of six beavers had managed to cache just 100 kilograms of which 93 per cent was willows. The largest stash was gathered by a family of 11 and it weighed 380 kilograms (that's equivalent to 838, one pound bags of flour). Nearly 60 per cent of the pile was willow branches, the rest included alders, birch, aspen and red osier dogwoods.

The beaver and the muskrat are master architects and both build a shelter to better their odds against winter. The muskrat stacks

pondweeds, cattails, bulrushes and mud into a soggy mound up to 1.3 metres (4 feet) high at the edge of its marshy world. The walls, which freeze into a solid dome, enclose a single chamber in the center. Despite the simple design, the lodge keeps the muskrats from freezing. In a Manitoba study, the inside temperature of the average muskrat house in winter was a life-saving 35 C (63 F) warmer than the outside air!

The burly beaver builds a much sturdier lodge of logs, branches and rocks, cemented with mud and vegetation dredged from the waters that surround it. A beaver lodge is much bigger than it appears because a large portion of the lodge is hidden underwater. In Kananaskis Country I was able to measure the base of a large abandoned lodge where the water had drained away. It was 32 metres around and over three metres tall. When such a lodge is covered with snow it is an impenetrable sanctuary from predators and a relatively warm refuge from the frigid extremes of winter. The inside temperature usually hovers around the freezing point even when the outside temperature plunges to a teeth-chattering -45 C.

Both beavers and muskrats huddle with their own kind to save energy in the winter. As many as 12 beavers have been counted snuggling inside the same lodge, and a crowded muskrat mound may hold half a dozen musky lodgers crammed together. The cramped living conditions save the animals precious energy by

lessening the drain on their body heat.





Even when beavers plan ahead, the communal cache rarely contains enough food energy to sustain them through the winter. So in summer when the living is easy, beavers pad their bodies with fat, adding as much as 40 per cent to their total body weight. Half of the fat is stored in their tail, and through the long cold days of winter the volume of a beaver's tail actually shrinks by a half, as the animal consumes the energy stored within it.

The muskrat, on the other hand, lives from day to day. It doesn't pack on extra pounds in summer or store piles of surplus food. Instead, during the winter it leaves the warmth and security of its lodge almost every day and forages underwater for the buried roots of cattails, bulrushes, sedges and horsetails. Sometimes it may dig through 50 centimetres of mud to uncover a juicy root.

To reach their winter food, both the muskrat and the beaver must dive into the frigid water under the ice and stay submerged long enough to gather what

they need. The beaver has it the easiest. Usually its stash of branches is piled beside the family lodge so it needs to be underwater for just a few minutes after which it can quickly return to the warmth of the family lodge. It's a different story for the muskrat. The buried roots and tubers that are close to its winter lodge are soon eaten and the muskrat must swim farther afield each day to find enough food. A muskrat can hold its breath for no more than 58 seconds. In that time it can swim underwater about 46 metres. The muskrat seems to be left with only two choices, both of them bad. Eat everything close to its lodge early in the winter, then starve to death or swim progressively farther afield and eventually drown. The muskrat does neither. In autumn, when the crafty rodent builds its winter lodge, it also builds a number of feeding shelters spaced out across the marsh. These shelters resemble a lodge, only they are smaller, about half the size. All of the feeding shelters are spaced close enough together so that the muskrat never exceeds its breath holding limit and it can forage far and wide.

The muskrat has one final amazing trick to help

Survive under the ice. During a typical dive, the animal often purposefully exhales half the air in its lungs. Along frequently used routes, the exhaled air forms a trail of bubbles trapped on the underside of the ice. The floating bubbles retain their oxygen content but soon lose any dangerous carbon dioxide they may also contain. Researchers have seen muskrats inhaling the cleansed bubbles through their nostrils. So, when a diving muskrat runs short of air, it does the unexpected. It snorts a bubble.

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 and behaviour of owls, penguins and northern bears; arctic, boreal and grassland ecology; and the lives of prairie birds and mountain wildlife. Corporate Partners in Conservation Alberta Companies are Leading the Way

In 2007, the Corporate Partners in Conservation (CPIC) Program initiative was established to provide corporate donors with the opportunity to play a vital role in protecting Alberta's natural heritage.

There are two funds within the program, which corporations can select from to best meet their business and environmental objectives. The CPIC program goes beyond conventional partnerships by offering employees an opportunity to be directly involved in conservation by getting out of the office and into the field—whether it's planting trees, installing or removing fencing or conducting wildlife surveys, it is coupled with the feeling that they are making a difference.

Alberta Conservation Association Corporate Partners in Conservation

Albian Sands Energy Inc. Canadian Natural Resources Ltd. Compton Petroleum Corporation Daishowa Marubeni International Devon Canada Corp. Petro-Canada Sherwood Park Toyota Suncor Energy Foundation Syncrude Total E & P Canada Ltd.



Read more about our corporate partners at www.ab-conservation.com.

To become a *Corporate Partner in Conservation*, contact Cindi Webster at 780-410-1998.

16

Conservation Doing the Right Thing

Robert Boyce's passion for conservation is deeply ingrained; he is a descendant of a long line of conservationists: multiple generations of fur farmers, hunters and anglers.

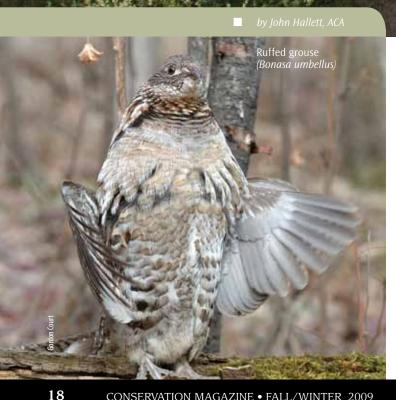
While Robert is doing his job, thoughts of his children and future generations enjoying the benefits of good stewardship are not far from his mind. As Devon Canada's Field Environmental Advisor, he is encouraged—no, expected—to keep in mind Devon's five core values including: *be a good neighbour* and *always do the right thing.*

The Southern Rockies Water Crossing Program is one example of a project where he has applied his conservation skills. This multi-stakeholder program, which was developed by Devon in cooperation with ACA and others, prioritizes crossings which are important to both Devon's operations AND fish. Where both rank high, that area is given top priority, with the goal to ensure there is no overall loss of fish habitat in Devon's operating area.

Robert says, "In this part of the province what we have is an ecologically significant area which is also home to natural resources. No one in our company would deny that our presence can have an impact, so we do as much as we can to lessen our disturbance." Robert explains that collaboration between partners and energy companies, such as the partnership between ACA and Devon, benefits everyone involved—industry objectives are met, temporary disturbance is reduced and balance is maintained.

Robert believes there are a lot of really good companies like Devon out there. "I think there's an increased environmental awareness in the industry, and it continues to mature. If we're going to be here for the long term, we have to strive for continuous improvement. That's not to suggest we're not doing things well now; in fact, I think we do a great job."

Pouce Coupe River Winter Range



Conservation Site Getaway

NW102 床 🛏 🕺

he Pouce Coupe River winter range lies tucked up in northwestern Alberta making it an outdoor enthusiast's dream. Located approximately 75 kilometres west of Spirit River near the Alberta/British Columbia border, this Alberta Conservation Association (ACA) Conservation Site has something fo1r just about everybody who is interested in the wildlife, natural areas, geology and recreational opportunities of northwestern Alberta.

The Pouce Coupe River and surrounding area gets its name from a Beaver Indian Chief named Pouscapee. Originating in Alberta, the river flows into British Columbia and then back north into Alberta, into the Peace River. The river's deep, green valley reaches depths of up to 220 metres (722 feet) and creates a multitude of natural areas, from lush boreal forest to open native grasslands, all of which provide habitat for a wide variety of plant and animal species.

As the name suggests, the Pouce Coupe River winter range is an important overwintering area for ungulates such as elk, moose, white-tailed and mule deer. It provides the important mixture of forest cover and open meadows vital for winter survival. Collectors of shed antlers have ample opportunities to find large specimens, due to the remoteness of the site and the high numbers of ungulates that overwinter here.

Naturalists and hikers who venture into this area won't be disappointed. Native grassland plant and animal species that have disappeared over much of their former Alberta range are still abundant here. Sun-loving prickly pear cactus, sharp-tailed grouse and the familiar crocus are just a few of the species found in the open, dry, south facing grasslands. Ruffed grouse can be heard drumming throughout the spring. In the fall they are commonly found roosting in trees or crouching on the ground along game trails and open areas. For those who venture into the dense mixedwood forests, the opportunities for wildlife viewing continue, as berry-browsing black bears, herds of elk and twig-munching moose are abundant.

While the spectacular Pouce Coupe River valley provides numerous photo opportunities at its many vistas, those that explore the bottom of the valley and the river will also be in for a treat. Camping sites are located beside the clear, cool waters of the river. For the angler, pike, walleye and other native sport fish can be caught in the river's deeper pools. Seasonal flows allow for canoeing, and there is no better way to experience the spectacular scenery and wildlife.







GO WILD ► Before you plan your next outdoor adventure, visit our website at www.abconservation.com and click Conservation Sites where you can locate each site using Google Maps, read property profiles and download driving directions. Copies of the 2009/2010 *Discover Alberta's Wild Side – Guide to Outdoor Adventure* are available at most retail outlets that sell hunting and fishing licenses or contact us toll free at 1-877-969-9091.

Totaling more than 4,800 acres (1,943 hectares), the Pouce Coupe River winter range is approximately 13 times larger than West Edmonton Mall.

The Pouce Coupe River valley slices through millennia of geologic history. Rock hounds will appreciate the wide variety of stones and unusual rocks that can be found in the valley and along the riverbed. Mastodon tusks have been found here. Ammonite fossils harvested from the geological formations opened in the canyon can be found in the Dawson Creek *Northern Alberta Railways Park* museum. However, private collecting is discouraged and any fossils found should be enjoyed but left on-site.

The fall turns the Pouce Coupe River winter range from its lush green to glorious yellow, orange and red. The cool, crisp

air is pierced by the bugling of elk and the short deep grunts of moose. For the hunting enthusiast, this area provides challenging terrain and unparalled harvesting opportunities. Due to the steepness of the valley, few motorized access trails have been developed. The area has become a haven for ungulates and other game. The surrounding rich agricultural areas, in conjunction with the diverse natural areas of the valley have produced abundant numbers of mule deer and trophy bucks.

Whether you visit the Pouce Coupe River winter range for solitude, camping, hiking, photography, hunting or fishing, you will find this historic area and Conservation Site's diversity is unequalled.



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EDMONTON WHITEHORSE

HUNTING

more than food on the table



by Tracey Feist

rom the call of big game in the Peace Country, to world-class fly fishing on the Bow River, Alberta has long been a destination for hunters and anglers from around the world to participate in the province's bountiful harvest of wildlife and fish.

While hunting and fishing continue to be a part of the cultural fabric that defines the province of Alberta, what many may not know is how important these two activities are to the economic well-being of the province.

A new research report, conducted by the Ontario-based Econometric Research Ltd., found that the expenditures on hunting and fishing-related activities in Alberta totalled \$801 million in 2008. This figure includes direct and capital costs, as well as income generated by Alberta-based outfitters and conservation organizations. Sport fishing alone accounted for more than half of that total, bringing in \$469 million; \$296 million came from hunting and the remaining \$36 million was made by outfitters and conservation organizations.

Kelly Semple, Executive Director for Hunting for Tomorrow, was part of the group that commissioned the study. That group includes Alberta Conservation Association, Alberta Agriculture and Rural Development, Alberta Hunter Education Instructors' Association, Alberta Fish and Game Association, Alberta Professional Outfitters Society, Alberta Sustainable Resource Development – Fish and Wildlife Division, Alberta Tourism, Parks, and Recreation – Tourism Division.

Hunting and fishing generate significant economic impacts in Alberta:

- Canadian households spent an average of \$106 going out to movies; Alberta hunters and anglers spent, on average, \$964 a year.
- The Gross Provincial Product (Income) is permanently increased by about \$265 million.
- 3,500 full-time equivalent jobs are permanently created.
- Wages and salaries in Alberta are increased by more than \$151 million.
- Government recovery on these direct expenditures exceeds \$116 million. The Federal government share is more than \$63 million, while the provincial coffers benefit from \$41 million. Local governments received around \$6.2 million in 2008.
- In 2008, hunters and anglers spent \$500 million in Alberta on capital expenditures, large purchases including property, large equipment, vehicles and boats.
- Although these purchases may not be recurrent, they generated a temporary increase of \$457 million in Alberta income, created 8,368 person years of employment, prompted \$276 million in wages and salaries, and generated a total government revenue of \$172 million: \$113.5 million in taxes to Federal, \$47.4 million to Provincial, and \$10.8 million to local government, all within 2008.

Semple says the research really came about after media inquiries had continually asked the same question during interviews: 'What is the economic impact of hunting and fishing in the province?'

"We started the research process two years ago in response to fielding those media inquiries," explains Semple. "The truth was, this was something that hadn't been measured in Canada since 1996 and had never been measured in Alberta. "The Alberta numbers indicate we have a fairly robust economy with a solid labour force movement that takes up hunting and fishing as a recreational opportunity," she says. "But I also think these figures reflect the effort and work we're doing through our hunting mentorships and hunter education programs. It all plays into these numbers."

Heaven on earth for outdoorsmen

Perhaps the numbers are also mirrored by some of the other organizations recently setting up shop in the province. Bass Pro Shops, the US-based retail giant recently opened a 150,000 square foot superstore in April 2009, just north of the Calgary city limits. They even brought in fishing and hunting media personalities Bob Izumi and Bill Dance to help with the store's grand opening celebrations.

Larry Whitley, Communications Manager for Bass Pro Shops says they are extremely pleased with their recent sales and traffic into that store.

"Whenever you open a new store, you have to look at the numbers. We had a substantial amount of catalogue customers in that area, with a database already built. Alberta is perfect. Wow, it's like heaven on earth for outdoorsmen. You've got everything here, hunting, fishing, and camping, canoeing and water sports. It's just a tremendous area to do business in," says Whitley.

With resident hunters and anglers spending an average annual expenditure of \$1,147 and \$781 respectively in 2008, Whitley comments that those numbers can certainly add up fast.

"With hunting comes all that camo, bows, guns, electronics and optics that can make it rather expensive. Fishing can get a little expensive too, with the electronics and boats. But we also see a great number of folks spending money on camping and hiking as well as in our nature shops."



WildTV opened its doors in Edmonton back in 2004 and has quickly become a network that features the best in Canadian hunting, fishing and environmental outdoor programming for those avid outdoor enthusiasts. In the past year, WildTV also saw an increase in its business, with 32 new partnerships with cable providers across Canada, as well as additional new programming.

"WildTV is proud to continue responding to the demands of Canadians for top quality outdoor programming," said Ryan Kohler, vice president, WildTV. "That programming strength comes from a deep appreciation and understanding of the outdoors. WildTV staff are real outdoorsmen and women who understand and share the same passion of a true conservationist.

"I believe the growth we've experienced this past year is a direct reflection of the enormous potential in the outdoor entertainment market, coupled with our ability to build successful relationships with our partners," says Kohler.

Other numbers on the rise

Another important statistic that Semple's group Hunting for Tomorrow has been able to track are hunter numbers. Those numbers have increased by 13 per cent over the past year, a number that Semple says is encouraging, especially since there has been a two per cent decline in hunter numbers across North America.

According to Alberta Fish and Wildlife statistics, a record number of 670,000 licenses and 150,000 WIN transactions were processed, making 2008 a record sales year. In 2008, 80,000 more transactions were processed than in 2007.

Semple says they are also seeing an increase in the number of women becoming involved in the outdoors. An example of this: there were 7,394 female hunters in 2008, up 36 per cent. "The Alberta Hunter Education Instructors' Association hosts the largest outdoor women's program every year, right here in Alberta." The 16th annual conference was aptly titled Educating Alberta's Outdoor Women, and featured topics such as GPS, the science of fishing and shooting both a restricted and non-restricted firearm.

"What we're finding is that of those 150 women who attend, over 50 per cent are new participants. And that's really a seeding point for women to participate in our mentorship and other education programs," says Semple.

The Econometric study also emphasizes that tourism driven by hunting and fishing stimulates the province's economy. Non-resident-foreign and non-resident-Canadian hunters and anglers spent \$20.5 million on direct expenditures, and \$1 million on capital expenditures in Alberta. Foreign anglers have identified fishing as a major incentive to visit Alberta.

"Alberta Tourism has always marketed fishing as a destination opportunity in the province and are helping to promote hunting opportunities here. They've seen that the province is a hunting destination of choice for many non-resident hunters, in addition to the millions of dollars they spend."

"The economic impacts are not the only contribution of hunting and fishing to Alberta," notes Semple. "Recreation and the enjoyment of nature are also important, and hunting and fishing allow for quality time spent with friends and family, and these increase the importance of Albertans' volunteerism and conservation activities. Hunters and anglers have always voiced their aspirations for better management of the natural endowments of Alberta, including improved protection for our wildlife and resources."

Even with Alberta in a recession, these statistics seem encouraging she says. "People are more conscious of their spending patterns. Many vacations are now being spent camping. The outdoors is your hotel room. This theme has been very prevalent recently and as food prices escalate and disposable income decreases, people want to take back control. With hunting and fishing, you're in the situation where you are able to say that 'I am in a position to provide for myself and harvest my food.'

"Previous surveys told us that time was the number one reason people don't hunt and fish," says Semple. "Now with the downturn in the economy, people are using their leisure time to reconnect with nature."

To read the Econometric Research Ltd study visit www.ab-conservation.com.

If you are interested in learning how to hunt or fish, please contact: Kelly Semple, Director, Hunting for Tomorrow at 780-462-2444.

WIN cards can be purchased online via www.mywildalberta.com.

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Well-travelled, single whooping crane looking for room to share in Texas and Alberta.
Prefer marshes, soft or coarse grass, reeds or sod.
Highly vulnerable to changes in my environment.
Once near extinction, looking for a comeback.

The Calgary Zoo's Centre for Conservation Research is working collaboratively to recover threatened and endangered species such as the whooping crane. One of the challenges is ensuring there is enough room for this graceful bird to survive.

Make Room, Share the Planet.

Contact the Calgary Zoo by phone at 403-232-9391 or visit www.calgaryzoo.org. Located in downtown Calgary on St. George's Island. Hours of operation are from: 9:00 a.m. to 6:00 p.m., daily (open 364 days a year).

Calgaryzoo

© Gordon Court

Alpine Adventures at Caw Ridge Nature Plays Out Above the Treeline

by Brian Bildson

There are very few places in the wild that I feel more connected to than Caw Ridge. As a new-to-Alberta trapper, I accidentally discovered Caw Ridge while making my way into the mountains from my Kakwa trapline back in the early 1990s. Somehow the fates had steered me to one of Alberta's most dynamic mountain ranges, and for me it was love at first sight. The romance continues to this day.

From my perspective, what's not to love about Caw Ridge? This incredible piece of mountain heaven contains the largest mountain goat herd in the province, magnificent bands of bighorn sheep, both species of deer

(white-tailed and mule deer), and a wide sweep of predators inclusive of cougar, grizzlies, wolves, wolverines, coyotes and black bear. It is also the main migration and staging route for the Prairie Creek and Redrock mountain caribou herd. Over 90 mountain caribou were recorded passing over Caw making their way back to their summer range, just this past spring.

Often, it's the smaller species that provide the drama when visiting Caw Ridge. Whether it is a hoary marmot, Richardson ground squirrel or a miniscule pica, there's always something going

on. In the spring, I came upon a marmot family who had evidentially just completed the spring cleaning of their winter den. Based on the size of the dung pile that they had pushed out of their winter quarters, the family had been eating lots of fiber.

Caw Ridge is, ironically, one of the first places where I heard about Alberta Conservation Association (ACA). In those early days I often met Steeve Côté and Marco Festa-Bianchet of the University of Sherbrooke who were conducting their goat research while based on top of the ridge. As they told me about their project, I was pleased to discover that some of the research Conservation Fund. While I didn't know much about ACA, I was happy to know some of my license levies were being used for on-the-ground research.

was funded through hunter and angler dollars via ACA's Grant Eligible

I must admit though, I wondered if this group could weather out several months of research above the treeline in what can be a very inhospitable place. Without exception these folks are hardy! Over the years I have met a series of Steeve's research students on top of Caw Ridge. This area dishes up some real weather events over the season, and they just keep coming back

for more.

I remember one memorable 4th of July weekend I went up for a visit. As we sat in the research shack having a coffee and a visit, a fierce summer storm blew in without warning. Watching from the window we saw the winds increasing and snow falling. I ended up spending the night on the floor before I was able to leave. I had it easy though; as the snow piled up, the researchers were unable to use quads for several days. This resulted in many miles on snowshoes for them.

Grizzly bear preys on juvenile goat

Many of my memories on Caw Ridge revolve around wildlife observations. Nature plays itself out for all to see when you're above the treeline. I can still see the grizzly bear hunting goats one day. His thick spring coat rippled in the wind as he scented the air for his prey. The bear had popped out on a ridge top and, unbeknownst to it, there were a band of goats just below the grizzly having a dust bath.

The grizzly paced back and forth across the ridge top pointing his nose into the wind seeking the scent of fresh goat. That day, the fierce crosswinds were his enemy and the goat's friend, for although the bear was only



metres away from the goats, the roll of the hill hid them from view. A crosswind blew their scent away. The bear left without even knowing the goats were there. However, sometimes the bear wins. Just this past season, 10 of last year's goat kids disappeared, and the grizzly is the chief suspect.

Another fond memory is a visit during one sunny winter day when I made my way up top to see how the animals were faring. I spotted a band of bighorn sheep feeding along a windswept slope. One of the wildlife values of Caw Ridge is the fact that the winter winds keep most of the snow swept clean on the ridges, making it a good winter habitat.

As an aspiring sheep hunter I was eager to observe the sheep, so I worked my way as close as I could and sat down to watch them. Much to my delight the sheep fed my way and ended up bedding all around me. As I sat there I counted more than 42 bighorns, some only 20 metres away. I thought I had died and gone to heaven. I couldn't believe that a wild species outside of a park would be this comfortable around man.

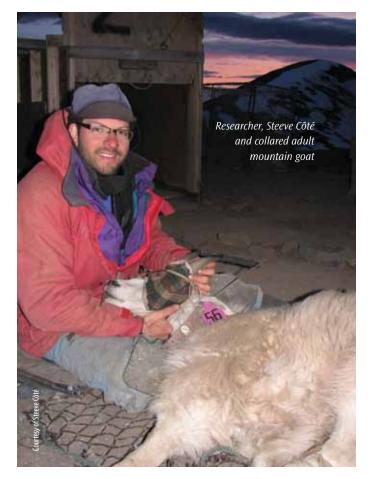
Caw Ridge is much more important than just a place to experience alpine adventures. The research being conducted and partially funded by ACA on Caw Ridge is world-class and making a difference. The research has been instrumental in reopening a goat season in Alberta. It is also the longest running research program on marked ungulates in the world. Every year new findings continue to amaze and delight and provide valuable data.

Caw Ridge deserves the respect and admiration of all Albertans. While it may have been random rambling that led me initially to Caw Ridge, it is the magic of Caw that keeps bringing me back. My hope is ACA can keep working with folks like Steeve Côté and his research associates to keep the magic alive and the data flowing. See you above the treeline!

Research Findings:

- Mountain goats are very sensitive to helicopter disturbance. Helicopters should not be allowed to fly within two kilometers of mountain goat habitat.
- Sexual dimorphism in horn length is substantial among yearlings, but females gradually catch up to the horn length of males. Males grow thicker horns than females as yearlings, and retain thicker horns through life.
- Kid production increased with female age from four to six years, peaking at 80% at eight to twelve years. Fertility appeared to decline after 12 years of age.
- Adult survival was greater for females than males. For both sexes, survival was lower for two-year-olds than for older goats. Survival of adult females was similar to that of other female ungulates of similar body size but survival of adult males appeared lower, especially for those younger than four years and older than seven years.
- Paternity was highly skewed, with 9% of 57 males siring 51% of 96 offspring assigned over 12 years. Male yearly reproductive success increased with age until nine years. Mass was a stronger determinant of siring success than age, horn length or social rank.
- Predation played a limited role on population dynamics. Predation on small, isolated populations of mountain ungulates could vary with the behavior of individual predators in a density-independent fashion, and therefore may be highly unpredictable.
- Native mountain goat populations are sensitive to overharvest if adult females are shot.

For more information on the Caw Ridge goat research visit: http://mouflons.pvp.ca/.



GRANT ELIGIBLE CONSERVATION FUND

NEW! Changes in application dates and deadlines.

RESEARCH

Applications will be accepted between November 1 and December 1, 2009.

CONSERVATION SUPPORT AND ENHANCEMENT

Applications will be accepted between January 2 and January 29, 2010.

Funded by the province's hunters and anglers, the Grant Eligible Conservation Fund annually supports a variety of projects both small and large, which benefit Alberta's wildlife and fish populations, as well as the habitat they depend on.

Go to **www.ab-conservation.com** for application and funding guidelines.

For more information, contact Amy MacKinven, GECF Administrator at 1-877-722-GECF (4323).



Rocky Mountain High During Winter's Lows



Fishing Alberta's High Mountain Lakes

Window Mountain, summer.

he angling season doesn't have to end when the larches drop their leaves and the skies drop metres of snow. For the very adventurous angler, ice fishing one of Alberta's high mountain lakes might be a cabin fever daydream worth considering.

Alberta's high mountain lakes can be described as majestic, powerful, energizing and spiritual destinations for the outdoor enthusiast. They instill a true sense of wilderness, leaving you feeling free, yet at the same time mindful that you are bound by Mother Nature. For those willing to embark upon the adventure and exertion required to discover these circue basins, the reward is an unforgettable experience.

For those lakes that are open year-round to angling, a winter excursion into one of these areas can be even more memorable than in summer – with a heightened sense of isolation and tranquility. In particular, you notice audible differences: many familiar sounds are missing such as the rustling of vegetation along the lake shore, the trickling sound of water flowing from the high cliffs above, the cackling of the Clark's nutcracker perched on a Krumholtz pine, the squeak of a pika on the scree slope across the lake, or the splash of a trout while surfacing during a mayfly hatch. There is a sense of quietude for the eyes as well; winter's monotone backdrop is only offset by the bright blue sky as compared to summer's vibrant alpine landscape.

Though the surroundings may seem desolate and abandoned, if you look closely there is life all around. The snow surface often tells a story stamped by various animal species you wouldn't otherwise experience.

Some high mountain lakes support viable, healthy fish populations year-round, which, when combined with the natural surroundings, results in an angling experience like none other. The ice-free season is typically short-lived and the fish that occupy these frigid waters are busy filling up on anything that they can find. Angling a high mountain lake can, therefore, sometimes be more productive than any other trout fishery. However, some high mountain lakes possess fussy fish where certain techniques and fly patterns produce far better results than others. The waters are so clear that sometimes the fish will scare extremely easily and almost nothing will seem to interest them, while some days they will strike your bobber.

Not all high mountain lakes in Alberta are open to angling year-round and not all are safe for winter backcountry travel. The barren surroundings may not appeal to everyone, but in actuality angling is not the primary objective of a winter trip into the alpine. The arrival is itself a personal achievement, having conquered the elements and obstacles faced along the way. The adventure is guaranteed, the fishing is typically outstanding, and the spark to begin planning for summer's angling season will most surely be ignited.

To find high mountain lakes like Window Mountain, pick up a copy of Barry Mitchell's Alberta Fishing Guide. For winter fishing opportunities discover ACA's aerated lakes at www.ab-conservation.com.

Conservation in Action



■ by Michelle Curial-Hébert

sk any adult what is his or her favorite childhood memory, and it's quite probable you'll hear it involves fishing. Whether it's quietly dipping a bob in a still, cool pond on a hot, sunny July day; feeling the sun's warmth on your back while ice fishing in February on a clear, blue-sky Alberta afternoon; or casually trolling a line behind Grandpa's old aluminum boat, oblivious to the chugging of the motor; a fishing memory is likely to create warm fuzzies in the crankiest curmudgeon!

It's also very likely that fishing has provided many youth with a fun and challenging activity that has allowed them to gain value and respect for the outdoors and the environment.

Conservation in action is demonstrated by a committee led by former Alberta premier, Ralph Klein, who along with the Honourable Ted Morton, Minister of Sustainable Resource Development, recognized the value of this connection between the outdoors and fishing and created *Kids Can Katch*. The goal, to create a catch-and-release fishing pond that will give city kids a chance to go fishing. Once "hooked" it is hoped that these same kids become future conservationists who will take a greater interest in caring for other species.

In May, Ted Morton joined Ralph Klein to promote this program by assisting in pond stocking in Kananaskis Country, releasing 800 rainbow trout. One key fund-raising event was a dinner and auction in June. The event raised \$590,000 towards the \$850,000 pond. It is through various fund-raising activities that the *Kids Can Katch* pond, which will be located by the Sam Livingston Fish Hatchery in Calgary, will be able to open by the next summer (2010).

Partners:











Dave Byler, Trout Unlimited Canada

Ducks Unlimited Canada



LakeTrout

The Honourable Ted Morton, Minister of Sustainable Resource Development. Top: 1958 at Jackson Lake, Wyoming. Bottom: July 2, 2009 on the Bow River.

Thanks to the support of committed organizations and individuals. Their belief that getting children outdoors is beneficial, will promote not only the development of the child itself, but also the heritage of future anglers, fisheries management and in the end, conservation and the environment.

Establishing and fostering the tradition of fishing to youth is necessary to champion conservation in Alberta. This *Kids Can Katch* pond will serve to pass down the heritage to a child who may not have otherwise had this opportunity.

For more information about Kids Can Katch and how you can help, contact:

Don Pike, Trout Unlimited Canada Ph: 403-221-8371 Toll free 1-800-909-6040 e-mail: pike@tucnada.org



see the possibilities in a changing world

2009 report on sustainability

We were the first. Suncor Energy pioneered the development of the oil sands, creating an industry that is now a key contributor to Canada's prosperity. Today, Canadians are asking us to do more – take decisive action on global environmental issues. We're listening. Investments in new technologies are helping us produce energy in a way that reduces our impact on air, land and water. As the Suncor record shows, the path to success begins with seeing what's possible.



decrease in absolute water use at oil sands from 2003 to 2008



Find out more about how Suncor is responsibly developing North America's energy supply. www.suncor.com/sustainability







Wolverine (Gulo gulo)

The wolverine is the largest member of the weasel family, weighing up to 15 kg and reaching over 1 m in length. Their fur is dark brown, with white markings on their chest and a wide tan coloured stripe that runs along each flank to the base of the tail. Wolverines occupy very large home ranges — males usually greater than 500 km² (about the size of Waterton Lakes National Park) and females 100 - 200 km². These large home ranges are needed in order to satisfy the wolverines relentless search for food. Wolverines prey on small mammals such as marmots (*Marmota* spp.), snowshoe hares (*Lepus americanus*) and ground squirrels (*Spermophilus* spp.). Wolverines are extremely powerful and have been known to kill animals several times their size, such as caribou and deer; however, most of the ungulates they consume are scavenged as carrion. Wolverines occur in the Rocky Mountain, Foothills and Boreal Forest natural regions in Alberta.

Overall, little is known about wolverine populations in Alberta. Since wolverines are one of Alberta's furbearers, much of the information we do have comes from fur harvest records. Lack of information on demography, distribution and ecology has led the Alberta government to list wolverines as a "Data Deficient" species in the province.

PUBLICATIONS MAIL AGREEMENT NO.41260556 RETURN UNDELIVERABLE CANADIAN ADDRESSES TO

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