

Annual Report 2009/2010



Alberta Conservation
Association

Conserving Alberta's Wild Side



Annual Report 2009/2010

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Our Mission

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

Our Vision

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



Charitable Registration Number: 88994 6141 RR0001

Cover Photo: Marco Fontana, Biologist, ACA is conducting Bull Trout stock assessments. Our fisheries studies on the Upper Oldman River and North Saskatchewan River systems have resulted in the protection and conservation of key spawning and rearing habitat in both watersheds.



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Member Groups:

Alberta Fish & Game Association
Alberta Hunter Education Instructors' Association
Alberta Professional Outfitters Society
Alberta Trappers' Association
Nature Alberta
Pheasants Forever, Alberta Council
Treaty 8 First Nations of Alberta
Trout Unlimited Canada
Wild Sheep Foundation Alberta

Board of Directors

Alberta Conservation Association Board of Directors meets quarterly and consists of nine member group representatives, one Provincial Government representative, four Public at Large representatives, one academic representative, one industry representative and the ACA/University of Alberta Chair in Fisheries and Wildlife.

Executive

Randy Collins, Chairman - Alberta Fish & Game Association
Patrick Long, Vice Chairman - Wild Sheep Foundation Alberta
Dr. Lee Foote, Treasurer - Public At Large, Academic Representative
Calvin Rakach, Secretary - Public At Large, Eastern Region
Brian Bildson, Past Chair - Alberta Trappers' Association

Directors

Tom Bateman - Southern Alberta Board Liaison,
Alberta Hunter Education Instructors' Association
Dr. Mark Boyce - ACA University of Alberta Chair in Fisheries and Wildlife
Bob Byers - Alberta Professional Outfitters Society
Deryl Empson - Minister's Representative
Alberta Sustainable Resource Development,
Sandra Foss - Nature Alberta
Colin Gosselin - Public At Large, Northeast Region
Bob Haysom - Pheasants Forever, Alberta Council
Adam Norris - Public At Large, Northwest Region (as of March 31st, 2010)
Don Pike - Trout Unlimited Canada
Jeff Smith - Public At Large, Southern Region
Vacant - Treaty 8 First Nations of Alberta



About Us

At Alberta Conservation Association, we feel most at home when we're enjoying the natural wonders of our province. We immerse ourselves in Alberta's wild side while encouraging others to do the same – working to ensure these extraordinary outdoor opportunities are available not only for your future, but also for the futures of generations to come.

Annually, ACA directs more than \$10 million towards conservation efforts, delivering a wide variety of projects and services across the province that include Wildlife, Fisheries, Land Management and Communications programs. By donating and securing land for conservation, our donors and partners work with us to create lasting legacies. Our initiatives, scientific studies and passion for conservation help conserve wildlife, fish and habitats for all Albertans to enjoy.

We are lucky to live and work in such a precious place, surrounded by natural beauty and untamed character. Take advantage by enjoying some of the 250,000 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.

Delegated Roles and Responsibilities

Alberta Conservation Association (ACA) holds special status as a delegated administrative organization (DAO), which means that we deliver responsibilities as outlined in the Wildlife Act and defined in a Memorandum of Understanding (MOU) with the Ministry of Alberta Sustainable Resource Development (ASRD).

In our role as a DAO, we work in partnership with ASRD, particularly the Fish and Wildlife Division, in developing program priorities that support the enhancement and management of Alberta's wildlife and fish resources.

Brendan Ganton (Biologist)
and Britt Keeling (seasonal), ACA.

Chairman's Report

While watching the news on a local Edmonton station one night, I couldn't help but smile when a public service commercial aired during primetime about Alberta Conservation Association and one of our major initiatives: the *Discover Alberta's Wild Side Guide to Outdoor Adventure*. Whether we decide to hunt, fish, take a nature walk, snap a few pictures of wildlife or just breathe in the great outdoors, the Guide is a must-have for all Albertans. It showcases not only exceptional areas throughout this great province conserved for everyone to enjoy, but also the partnerships that made it happen.

We have moved in the right direction on the communication front by creating partnerships to help leverage our advertising dollars. This has allowed us to use television, radio and print, plus the web and social media, to get the message out – that at ACA, we are spending our conservation dollars wisely for the benefit of Alberta's wildlife and fish populations and the habitat they depend on.

This year saw the creation of the new "Recruitment and Retention" granting program that ensures valuable dollars will be given back to those that need it most – whether it be a new dock for a youth camp, an antelope fencing project, a trapping education course, or additional funds for stocking more fish. It's your hunting, angling and trapping dollars that are being used for what they are intended; conservation and the creation of recreational opportunities that inspire an appreciation of the outdoors.

Being part of this board and working with cream of the crop stakeholder groups that have Alberta's wild habitats on the top of their priority list has been a pleasure this past year. Getting the information out to all Albertans about the good work of the Alberta Conservation Association, its stakeholders and its invaluable staff is the icing on the cake.

We can only move forward in ensuring this continues to happen, and with the vision of the board and staff at the ACA, I know this is a reality. Personally, I hope I can bring the spirit of fresh air, fresh fish and fresh thinking to all Albertans in our quest to make Alberta a better place for our habitat and for generations to come.



Randy Collins

Chairman, ACA Board of Directors
Alberta Fish and Game Association Representative



We would like to welcome Randy in his first year as ACA Chair.

Randy is an angler at heart and one of his goals with Alberta Fish and Game Association is to put "fish" back in the name and give equal promotion to all outdoor pursuits. His most memorable moments are when he gets to share his passion for fishing with those that don't have the opportunity to enjoy it on a regular basis. That's why, every year for the past 17 years, Randy has been involved with the Fun Fishing Day for the Disabled at Camp He-Ho-Ha. The AFGA club he belongs to won a Canadian National Fishing Award for its work in this event. Humbly, Randy says he is not in it for the recognition, but purely for no other reason than to ensure disabled Albertans can enjoy the great outdoors and to take part in a day of fishing and fun - which is exactly what has happened.

President and CEO's Message



2009/10 was a record year for conservation in Alberta. Despite economic issues casting shadows around the world, our corporate partners continued to grow with us – choosing social responsibility for conservation as an integral component of their day-to-day business. Corporations are *acting* on their environmental statements by partnering with us on tangible and measurable projects.

With the hard work of our staff and the dedication of our partners, we brought in more than \$6 million in non-levy revenues – a record amount for ACA. This influx of revenue allowed us to put ACA's name on title for nearly 3,800 acres of Conservation Sites. The best part of this accomplishment is that the vast majority of these sites are held in partnership with Nature Conservancy of Canada (NCC), Ducks Unlimited Canada (DUC) and/or Alberta Fish and Game Association (AFGA). The results speak for themselves: we clearly accomplish a great deal more for conservation by working in partnership with other groups than by working independently. I believe our conservation partners feel the same way, and I'm anticipating even larger legacy conservation land purchases for Albertan's.

In fact, partnerships became the theme for much of what ACA did in 2009/10. We launched a three-year pilot project to promote hunter, angler and trapper retention, recruitment and education through a directed granting fund. The pilot project has two key goals: the first to retain, recruit and educate hunters, anglers and trappers; the second to promote more cooperation and partnerships between our member groups and other conservation-minded organizations. Our first year was hugely successful with a wide range of groups across the province participating in the program and many new partnerships being formed.

Success also came when looking for partnership opportunities to enhance our Wildlife, Fisheries and Land programs. In 2009/10, we worked directly with AFGA (and affiliated clubs), ASRD, Delta Waterfowl, DUC, Edmonton and Area Land Trust, NCC, Trout Unlimited Canada (and affiliated clubs), Tree Canada, and various watershed groups throughout the province. These partnerships led to more efficient and effective use of conservation dollars and greater overall benefit for wildlife, fish and habitat in Alberta.

The accomplishments we achieved this past year are astounding. In 2009/10, we published the second edition of *Discover Alberta's Wild Side – Guide to Outdoor Adventure* and distributed 100,000 copies, directly increasing our website visits to over 3,000 per month. We stocked over 130,000 rainbow trout in 60 water bodies across Alberta, aerated 19 lakes, participated in 24 aerial ungulate surveys, worked on six kilometers of stream bank riparian habitat, walked 267 kilometres of transects in search of sharp-tailed grouse leks, surveyed 26 lakes for piping plovers, electrofished more than 200 kilometres of stream to determine distribution and abundance of various sportfish, participated in the prescribed burning of 1,557 acres (630 hectares) of habitat to create ungulate winter range, completed 40 other conservation projects and provided funding for over 91 (68 GECC, 23 Grants in Biodiversity) other conservation projects through our granting programs.

It has been a great – and clearly busy – year for ACA, and I know we wouldn't want it any other way. With the help of our many conservation partners, we are moving with positive momentum into the coming years; to accomplish even bigger conservation goals, ones that we once never even considered possible.

Todd Zimmerling

President and CEO
Alberta Conservation Association

A handwritten signature in dark ink, appearing to read 'Todd Zimmerling', written in a cursive style.



Conservation Milestones

(since our inception in 1997)

Wildlife

1,290 nest boxes established with 200 refurbished annually

290 nest tunnels installed to benefit ground nesting ducks in areas where natural habitat is marginal

57,000 ducklings fledged from these nest boxes/tunnels (estimate)

1,071 piping plover nests found, 891 exclosed. We've walked the equivalent of three quarters of the way around the world searching for plover nests (~28,800 km)

Fisheries

70 kilometres of riparian area enhanced

56 on-the-ground riparian projects conducted on more than 6,500 hectares (over 100 quarter sections)

1.6 million fish stocked (annual stocking ranges between 122,000 to 144,000)

230 kilometres of stream electrofished for sampling

53 angler surveys conducted

156,197 anglers surveyed

Land

13,000 acres secured under the Landowner Habitat Program (LHP)

76 landowners are involved in the LHP

9,700 acres have ACA on title (sole or as a partner)

Partnerships

Our success is a result of hundreds of partnerships that we have developed since 1997. We have achieved more for conservation with the assistance and contributions from our member groups, Corporate Partners in Conservation, Corporate Donors, landowners and conservation groups than could be achieved on our own.



Our People Our Culture

Chad Croft, NE Regional Manager, ACA.

Health and Safety Program

Health and Safety is an integral part of all ACA work environments. No matter who works on ACA projects – employees, contractors, volunteers, visitors, or the President and CEO – they must adhere to the applicable health and safety practices, taking personal responsibility for the health and safety of themselves and others.

Our ACA Health and Safety program is centered on several key elements:

- Hazard assessment is critical for the identification and control of workplace hazards and we have established a detailed and effective process for staff to use for well-known existing hazards as well as identifying new hazards.
- Personal Protection Equipment (PPE) is a key requirement for ensuring safety of all persons on ACA work sites and includes both general PPE and specialized PPE geared toward specific tasks and hazards.
- Safety training and meetings are mandatory for all employees and important for ensuring everyone has the necessary skills and knowledge to work safely.
- Regular inspections and maintenance are conducted to ensure all ACA vehicles and equipment are kept in safe operating condition.
- Effective safety communication requires appropriate communication devices, plans and procedures, and is critical for minimizing potential hazards as well as ensuring all persons are well prepared for potential emergency situations and incidents.
- Incident reporting and investigation involves a rigorous process to address and respond to all incidents that result in personal injury or property damage. This process provides important information for understanding how incidents occurred in order to implement effective corrective actions and improve processes. Reporting and in some cases investigating near misses are also crucial to address potentially unsafe conditions and minimize future reoccurrences and hopefully prevent possible injuries or property damage.

Stephanie van Huystee, Biologist, ACA.

2009/10 Overview

We continued to review and revise the Health and Safety Manual, incorporating insight, comments and suggestions from ACA staff that are using the program on a regular basis in their day-to-day project work. The goal remains to have a document that is comprehensive and user-friendly.

This year substantial effort went into improving the mechanisms and processes for safety communications and planning. New communication devices were put into service for testing, a new third-party provider for communicating with and tracking persons in the field was tested and subsequently put into service, and an online application process for creating and distributing Project Safety Plans was created and implemented.

Given the large amount of driving involved with ACA work, vehicle-related accidents and near misses continue to be the most common type of workplace hazard. Of these incidents, one minor injury occurred. All incidents are taken seriously and reviewed to understand their nature and make corrections to reduce or eliminate this hazard.



Human Resources

A strong group of employees is essential to the success of the organization. We have 76 full-time employees and 15 seasonal staff in regional offices located throughout the province. They are key to ensuring ACA's conservation programs are delivered safely, on budget, on-time, with the highest regard to quality.

2009/10 Overview

Service Awards

The revitalization of the employee service award was a great success as the program now gives employees a choice in the selection of their gift. The following individuals reached their 10 and 5 years of service with ACA.

10 Years of Service

Lance Engley, Senior Biologist

Mike Grue, Intermediate Biologist

Kris Kendell, Senior Biologist

Andy Murphy, Senior Technician

5 Years of Service

Robert Anderson, Senior Biologist

Jason Blackburn, Intermediate Biologist

Doug Manzer, Wildlife Program Manager

Employee Survey

Our yearly employee survey indicates:

Ninety-two per cent of employees said they were satisfied with ACA as a place to work; that is up from 2008 which was 80%.

Employees had a year to work with the new performance review format and the satisfaction rate is positive. Performance has been linked with the organizations Strategic Business Plan.

Areas that needed to be addressed from the previous years have been dealt with; however, continuous work on the maintenance of those areas will need to remain priority.

Employee Retention

Excellent new employees have joined the organization, bringing with them a range of valuable skills. The turnover rate was at 5.3 %, getting us closer to the 5% target set in the Strategic Business Plan.



Jim Potter, Technician, ACA.

Information Technology Program

Information Technology (IT) is essential to any organization. As ACA operations evolve, the need for IT systems that are reliable and efficient yet flexible and adaptable is critical. For projects to be completed safely, on-time, on-budget, to the highest standard, IT must continually adapt to meet the changing needs of specific programs and projects, as well as ACA as a whole. In meeting these challenges, IT was involved in several new developments in 2009/10.

2009/10 Overview

- *Implementation and support of a new accounting system that improved financial budgeting of all ACA programs and projects.*
- *Creation of new financial reporting and graphing to assist Managers and Project Leaders with tracking manpower and costs of all ACA programs and projects.*
- *Enhancements to ACAWeb, an internal website designed for posting and storing information and documents that are accessible to all ACA employees.*
- *Creation of the new Project Safety Plan (PSP) application used by all ACA staff for planning and implementing every safety aspect of projects.*
- *Implementation of the ACA Board of Directors website, which provides an efficient mechanism for archiving as well as distributing important information to Board members.*
- *In addition, the IT program provided daily technical support to ACA staff for any issues with software, hardware, networking and mobility systems.*

10 Years With Alberta Conservation Association

As dedicated as they
are diverse...

Meet the four who have devoted ten years of enthusiasm and dutiful work to share one vision: conserving, protecting and enhancing our wild side so Albertans can continue to enjoy all our outdoors has to offer for generations to come.

Mike Grue

The Data

- B.Sc. in Biological Sciences from University of Lethbridge in 1994
- Joined Canadian Wildlife Service and Alberta Fish and Wildlife
- Although Mike did not begin working with ACA until its inception in 1997, he worked in partnership with many of the original staff in the Lethbridge office while with Alberta Fish and Wildlife



The Dedication

Mike established his career with ACA as a seasonal technician on the Crop Damage Depredation Program, eventually gaining full time employment. In the past ten years he has enjoyed being part of an impressive range of projects in Fisheries, Land Management and Wildlife.

Both challenging and rewarding, his time at ACA has helped Mike reach milestones and successes specific to the work he is so passionate about. In fact, Mike insists that most days don't feel like work – he describes the workdays as opportunities to employ the latest technology, collaborate with people who are knowledgeable, interesting, and helpful, and continue to learn along the way.

"The best part about the specific work I do is the opportunity to interact with internationally recognized experts in pronghorn research and management."

Kris Kendell

The Data

- Bachelor of Environmental and Conservation Science degree from the University of Alberta
- Biologist with ACA since 1998
- Kris is a member of the Alberta Northern Leopard Frog Recovery Team, on the steering committee for the Northwest Chapter of the Partners in Amphibian and Reptile Conservation, chair of the Alberta Amphibian and Reptile Specialist Group, Director at Large on Canadian Reptile and Amphibian Conservation Network board, and coordinator of Alberta Conservation Association's Alberta Volunteer Amphibian Monitoring Program and Alberta Snake Hibernaculum Inventory Program

The Dedication

As a child growing up in the midst of the city, Kris remained a self-described country boy with a strong attraction towards all wild spaces. He spent countless hours exploring local sloughs, wooded ravines, grassy fields, and woodlots within reach, marveling at the natural world and all it offers. Kris spent most of his time following animals around, imitating their sounds and getting to know smaller creatures and plants at their level.

Kris has been a naturalist all his life, long before he became a biologist. In a world where furred and feathered species dominate the public's attention, Kris plays an important role in increasing the awareness and appreciation of our naked and cold-blooded amphibian and reptile neighbours.



"I often say I have a 'big kid's job' – meaning I sometimes get paid to play in the mud and chase slippery, crawly things! I enjoy observing wildlife and find it rewarding to work with landowners and the public, increasing their knowledge and understanding of the natural world and conservation."

Lance Engley

The Data

- B.Sc. in Environmental and Conservation Sciences from the University of Alberta
- Joined ACA in the spring of 1999 as a junior technician with the Piping Plover Program
- One of his major roles is to ensure that the Species at Risk programming aligns with ACA's overall goals

The Dedication

Lance worked as a fishing guide in the Northwest Territories before joining ACA. And while he bid goodbye to that career long ago, his passion for the activity has only deepened. Beyond being an avid angler, Lance enjoys almost anything that allows him to spend time in the outdoors: he recently obtained his Possession and Acquisition Licence and completed his Alberta Conservation and Hunter Education course, and is hoping to begin hunting this fall.

Sharing many of his values with ACA, Lance wouldn't change a thing over the past ten years. As for the next ten? He will continue to advance his career in hopes of future generations being able to enjoy the diversity of wildlife in Alberta's great outdoors just as much as he has.



Andy Murphy

The Data

- Began work with ACA doing seasonal waterfowl pair and brood surveys with Jim Potter near Buffalo Lake
- Joined ACA full time in 2000

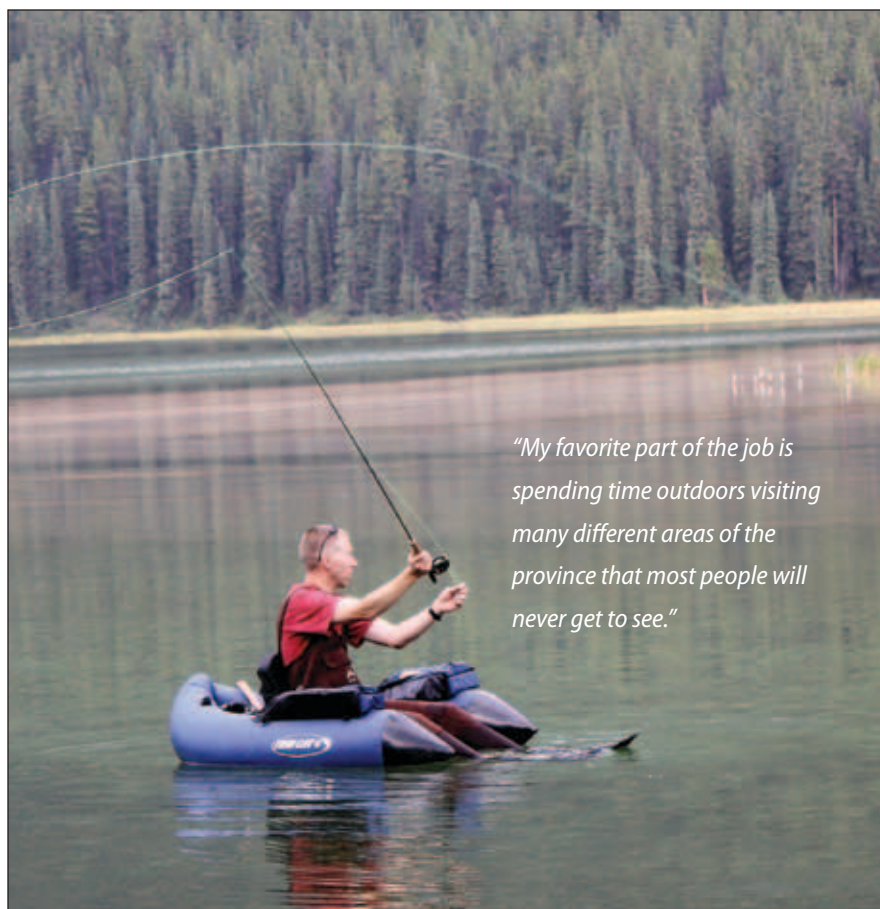
The Dedication

Andy has always known exactly what he wants to get out of his career: his passion lies in conserving native habitats, and his preferred guilds are waterfowl, upland game-birds and ungulates. He is particularly fascinated by incubation behavior and reproductive strategies and stresses.

Andy originally managed the Landowner Habitat Program in the Red Deer office, and began helping with habitat securement and conservation site maintenance. These projects continue to take most of his time, although he's also enjoyed some variety by contributing to Aerial Ungulate Surveys, Sharp-tailed Grouse Lek Surveys, and even backpack electro-fishing cutthroat trout in the foothills. Another memorable initiative? Spending an entire field season working hair by hair – he collected bear fur in order to estimate Alberta's grizzly population.

While Andy's work is his passion, his highest priority is his family. His hobbies are hunting, canoeing, bird watching and raising cattle.

"I sometimes get paid to 'watch or look for wildlife.' The money isn't as good as professional hockey, but the 'work?' Much better!"





Conservation Programs

Communications Program

As 2009/10 unfolded, it didn't take long to realize we were in for an interesting year. Internal requests for communications, web, branding, print and design support were on the rise, and with it, external requests from our member groups who looked to us for expertise.



One of the first major external projects had us partnering with Trout Unlimited for *Kids Can Catch*, the catch and release fishing pond fundraiser in Calgary. We provided writing, editing and web support as well as the event logo design and branding development.

We also partnered with Sherwood Park Toyota to raffle a 2010 Toyota Camry, assisting Alberta Fish and Game Association (AFGA), the Beaver Hills Initiative, Ducks Unlimited (DUC), Edmonton and Area Land Trust (EALT), Nature Conservancy of Canada (NCC) and Strathcona County with raising awareness and funds for the purchase of Golden Ranches. Ticket sales became an ambitious endeavour taken on by all staff, with our offices competing to see who could sell the most tickets. All proceeds went towards purchasing the Golden Ranches property.

Despite our busy workload, promoting and building our brand always takes precedence: From our internationally read publications – *Conservation Magazine* and *Discover Alberta's Wild Side: Guide to Outdoor Adventure* – to our Conservation Site signs, advertising, website and trade show displays. We work with staff to promote their projects in the most engaging and effective way possible by employing a multitude of communications tools. Some projects we assisted with this year include the Alberta Volunteer Amphibian Monitoring program display banner, pheasants display banner and brochure, sharp-tailed grouse brochure, fire interpretive hike panels, Reptiles of Alberta booklet and land donation ads.

We made major enhancements to our website in 2009/10. As readership and content continued to increase, we focussed on the tools required to engage readers online and Search Engine Optimization (SEO) mechanisms. Our year-end numbers show that 32,297 unique visitors spent an average of 2.55 minutes on our site. Monumental upgrades included the Aerial Ungulate Survey and Conservation Site databases as well as our homepage and Enhanced Fish Stocking page.

Through the year, we continued to look for avenues to communicate our messaging and capture new audiences. In February 2010 we incorporated social media into our business strategy. We created accounts on Facebook, Twitter and YouTube and fully launched into the community in April. Our online subscriptions grew from 14,103 to more than 17,000. These individuals, who are primarily WIN cardholders, receive regular conservation updates that include online access to the Guide and magazine. That number is expected to double by the middle of 2011 as we receive permission from cardholders who wish to stay connected and informed about how the levies from their hunting and fishing license go back into the conservation of Alberta's wildlife, fisheries and habitat.



2009/10 Overview

- **Discover Alberta's Wild Side: Guide to Outdoor Adventure**
 - Second edition published
 - 100,000 copies were printed and distributed primarily in Alberta
 - 9 international destinations received Guides
 - 387 Conservation Sites totaling 208,000 acres of habitat conserved that offer outdoor pursuits such as hunting, fishing, hiking, berry picking and bird and wildlife watching
- **Conservation Magazine**
 - Two issues published
 - 50,000 hard copies distributed
 - 24,000 online subscribers
- 1 Annual Report produced
- 1 Annual Operating Plan produced
- **Television**
 - 10 one-minute television vignettes produced in partnership with Let's Go Outdoors
 - 48 television occasions resulted (each vignette was aired over a two week period during the prime time supper news breaks)
 - 3 million viewers reached
- **Web**
 - 32,297 people visited www.ab-conservation.com (unique visitors)
- **Radio**
 - 8,320 total occasions on radio produced in partnership with Let's Go Outdoors. These were combined between radio feature stories and the one minute commercials.
 - 1,600 additional occasions recorded with opening and closing billboards on the weekend radio show
 - 4,992 occasions of one-minute daily radio columns, each of these aired at a minimum of three times per day, seven days a week
- 26 Conservation Site signs completed in conjunction with the Land program
- 2010 Toyota Camry raffle tickets sold in partnership with Sherwood Park Toyota
- Accepted as members of Outdoor Writers of Canada and Alberta Magazine Publishers Association



Business Development

Business Development was established in 2007 as a response to growing partnership opportunities and requests. Our nationally recognized, Alberta-based conservation work in Wildlife, Fisheries and Land connect organizations to legacy projects and meet the needs of the communities they live and work in.

The Corporate Partners in Conservation program was established to provide avenues for organizations to play a vital role in protecting Alberta's natural heritage by participating in varying capacities through the: Habitat Securement Enhancement and Management Fund, the Special Project Support Fund or the WIN Card Benefits Program.

Responsibility for, and conservation of the environment is fundamental to the success of these relationships. In recognition of this commitment, Corporate Partners in Conservation receive a seal from ACA that identifies those that are leaders in conservation.

Business Development is also responsible for offsetting the costs of our internationally sought after publications, *Conservation Magazine* and the *Discover Alberta's Wild Side: Guide to Outdoor Adventure*, through the sale of advertising space.

2009/10 Overview

- 6 companies signed on as Corporate Partners in Conservation:

Canadian Western Bank
CTV
Jobsite Workwear
Pacrim Hospitality Services
Penn West Energy
Syncrude

- \$42,237.64 secured in advertising sales in the two issues of *Conservation Magazine* and the 2009-2010 *Discover Alberta's Wild Side: Guide to Outdoor Adventure*.



Wildlife Program

Our Wildlife program includes activities that enhance the diversity and abundance of wildlife and their habitats within Alberta, focusing on not only harvested game species, but also species at risk. Program activities are organized into four areas: Ungulates, Upland Game Birds, Waterfowl and Species at Risk.

In 2009/10, we delivered 24 aerial surveys for moose, elk, pronghorn, deer, bighorn sheep, bison and mountain goats in wildlife management units (WMUs) across the province. ASRD uses these surveys to set hunting quotas and inform the general public, particularly hunters, of population trends. We also worked to enhance winter range for ungulates, participating in planning two prescribed burns affecting 1,557 acres to improve habitat for elk and bighorn sheep in the Clearwater area. Meanwhile, mechanically-clearing an additional 40 acres near Chain Lakes enhanced moose browse.

Our monitoring efforts stretch far beyond those of aerial surveys for ungulates, including inventories of upland birds, waterfowl, species at risk, and a variety of indicator species for evaluating habitat quality. In 2009/10, we made progress developing an efficient approach for monitoring sharp-tailed grouse over broad areas, and the work was recently accepted for publication in scientific literature.

Detecting population trends of upland birds is a challenging pursuit, but necessary for understanding potential impacts of land use decisions. Part of our upland game bird program focuses on farmland systems where we work with landowners to enhance their land for wildlife while meeting the realities of the farming economy. We recently published a booklet with Pheasants Forever titled *Alberta's Ring-necked Pheasants Through the Seasons* that highlights the annual life cycle needs of pheasants. This booklet is targeted toward youth, landowners, land managers and pheasant hunters. A complimentary booklet describing the habitat needs of sharp-tailed grouse was also published and is available to landowners and land managers.

Through a collaborative project with Suncor (formerly Petro-Canada) we detected a 10% loss in grassland habitat to forest encroachment in three key watersheds since 1949. The decline is due in part to fire suppression, which can negatively impact elk by diminishing the availability of grass forage on public land.

In 2009/10, we participated in the delivery of three graduate student projects from the University of Calgary focusing on grassland ecology: the first study examines the cumulative impacts that land use decisions have on pronghorn movement, another compares various reclamation efforts for sagebrush habitat, and the last focuses on conservation planning and recovery of sage grouse.

We also committed to a range of projects that will help conserve and recover species at risk across the province. The MULTISAR program continues to be an exceptional example of successful collaborations among conservation organizations, government and landholders to implement land use decisions that benefit species at risk and rural economies. The program completed three Habitat Conservation Strategies in 2009/10 covering 41,163 acres. In addition, the program signed two habitat enhancement agreements with landholders and completed five habitat enhancements



"In Alberta, it's getting harder and harder to find hunting and fishing experiences that resemble anything like the wilderness our grandfathers enjoyed. We identify what's left of these areas and work to protect the habitat so our future generations might have the opportunity to experience the wilderness as it used to be."

Robert Anderson, ACA



including two upland watering sites, weed control on a quarter section recently seeded to native grass, preparation of 90 acres for reseeding back to native grassland, and installation of a half mile of wildlife-friendly fence.

Similarly, landowner co-operation and collaborations are key to enhancing and protecting habitat for piping plovers across Alberta. Since this work began in 2002, there has been an overall increase in the plover population in the province. Recovery work for northern leopard frogs continues to be challenging, with limited success at reintroducing the species to waterbodies in Alberta. However, we continue to make progress with our work to enhance riparian areas to benefit frogs, which also benefits other wildlife such as pheasants, deer, waterfowl and songbirds.

In 2009/10, we published five wildlife status reports bringing the total number to 67 since 1997. The reports include current information on each species' conservation status that enables formal status assessment and informs long-term conservation planning.

Wildlife program activities in 2009/10 involved over 50 partners and collaborations, consisting of government, industry, NGOs, counties/municipalities, universities, leaseholders and private landowners, and other interested groups.

2009/10 Overview

- 24 aerial ungulate surveys on 8 ungulate species
- 1,700 acres of habitat improved for elk and moose
- 48 landowners participating in the Waterfowl Compensation Program (WCPP)
- 118 waterfowl scare cannons loaned through the WCPP
- 1,300 nest boxes and 175 nest tunnels maintained and monitored
- 4 wildlife status reports published/completed (Athabasca Rainbow Trout, Bull Trout, northern myotis, slender mouse-ear-crec and grizzly bear)
- 2 published brochures: Alberta's Sharp-tailed Grouse Through the Seasons and Alberta's Ring-necked Pheasants Through the Seasons
- 217 amphibian and six reptile observations submitted by volunteers involved in AVAMP
- 3 MULTISAR landowner-specific Habitat Conservation Strategies completed
- 41,163 acres of area surveyed by MULTISAR program as part of the three Habitat Conservation Strategies
- 7,166 wildlife observations collected during MULTISAR surveys including 647 observations of 'Endangered' or 'Special Concern' species
- 26 waterbodies surveyed for piping plovers
- 91% of known piping plover nests protected
- 68.4 % overall piping plover nest success with an estimated 1.01 chicks per nest fledged
- 19 piping plover habitat assessments on 8 lakes
- 50 partners involved in Wildlife program activities

COMPLETED
WILDLIFE PROGRAM
CONSERVATION WORK
FOR 2009/10:

Alberta Northern Leopard Frog Recovery Program

The northern leopard frog (NLF) (*Lithobates pipiens*) has suffered dramatic population declines in many parts of its range in Alberta. Although little studied, the decline in Alberta does not appear to be part of a natural cycle. The species' reduced area of occupancy and fragmented populations led to its listing as *Threatened* under Alberta's *Wildlife Act* in 1996. The status of NLF was re-evaluated in 2003, and confirmed to be *Threatened*. Population and habitat monitoring, reintroductions, habitat protection/stewardship and outreach initiatives are key actions required to help recover NLF populations in Alberta. ACA is a member of the Alberta Northern Leopard Frog Recovery Team.

In 2009, the Town of Taber, its agents, and ACA entered into a partnership that involved habitat identification surveys for NLF as well as various stewardship activities. We also co-ordinated the translocation of NLF eggs into three reintroduction sites in 2009: Waterton Lakes National Park, Wyndham-Carseland Provincial Park and Beauvais Provincial Park. We also contributed data to a provincial disease surveillance program designed to minimize disease transmission among amphibians during reintroductions, and completed NLF surveys in a high priority region within the species' historical range as well as at four reintroduction sites.

Partnerships

Alberta Sustainable Resource Development, Calgary Zoo, Government of Canada Habitat Stewardship Program for Species at Risk, Parks Canada Species at Risk Recovery Action and Education Fund, TD Friends of the Environment Foundation

Alberta Wildlife Status Reports

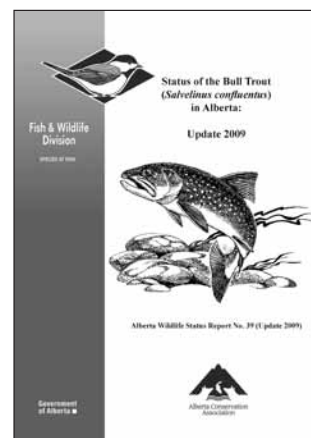
The Alberta Wildlife Status Report Series provides comprehensive summaries of the status of selected wildlife species in Alberta. High priority species are those considered *At Risk* or *May Be At Risk* in *The General Status of Alberta Wild Species 2005*, or considered to be at risk at a national level by the Committee on the Status of Endangered Wildlife in Canada. Each spring, we meet with government staff to prioritize the species that are most in need of a detailed status assessment. Status reports summarize the most current information on the species in Alberta, and provide a basis for the Scientific Subcommittee (of Alberta's Endangered Species Conservation Committee; ESCC) to complete a formal status assessment of that species using criteria developed by The International Union for Conservation of Nature. The Subcommittee provides the ESCC with the formal status evaluation, and the stakeholder-based ESCC then recommends a legal designation for that species to the Minister of Alberta Sustainable Resource

Development. ACA oversees the entire publication process for status reports, including the contracting of experts to write the report, editing drafts, supervising the external review process, and completing the final formatting, and the distribution of printed reports. In 2009/10, we published one new status report (Athabasca rainbow trout) and four updated status reports (northern

myotis, grizzly bear, slender mouse-ear-creep, bull trout).

Partnerships

Alberta Sustainable Resource Development





Shevenell Webb, Biologist, ACA and Kirby Smith, ASRD.

Aerial Ungulate Surveys

ACA and Alberta Sustainable Resource Development (ASRD) work in partnership to conduct aerial surveys for deer, elk, bighorn sheep, bison, mountain goats, pronghorn antelope and moose. In 2009/10, we partnered with ASRD to deliver 24 aerial ungulate surveys across 48 management units in Alberta. These surveys are used by the Alberta Government to set hunting quotas and assist with land use planning efforts. In addition, we funded and participated in trials to assess the ability to observe moose in order to develop a correction factor for improving population estimates in conifer-dominated units along the Foothills of Alberta. We also received funding from the Wild Sheep Foundation Alberta enabling us to survey more sheep ranges than would have otherwise been possible. Results from these surveys will be available for public viewing by early summer 2010, once all the surveys have been completed and our data compiled into report form.

Partnerships

Alberta Sustainable Resource Development, Wild Sheep Foundation Alberta

Alberta Volunteer Amphibian Monitoring Program

The Alberta Volunteer Amphibian Monitoring Program (AVAMP) supports a global initiative to monitor amphibian populations in response to widespread declines in many jurisdictions. The program has a network of volunteers who monitor the presence of amphibians in Alberta, with goals of increasing awareness of amphibians and understanding of their current distributions in Alberta. Alberta's reptile species are also often promoted along with the program. In 2009, AVAMP participants submitted a total of 217 amphibian and six reptile observations; including two hibernacula locations and two non-native reptile reports: snapping turtle (*Chelydra serpentina*) and red-eared slider (*Trachemys scripta*). Data submitted by volunteers represented 70% of the amphibian and 22% of the reptile species native to the province. Program materials, such as a monitoring manual, CD of frog and toad calls, biannual newsletter, and the *Reptiles of Alberta* brochure, strive to increase awareness of the ecological world that is critical to the conservation of amphibians and reptiles. The newsletter also provides a communication conduit between scientific researchers and the general public.

Partnerships

Alberta Sustainable Resource Development, TD Friends of the Environment Foundation

Habitat Enhancement Legacy Partnership (formerly Pothole Creek)

Upland game birds are highly valued for their showy colours, breeding displays and long history in the hunting tradition of Alberta. Ring-necked pheasants require a mosaic of habitat that provides areas suitable for nesting, brood rearing, travel and cover. This year, in partnership with Pheasants Forever Calgary, we continued to work with private landowners, counties and on ACA-managed sites to support enhancement activities for upland habitat. Using information booklets, presentations and site visits, we provided information about pheasant habitat needs and the benefits of habitat diversity to hunters, conservation groups, members of the agricultural community and private landowners. In the coming year, we will continue to develop relationships with key members of the agricultural community, work with private landowners on property habitat plans, run pilot studies to assess wildlife monitoring protocols, and actively work with multiple partners to support enhancement projects in southern Alberta.

Partnerships

Cooperating landowners, Pheasants Forever – Calgary Chapter

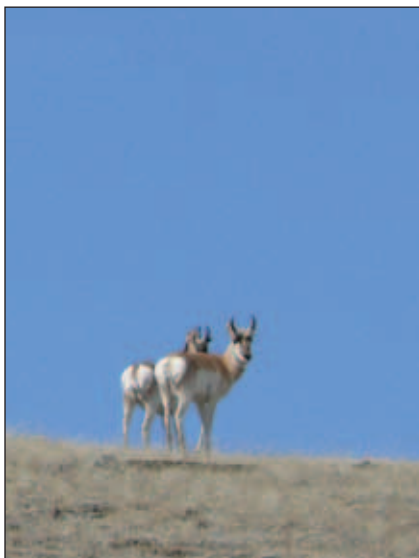
Habitat Selection by Pronghorn in Alberta

Pronghorn (*Antilocapra americana*) is the most specialized and representative large mammal that currently roams free among the diversity of prairie wildlife in North America. It is commonly considered a species of the prairies or grasslands. To better understand the relationship between pronghorn and

its environment, we examined the species' use of habitat at two spatial scales during the fawning, summer and winter periods. We were able to identify three groups of pronghorn based on habitat composition of their fawning ranges, specifically those that dwell predominantly in 1) native grass prairie, 2) cultivated land, and 3) a mixture of native grass and cultivated land. Using these three groupings for comparison, winter ranges were larger than either of the fawning or summer ranges. The selection of habitat types was stronger at the second order than the third order for all groups of pronghorn. Those pronghorn grouped using grassland for fawning demonstrated the strongest selection patterns for habitat features when compared to those using cultivation or the mixed group.

Partnerships

Alberta Fish and Game Association – Zone 1, Alberta Fish and Wildlife, Alberta Parks and Recreation, Alberta Professional Outfitters Association (Legacy Fund and Wildlife Management Fund), Alberta Antelope Guides, Canadian Forces Base Suffield, Foundation for North American Wild Sheep – Eastern Chapter, Safari Club International, Safari Club International – Northern Alberta Chapter (Hunting Heritage Fund), Safari Club International – Alberta Chapter, University of Calgary



Hay-Zama Wetland Monitoring

The Hay-Zama Wetland Monitoring program was developed in response to concerns about the potential impact of oil and gas activities within the wetland complex on waterfowl. As a condition of operation within the Hay-Zama complex, the Energy Resources Conservation Board (ERCB) requires oil and gas companies to monitor staging waterfowl and suspend production of a well if waterfowl numbers exceed the level of 600 individuals within 30 metres of a well site. To monitor waterfowl numbers, we flew weekly aerial surveys during spring and fall migration periods over all producing oil and gas wells within the complex. Our weekly surveys also included an established route over the entire complex to estimate the aggregate number of staging waterfowl observed for each survey, which was then used to assess when the bulk of migration had occurred. We observed peak numbers during the first week of May and the third week of September. Waterfowl concentrations did not exceed threshold levels at any well sites during the 2009 migration periods. We also flew a single aerial survey for bald eagle nests within the complex on June 3, 2009 and observed six active nests.

Partnerships

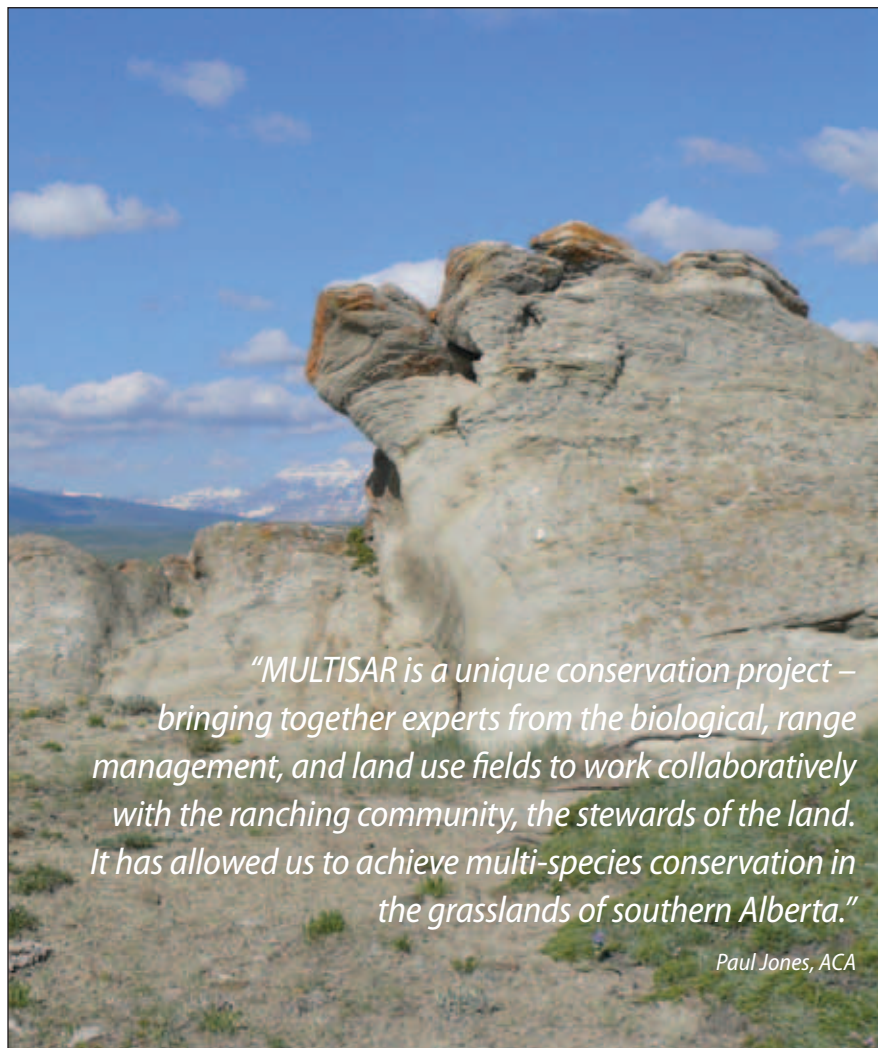
Hay-Zama Committee, NuVista Energy Ltd., Pengrowth Corporation

MULTISAR

Multiple Species At Risk (MULTISAR) is a stewardship program for species at risk focusing on the Milk River and associated watersheds. The program is succeeding due to the collaborative effort between Alberta Conservation Association, Alberta Sustainable Resource Development, Prairie Conservation Forum, and landholders. In 2009 we completed detailed wildlife and range surveys on 41,163 acres of land and completed three Habitat Conservation Strategies. We also entered 7,166 observations into the Fish and Wildlife Management Information System, of which 647 observations were species listed as either 'Endangered' or 'Special Concern'. Habitat enhancements were completed on five properties and include water developments, preparation for native grass seeding in 2010, spraying weeds on recently seeded quarter section, and construction of 800m of wildlife friendly fence lines. We also purchased native grass seed and silver sagebrush for early spring planting in 2010. Through open communication, MULTISAR will continue to work towards building long-term relationships with landholders, government, non-government organizations, and industry in order to implement habitat conservation strategies that benefit both wildlife and landholders.

Partnerships

Alberta Sustainable Resource Development, Canadian Natural Resources Limited, Government of Canada Habitat Stewardship Program for Species at Risk, landholders, Prairie Conservation Forum



"MULTISAR is a unique conservation project – bringing together experts from the biological, range management, and land use fields to work collaboratively with the ranching community, the stewards of the land. It has allowed us to achieve multi-species conservation in the grasslands of southern Alberta."

Paul Jones, ACA

Petro-Canada Sustainable Grasslands Program

Through the Petro-Canada Sustainable Grasslands Program, the Alberta Conservation Association is delivering a project looking at tree and shrub encroachment in the foothills fescue natural subregion. Fire is essential in grassland community development, and exclusion of fire from the landscape has created an accumulation of woody debris and a decrease in habitat value. We used black and white imagery from 1949 and colour infra-red images from 2006 to determine grassland change in the southern east slopes of Alberta. All three study areas saw change in landscape composition and grassland cover with an average 10% loss of grassland in the total area (1300- 2100 hectares), even with presence of wildfire. As a part of the Petro-Canada Sustainable Grasslands Program, three additional projects have been delivered by graduate students at the University of Calgary – one on sage grouse, one on silver sagebrush reclamation and one on pronghorn. In the summer of 2009 Petro-Canada was purchased by Suncor Energy Inc. Efforts are underway to extend the program beyond March 31, 2010 with Suncor Energy Inc.

Partnerships

Petro-Canada, University of Calgary



Piping Plover Recovery Program

The piping plover is a bluebird-sized shorebird listed as *Endangered* under Alberta's *Wildlife Act* and under Canada's *Species at Risk Act*. Plovers rely heavily on gravel-strewn beaches for nesting and rearing broods. Nest predation and habitat degradation have been identified as limiting factors for this species. Consequently, we apply predator exclosures to enhance their reproductive success and complete habitat enhancement activities to mitigate threats to breeding habitat. We also conduct annual surveys on core breeding lakes to monitor population numbers and movement, and to complement the international census conducted every five years across North America.

In 2009/10, we carried out population inventories on 26 waterbodies and recorded 215 adults on 24 lakes. We located 121 nests of which 110 had exclosures applied around them. Overall nest success was 68.4% with an estimated 1.01 chicks per nest fledged. We banded 19 young and re-sighted 32 plovers banded in previous years.

We surveyed 60 cottagers on one core breeding lake and found 95.0% ($n = 57/60$) of cottagers continue to be either supportive (63.0%) or neutral (32.0%) toward plover conservation. We constructed two fences and repaired a third to protect shoreline habitat from cattle, bringing the total length of shoreline fenced since 2002 to 46 km. We also conducted habitat assessments at 19 sites on eight lakes that we previously protected in order to monitor changes in habitat features over time.

Partnerships

Alberta Sustainable Resource Development, Alberta Tourism, Parks and Recreation Cooperating Landowners, Ducks Unlimited Canada, Government of Canada – Department of National Defense, Government of Canada Habitat Stewardship Program for Species at Risk, Government of Canada – Service Canada, TD Friends of the Environment Foundation



Sharp-tailed Grouse Habitat Inventory

Sharp-tailed grouse populations may be declining in Alberta, although the ability to estimate population trends at a meaningful scale is lacking. In an effort to reduce human resources and costs associated with labour-intensive surveys, ACA is developing and refining an approach using habitat models to estimate lek density across broad spatial areas. Initial trials in the Special Areas region have worked quite well with those areas predicted to have higher quality habitat having higher densities of leks. We developed habitat models in 2009 for survey trials in the southeast corner of Alberta for application in spring 2010. A key objective will be refinement of habitat classifications to enable density estimates that are distinctive among classes. Field efforts in 2009 focused on testing some assumptions concerning lek fidelity and detectability of lek sites. We found a high degree of abandonment of lek sites in areas of poor grass cover, and high fidelity in areas of extensive grass cover. Consistent with our detection models from 2006 to 2008, our ability to detect leks decreased as the distance to leks increased.

Partnerships

Alberta Sustainable Resource Development, Special Areas Management Board



"At ACA we recognize the high value that Canadians place on conserving endangered species."

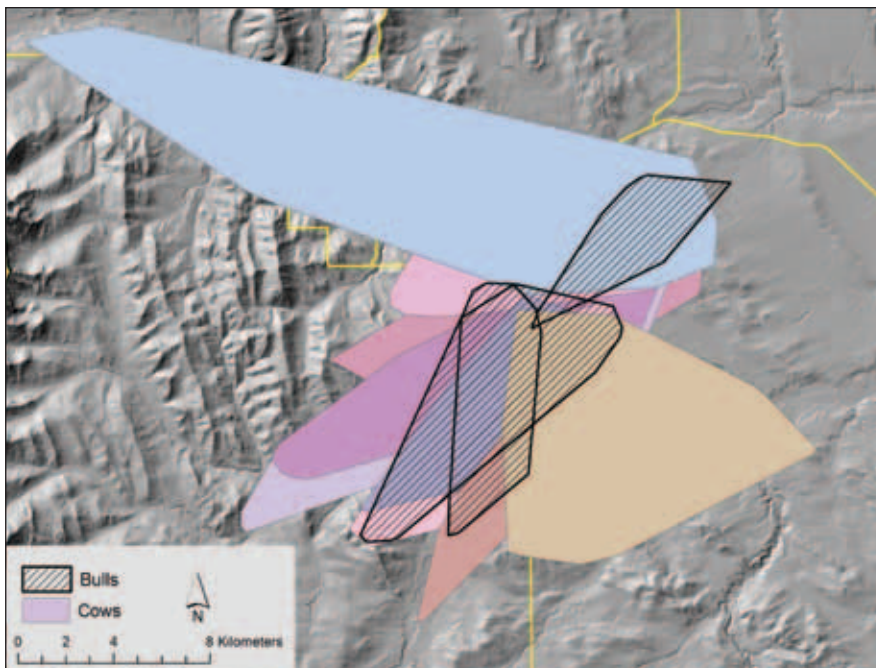
Lance Engley, ACA



Sightability Correction for Elk Aerial Surveys in Southwest Alberta – A Component of the Southwest Alberta Montane Elk Study

In Alberta, elk are highly valued as an important component of large mammal predator-prey systems, as a recreational resource, and as an indicator species for assessing the impacts of industrial activity on habitat utilization. In some areas, elk are a major source of conflict with landowners as they compete with domestic stock for forage. Because of the diversity of perspectives surrounding elk, accurate population estimates are important for informing management decisions that attempt to balance conflicting issues. Elk aerial surveys in southwestern Alberta are currently conducted as total trend counts during winter when elk are congregated and when snow cover makes elk easier to observe. While these surveys provide a useful measure of relative abundance through time, they are a minimum count and do not allow estimates of the proportion of the population that are missed. Mature bull elk (3 point+) typically travel in smaller groups and may exhibit different habitat use from cow groups. It is likely that estimates of bull numbers from trend surveys are biased low

due to differences in the ability to observe the two sexes. Elk survey data could be improved with the development of a method that corrects winter range counts for sightability (detectability) or identifies new survey areas that would improve the accuracy of observed bull:cow ratios. Using Global Positioning System (GPS) collar elk data from the Southwest Alberta Montane Elk Study, it may be possible to identify winter ranges used by mature bull elk that are not currently surveyed, and if necessary, develop a site-specific model to predict the proportion of both bull and cow elk that are not observed. During 2008/09 and 2009/10, we used GPS collar location data from both mature bull and cow elk to examine patterns of spatial overlap between the two sexes during the period when aerial surveys would be conducted (January to March). During 2008, mature bull and cow elk showed different patterns of space use throughout the winter, suggesting that current surveys may underestimate bull:cow ratios if they are focused on large elk congregations. However, during 2009 our limited sample size did not show this difference in space use during the winter.



Partnerships

The Southwest Alberta Montane Elk Study Steering Committee was formed in 2005 and consists of the following collaborative partners and funding sources: Alberta Conservation Association, Alberta Ingenuity Fund, Alberta Sport, Recreation, Parks and Wildlife Foundation, Alberta Sustainable Resource Development, Boone and Crockett Club, Canadian Wildlife Federation, Devon Energy Corporation, National Science and Engineering Research Council of Canada, Oregon State University, Parks Canada, Safari Club International, Shell Canada Ltd., Southwest Alberta Sustainable Community Initiative, Spray Lakes Sawmills, University of Alberta, University of Calgary and World Wildlife Fund

Ungulate Winter Range Restoration

Although wildfire suppression was initiated with reasonable intentions by resource managers, conservationists and landowners of the past, our understanding of forest ecology today indicates that wildfire plays an important role in the sustainability of natural forests. Prescribed burning and mechanical clearing provide methods for restoring ecosystem condition in areas affected by wildfire suppression. We work with Alberta Sustainable Resource Development (ASRD) and other conservation groups to carry out such treatments as part of our Ungulate Winter Range Restoration (UWRR) program. In the spring of 2009, we provided logistical support to ASRD during the implementation of prescribed burn plans in the Clearwater River subbasin (05DB; ~40 hectares) and the Notikewan River subbasin (07HC; ~590 hectares). Our logistical support included the deployment and monitoring of portable weather stations, and human resources to assist in fireguard planning and burn monitoring. In terms of mechanical clearing treatments, we cleared ~16 hectares of land within the Spruce Ranch, near Chain Lakes Provincial Park, for the purpose of enhancing

moose browse quality and quantity in the area. To guide how the UWRR program will operate in specific areas in the future, we developed social, economic and ecological objectives at the subbasin level for two additional priority watersheds—one in the northwest near Peace River (Notikewan River subbasin 07HC) and one in the southwest adjacent to Waterton Lakes National Park (Waterton River subbasin 05AD).

Partnerships

Alberta's Conservation Collaboration, Minister's Special License Program, Alberta Sustainable Resource Development, Compton Petroleum Corporation, Devon Canada Corporation, Tay River Environmental Enhancement Fund (Shell Canada Limited)



Upper North Saskatchewan Fire and Wildlife Interpretive Trail

Prescribed burn programs in the east slopes of Alberta have presented an excellent opportunity to engage the public about the important role that fire plays in maintaining and enhancing the forested ecosystem. In 2009/10, we continued work on a new initiative to develop an outreach program about fire and wildlife ecology. Our goals for the program were to develop an interpretive trail in a recent prescribed burn that would give visitors an up-close glimpse of the forest after fire and improve people's understanding about natural disturbance in creating and maintaining wildlife habitat. In the past year, the prescribed burn was successfully implemented by mapping out the interpretive trail layout, building partnerships with local community groups, installing an outhouse and walking bridges, and developing the interpretive sign panels.

Partnerships

Alberta Sport, Recreation, Parks and Wildlife Foundation, Alberta Sustainable Resource Development, Mountain Equipment Co-op, TD Friends of the Environment Foundation (Red Deer Chapter)





Waterfowl Crop Damage Prevention Program (WCDPP)

The Waterfowl Crop Damage Prevention Program (WCDPP) assists agricultural producers in reducing damage to crops caused by waterfowl during fall migration, and is delivered by ACA in collaboration with Alberta Sustainable Resource Development. Alberta Conservation Association and Environment Canada have traditionally cost-shared the program, although in 2009 Environment Canada could not commit to program cost-sharing by the time delivery was initiated, and therefore waterfowl feeding stations were not operational. Waterfowl scaring equipment and advice is provided free-of-charge to producers. We also maintain a web page that provides scaring advice and displays areas of potential waterfowl concentrations that hunters may use to plan their activities.

We provided 48 landowners with 118 scare cannons. Of landowners who borrowed scare cannons, 48% agreed to share their contact information with hunters looking for hunting opportunities. We updated our website weekly

with areas of scare cannon use through the fall. We received requests for producer contact information from eight waterfowl hunters as a result of the website.

Partnerships

Alberta Sustainable Resource Development

Waterfowl Nesting Habitat Enhancement

We strive to provide nesting habitat in areas where ground cover or mature aspen nesting sites limit potential nesting sites for mallards, bufflehead and goldeneye. Approximately 1,300 nest boxes and 175 nest tunnels have been installed throughout Alberta in partnership with Ducks Unlimited Canada (DUC) and Delta Waterfowl. Annual monitoring and maintenance of nest structures is carried out by ACA staff and many volunteers.

Tunnel use, for 96 tunnels monitored in 2008/09 was about 64%; of those tunnels used, approximately 95% appeared to have hatched eggs. In total, we maintained 92 nest boxes, with 74 (80%) utilized by ducks and/or owls. Maintenance of nest structures and monitoring

of use for the 2009 breeding season is underway in February and March 2010.

Partnerships

Alberta Fish and Game Association, Delta Waterfowl, Ducks Unlimited Canada, Syncrude Canada, Wildlife Habitat Canada, Windsor Plywood



Fisheries Program

The Fisheries program maintains or improves the diversity and abundance of fish populations, communities, and the biological processes and habitats that support them. Our program ensures recreational angling opportunities are maintained for future generations by implementing conservation activities that sustain or advance Alberta's fish populations. Program activities are organized into five areas: Aeration, Enhanced Fish Stocking, Lotic (running waterbodies), Lentic (standing waterbodies) and Riparian Conservation.

Our Aeration and Enhanced Fish Stocking projects provide Albertans with recreational angling opportunities in areas of the province that would not otherwise exist. In 2009/10, we aerated 19 waterbodies (including two new sites Birch Lake and Spring Lake) to help develop and maintain lake habitats to promote year-round survival of stocked trout, and also All aerated waterbodies successfully prevented summer or winter fish kills, except for one lake (Moonshine Lake), where a partial winter kill occurred. By stocking 20 cm fish into put-and-take lakes, Enhanced Fish Stocking increases angling opportunities and the relatively large size of stocked fish enhances the fishing experience. In 2009/10, we stocked a total of 131,100 rainbow trout in 61 waterbodies across the province. We also supported an ongoing ACA staff graduate student project (Royal Roads University, Victoria, BC) that evaluates the effectiveness of stocked trout fisheries meeting management goals and recreational angler expectations.

The Lotic and Lentic projects involve inventory and monitoring of priority fish species across the province to provide information on species composition, population structure, abundance and distribution, as well as to monitor angler use, harvest, and associated fisheries demographics. In 2009/10, we undertook 12 surveys, comprised of nine lakes and eight rivers/streams. Focal sport fishes in our surveys include walleye, northern pike, lake trout, bull trout, Arctic grayling, cutthroat trout and rainbow trout. Results from our sport fisheries surveys (and stock assessments) feed directly into ASRD fisheries management plans and form the basis for fishing regulation changes and evaluations, and determine the effectiveness of new management strategies, such as the special walleye fishing licence.

Studies on the Ram River and Upper Oldman River systems have resulted in the conservation of key bull trout spawning habitat in both watersheds. Based on our results, ASRD has requested "Class A" designation (restricted water-course crossing and limited disturbance to aquatic ecosystem) under the *Alberta Water Act* for sections of Fall Creek (Ram River) and Hidden Creek (upper Oldman River). By protecting critical spawning and rearing habitats, the Class A designation helps maintain viable bull trout populations in these watersheds.



In 2009/10, we investigated the effects of stream crossing structures on Arctic grayling populations, and the use of a fish-based index of biotic integrity to assess ecological conditions of aquatic systems. Both studies will provide valuable information on landscape-level effects on fish communities required for formulating sound conservation and management strategies. These studies will also generate critical information required for the implementation of two key provincial resource management policies, the Alberta land-use framework and preparation of “State of the Watershed” reports under the Alberta Water for Life Strategy. Our work on the fish-based index of biotic integrity will soon be published in a scientific journal.

ACA riparian conservation uses beneficial management tools such as streambank fencing, bank stabilization, provision of off-channel watering for cattle, education and outreach to enhance, maintain and protect riparian habitats and ecosystem health. Riparian conservation activities are often conducted in collaboration with private landowners, watershed groups, government, industry and other stakeholders. In 2009/10, we conducted several community outreach activities including demonstration tours, open houses and workshops to highlight our projects and increase public interest in riparian conservation. Over 160 volunteers, including 70 children and seven college students, contributed more than 800 hours. In total, we conducted 12 on-the-ground riparian restoration projects, including eight streambank fencing projects, three bank stabilization (bio-engineering) projects, and two tree plantings with nearly 21,000 seedlings and 1,100 shrubs. Overall, our 2009/10 projects protected approximately six kilometres of streambank through fencing and improved over 50 hectares through tree planting and bank stabilization.

Fisheries program activities in 2009/10 involved over 70 partners and collaborations, consisting of provincial and federal governments, industry, watershed groups, NGOs, counties/municipalities, universities, private landowners and other interested groups.

2009/10 Overview

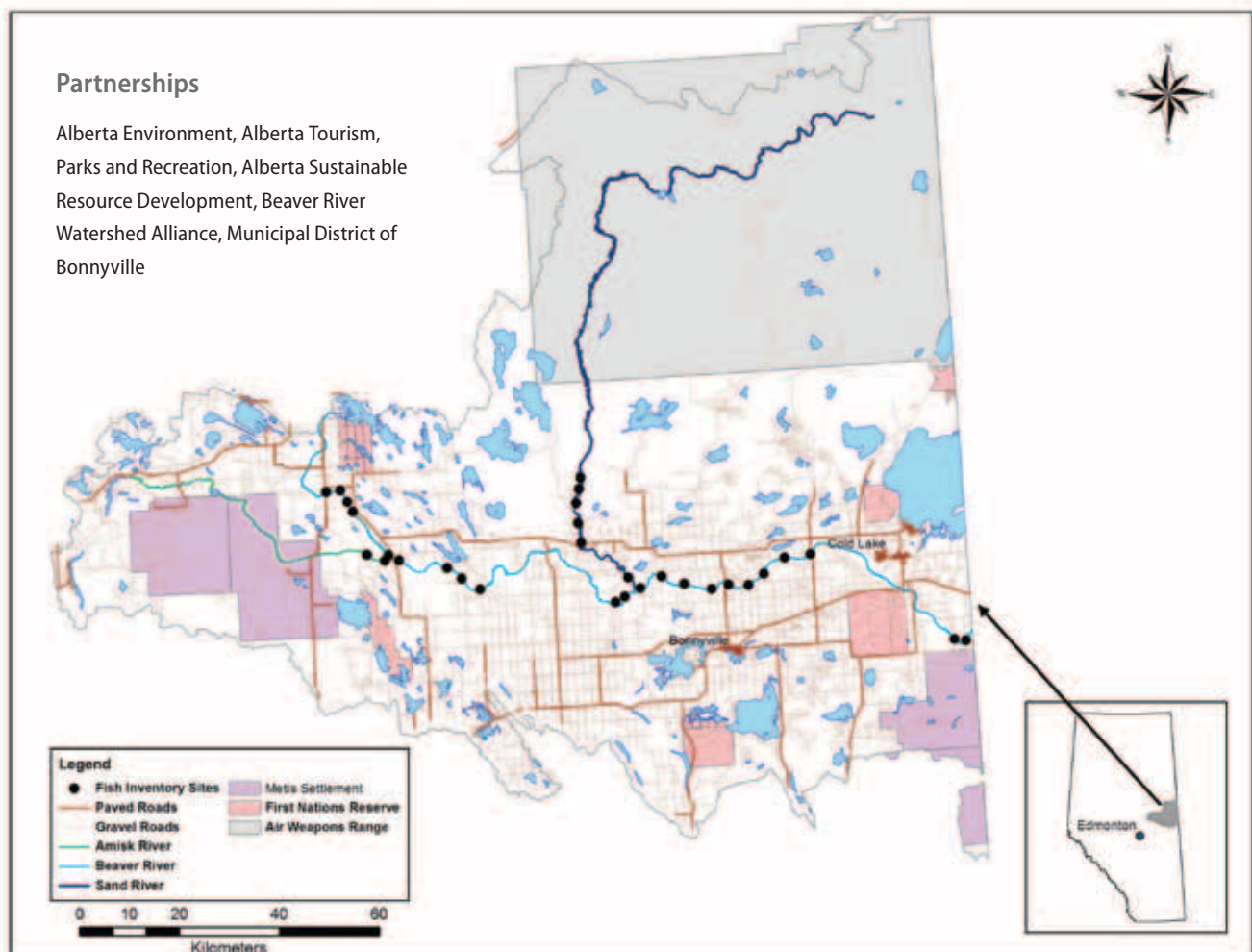
- *19 aerated waterbodies successfully overwintered fish*
- *130,000, 20-cm long rainbow trout stocked into 61 waterbodies*
- *12 fish surveys conducted on 17 waterbodies across Alberta, generated information on populations status, recreational harvest, distribution, migration, and spawning habitat on sport fishes*
- *Sport fishes surveyed include walleye, northern pike, lake trout, bull trout, Arctic grayling, cutthroat trout, and rainbow trout*
- *2,964 anglers interviewed during creel surveys*
- *12 on-the-ground riparian conservation enhancements protected 6 km of streambank fencing and over 50 ha through bank stabilization and tree planting*
- *22,100 seedlings and shrubs planted*
- *160 volunteers spent 800 hours on riparian conservation projects*
- *70 partners and collaborations involved in Fisheries program activities*

“Alberta is a busy place with relatively few lakes, and understanding the influence of angling effort on sport fish stocks is vital for conservation. Our surveys update the status of individual stocks and our innovative methods increase ACA’s efficiency while being used provincially.”

Bill Patterson, ACA

A Fish-based Index of Biological Integrity for Assessing Ecological Condition of the Beaver River

The Beaver River Watershed Alliance is currently developing an Aquatic Health Ecosystem Monitoring Program for the Beaver River watershed, which is an assessment of the health of the aquatic environment, including the fisheries resources. The purpose of this study is to develop and validate an Index of Biological Integrity (IBI) for assessing the health of the Beaver River using data collected on fish assemblages and a suite of physical and chemical variables. Our goal for 2009 was to collect information on fish assemblages, water chemistry and local habitat features at 30 to 40 sites along the Amisk, Beaver and Sand rivers. We collected fish community composition data by boat electrofishing at 22 sites on the Beaver River, six sites on the Sand River, and two sites on the Amisk River. In total, we caught 3,901 fish, of which 54.11% were white sucker (*Castostomus commersonii*), 30.22% lake chub (*Couesius auratus*), 8.07% longnose sucker (*Catostomus catostomus*), 4.36% fathead minnow (*Pimephales promelas*) and 1.13% walleye (*Sander vitreus*). Together, log perch (*Percina caprodes*), northern pike (*Esox lucius*), brook stickleback (*Culaea inconstans*), yellow perch (*Perca flavescens*), longnose dace (*Rhinichthys cataractae*), burbot (*Lota lota*), spottail shiner (*Notropis hudsonius*) and northern redbelly dace (*Phoxinus eos*) comprised less than 2% of the total catch.





Bearberry Creek Riparian Conservation Program

In some locations land use practices have degraded riparian and aquatic habitat, negatively impacting water quality and fish populations. Restoring the fisheries of Bearberry Creek may depend, in part, on the health (or condition) of riparian areas. The goal of this project is to facilitate the re-establishment of a recreational fishery in Bearberry Creek by improving the riparian conditions and water quality in the watershed. In 2009, we signed two new agreements for cost-shared riparian protection and enhancement projects with landowners. We also constructed three new bank stabilization projects using bioengineering techniques, totaling 4,225 m² of enhanced riparian habitat. We developed a variety of public outreach communications including a newspaper article, an advertisement, and an interview featured on the radio program "Let's Go Outdoors" with Michael Short. We distributed a landowner's guide to the program, made a presentation to a local high school Environmental Science class, and used our off-channel watering system for demonstration purposes. Landowners continue to show positive interest in the project.

Partnerships

Alberta Environment, Alberta Sustainable Resource Development, Cows and Fish, Department of Fisheries and Oceans, Mountain View County, Mountain View Gazette, Olds College, Pembina Pipeline Inc., Penn West Energy, Red Deer River Watershed Alliance, Royal Bank of Canada,



Shell Canada, Sundre High School

Beaverlodge Riparian Conservation

Bank-side livestock feeding and watering, vehicle fording, and in-stream alterations have degraded the riparian zones in the Beaverlodge River watershed. Since 2004, ACA, in partnership with landowners, provincial and municipal government and other conservation organizations, has embarked on riparian restoration and conservation projects along these water courses. In 2009/10, we provided fencing material to two landowners to fence a total of 1.7 km, protecting 37.8 ha of riparian habitat, and provided one off-channel watering system for cattle. We also planted a total of 20,430 seedlings on 26.2 ha and established six 20-year Habitat Enhancement agreements with landowners. The Beaverlodge River and its tributaries were videotaped to assess riparian health. Overall, 61% of riparian zone in the Beaverlodge watershed assessed was rated as good, 21% as fair and 18% as poor. We participated in three communication events highlighting riparian issues. Overall, our riparian conservation efforts are resulting in incremental changes in the watershed. Pace of change has been slow, and in 2010 we will focus on finding a local "champion" to be the driving force in the local community for finding additional landowner partners.

Partnerships

Alberta Agriculture and Rural Development, Conoco Phillips, County of Grande Prairie, Penn West Energy, Royal Bank of Canada

Crowsnest Drainage Sport Fish Population Assessment – Phase 1

Since introductions to the Crowsnest River in the 1930s and 1940s, rainbow trout has become established as a quality sport fishery and the most sought after species by anglers. Consequently, angling pressure in the drainage is high and a sport fish stock assessment is essential to monitor populations of rainbow trout and native mountain whitefish, the two most abundant and popular species in the sport fishery. In year one of a two-year study, we used archival fisheries data and conducted preliminary sampling at five locations on the Crowsnest River to determine sampling intensity, define study area boundaries, and identify sample site locations for summer 2010. During preliminary sampling, we captured eight salmonid sport species for a total catch of 1,096 fish, of which 55% were rainbow trout and 40% were mountain whitefish. Across the five sample sites, incidence of hooking damage to legal-harvest-sized rainbow trout averaged

17.4% and ranged from 0 to 32.3%. Hooking damage to legal-harvest-sized mountain whitefish averaged 5.1% and ranged from 0 to 7.8%. We determined that sampling 61 sites in 2010 would meet our study objectives; 21 sites on the Crowsnest River and 40 sites on its tributaries. We defined study area boundaries on the Crowsnest River main stem as the confluence with Allison Creek to the mouth of Todd Creek. Tributary boundaries included all fish-bearing streams 3rd order (Strahler) and

larger that occurred west of Highway 22. We determined that a site length of 40 times the mean-wetted width (main stem) and 150 – 300 metres (tributary streams), using tote-barge and backpack electrofishing gear, respectively, was sufficient.

Partnerships

Alberta Sustainable Resource Development,
Devon Canada Corporation

“The Crowsnest River is one of the most popular trout fisheries in Alberta with angling integral to the local economy – drawing in anglers and their families. Because of the Crowsnest River’s reputation as a quality trout fishery, angler pressure is high. Our estimates will allow for a quantitative evaluation of current angling regulations on the river to ensure a sustainable fishery.”

Jason Blackburn, ACA



Cutthroat Trout Population Assessment in the Castle River Drainage

In an effort toward conservation of westslope cutthroat trout, considered *Threatened* by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), we initiated drainage-scale population assessments of the species in southeastern Alberta. A stratified-random sampling design was applied to the Castle River drainage to determine the density, abundance and proportion of legal-harvest-sized cutthroat trout in the population. We captured a total of 2,260 fish belonging to the genus *Oncorhynchus* using backpack, tote-barge and raft electrofishers. We identified 61% of the catch as cutthroat trout ($n = 1,375$), 26% as hybrids ($n = 595$) and 13% as rainbow trout ($n = 290$). Of the total catch, 9% ($n = 198$) were legal-harvest-sized fish, of which 63% were cutthroat trout ($n = 124$), 33% hybrids ($n = 41$) and 17% rainbow trout ($n = 33$). cutthroat trout were most prevalent in the upper reaches of the drainage. We estimated a total *Oncorhynchus* population of 144,502 (90% confidence interval (CI) = 90,530 – 228,431), of which 4,798 (90% CI = 2,820 – 7,878) were legal-harvest size. The estimated cutthroat trout population was 106,419 (90% CI = 70,231 – 174,513), of which 3,729 (90% CI = 2,012 – 6,360) were legal-harvest-size. An accurate estimate of genetically pure westslope cutthroat trout requires large-scale tissue sampling and genetic analysis. This study offers a description of drainage population size and relative ratios of cutthroat trout to hybrids and rainbow trout where they cohabit in the watershed. Use of fish densities calculated in this study will facilitate future estimates at known pure locations.

Partnerships

Alberta Sustainable Resource Development,
Devon Canada Corporation

Enhanced Fish Stocking Project

The Enhanced Fish Stocking Project (EFSP) provides anglers with increased opportunities to catch and harvest 20-cm rainbow trout in parts of Alberta where angling opportunities are limited or do not exist. Recipient waterbodies are prone to winterkill and require an annual rainbow trout stocking to maintain the angling opportunity. We deliver all rainbow trout stockings through contracts with private rainbow trout growers. In 2009, we stocked a total of 61 waterbodies with 131,100 rainbow trout during 86 stocking events. Approximately 60% of the rainbow trout stockings were completed during the first stocking prior to the May long weekend. A total of 1,039 rainbow trout stockings have occurred within the EFSP since 1998 when ACA assumed responsibility of the EFSP, resulting in the stocking of approximately 1.58 million rainbow trout during this 12-year period.

Partnerships

Alberta Sustainable Resource Development



Lake Aeration

In an effort to promote year-round survival of sport fish in Alberta, we aerated 19 waterbodies prone to winterkill and summerkill in 2009. Specifically, we maintained oxygen concentrations at 3.0 mg/L or higher in the winter and 5.0 mg/L in the summer. Surface area of aerated waterbodies ranged from 0.8 to 139.9 hectares and the number of aerators per waterbody varied from one to ten units. All aerated waterbodies successfully overwintered trout with no observed or reported winterkill, except for Moonshine Lake where a partial winterkill was reported. Thus, overall, lake aeration enabled us to enhance recreational angling opportunities that would not have otherwise existed.

Partnerships

Alberta Fish & Game Association, Alberta Sustainable Resource Development, Fish and Wildlife Division, Alberta Tourism, Parks and Recreation, Braxxon Excavation, Canadian Forest Products Ltd., Clearwater County, Conoco Philips, County of Stettler, Daishowa-Marubeni International Ltd., Fisheries Enhancement Society, Northern Sunrise County, North Shore Environmental Consultants Ltd., RTC Services Ltd., Shell Canada Tay River Environmental Enhancement Fund (TREE Fund), TAQA North (formerly PrimeWest Energy), Town of Fairview, Village of Spring Lake, Volunteer Stewards Weyerhaeuser Canada Ltd., TransAlta



Lesser Slave Lake Riparian Conservation

Riparian areas are the narrow strips of land adjacent to rivers and lakes that protect water quality, control erosion and provide habitat for wildlife. In the Lesser Slave Lake watershed, these areas are under constant pressure from human-related development. ACA is working with the High Prairie Riparian Action Team and landowners to protect and restore these areas in the Lesser Slave Lake watershed. We continued to work on the Eula Creek riparian restoration project, providing the landowner with three roles of barbed wire to complete the riparian fence. We also completed riparian health assessments on existing projects. Sites scored from 'Healthy with problems' to 'Healthy'. We completed our analysis of aerial videos used to assess health and completed mapping for the South Heart and West Prairie rivers initiated in 2006. In general, reaches assessed on the South Heart River were in good condition (62%). Riparian areas along the West Prairie River were 43% good, 27% fair and 30% poor condition.

Partnerships

High Prairie Riparian Action Team, Lesser Slave Lake Watershed Council, Penn West Energy, Royal Bank of Canada

Lower Notikewin River Drainage Fish Inventory

The Notikewin drainage is an important fishery for walleye anglers and is subject to a wide variety of industrial activities including forestry and oil and gas extraction. Ongoing development of roads, seismic lines, cutlines and pipelines have led to extensive fragmentation and degradation of fish habitat throughout the watershed. What is not known is the effect these developments have had on fish populations, including walleye, throughout the drainage, and to what extent populations have the ability to recover following decline. The 2009/10 survey was intended to be the first phase (Phase 1) of a multi-year project. Phase 1 activities were to include development of a study design and preliminary ground-truthing of study sites. However, this project was put on hold after a program review.

Partnerships

Alberta Sustainable Resource Development

McLeod River Survey Final Report

In the summer of 2005 and 2006, we conducted a survey to collect bull trout abundance data in the McLeod River drainage. Using backpack and float electrofishing gear, we captured 3,728 fish from 111 sites. Bull trout captures were 6% and 2% of the backpack and float electrofishing catch, respectively. Four sites in the Mackenzie Creek drainage accounted for 84% of the bull trout captured by backpack electrofishing. Based on our sampling design, bull trout abundance in the McLeod River drainage is low. Estimating bull trout abundance in a large watershed, such as the McLeod River, requires substantial effort and obtaining accurate results can be cost prohibitive.

Partnerships

Alberta Sustainable Resource Development

North Saskatchewan and Ram Rivers Bull Trout Spawning Stock Assessment

Anglers reported catching large, presumably migratory, bull trout (*Salvelinus confluentus*) in Fall Creek, a tributary to the Ram River, but little else was known about the population. The Fall Creek drainage receives substantial recreational and industrial use; these activities have the potential to negatively impact bull trout populations, and spawning areas are particularly susceptible. In 2007, we documented the use of Fall Creek by migratory bull trout for spawning. Activities in 2008 and 2009 focused on identifying the stream of origin of these fish and the timing and magnitude of the spawning run using a combination of genetic and telemetry techniques. Electrofishing, trapping and redd surveys allowed us to assess the stream's use by bull trout. The size distribution of bull trout in the 2008 electrofishing catch from Fall Creek ranged from 41 – 680 mm fork length indicating the stream is not only important for adult spawning but also rearing of young-of-the-year and juvenile bull trout. We estimated 3,857 juvenile fish (90% confidence interval of 1,447 – 9,258 fish) inhabit the 7.5 km of stream below the falls. We captured 75 fish through trapping, 27 of which were implanted with radio-tags. Implanted fish migrated up to 71.8 km to overwintering locations in the Ram, North Saskatchewan and Clearwater rivers. Spawning activity in Fall Creek was concentrated in the upper reaches of the stream below the falls, peaked around the third week in September, and was complete by the second week in October. The information collected over the course of our study is critical for the conservation and sound management of the species in the North Saskatchewan River watershed and has resulted in proposed changes to recreational and industrial practices in the drainage.

Partnerships

Alberta Streamwatch Conservation Coalition, Alberta Sustainable Resource Development, Forest Resource Improvement Association of Alberta, Shell Canada and Mancel Energy, Tay River Environmental Enhancement Fund, Smoky Trout Farm, Sundre Forest Products

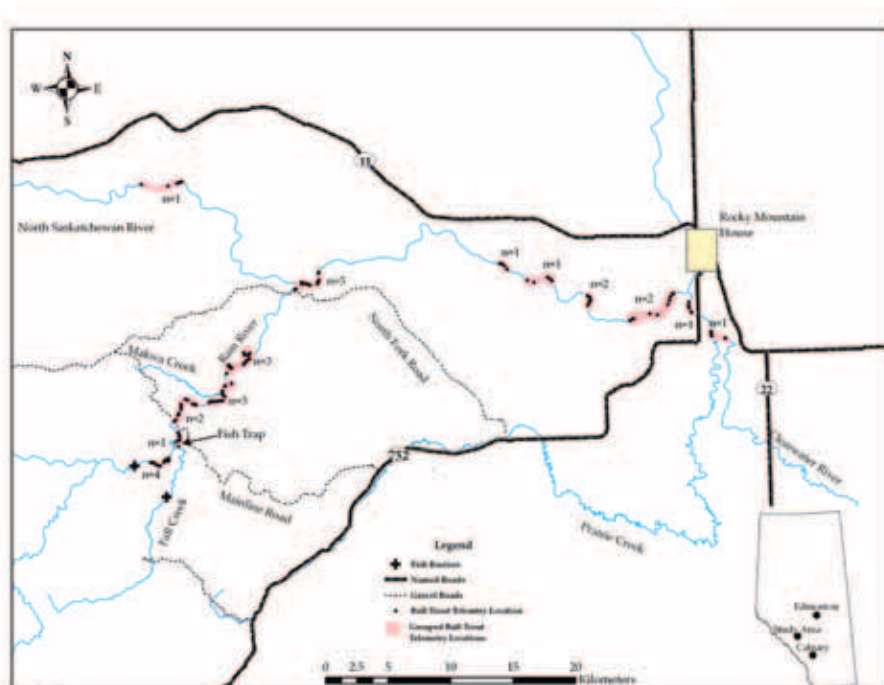


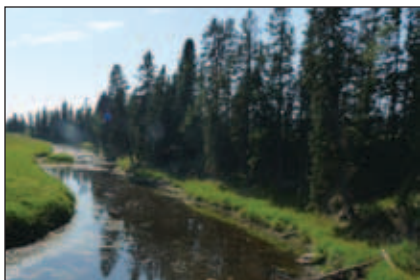
Pinto Creek Bull Trout Study

Pinto Creek (tributary to North Burnt Timber Creek) was believed to be an important bull trout spawning location and was closed to angling in 1995; however, bull trout abundance and spawning use of this stream has never been formally evaluated. In 2009, we estimated the abundance of bull trout in Pinto Creek to be 8,395 fish (95% confidence interval of 2,521 – 28,642 fish) and we documented 56 bull trout redds in 14 km of stream. Data collected during this project will be used to make informed management decisions regarding bull trout in Pinto Creek. In 2010/11, we will enumerate the spawning population of bull trout in Pinto Creek to determine if these fish are of a fluvial (migratory) or resident population/life-history strategy.

Partnerships

Alberta Sustainable Resource Development, Shell Canada Energy/Suncor Energy Inc. Panther River Environmental Enhancement Legacy Fund





Red Deer – Battle River Riparian Conservation

Many riparian areas in the Red Deer and Battle River watersheds have been negatively affected by the impacts of human activities including agriculture, residential development and numerous types of industrial activity. The Red Deer – Battle River Riparian Conservation project focuses on protecting and enhancing riparian habitats in these two watersheds. In 2009/10, we established one new landowner fencing and off-site watering project that protected 2.6 km of stream bank and planted 400 willow clippings and 1,100 other shrubs at another project site. Overall, riparian health at project sites we inspected showed improvement since the previous year. Through the use of trail cameras, we found that livestock used the off-site watering system exclusively, despite open access to the lake at the Sproule project site. We undertook various community outreach initiatives, such as open houses, stakeholder meetings and workshops with the co-operation of various stewardship groups. All of these initiatives helped to improve public awareness of our Riparian Conservation project, as well as the overall condition of riparian habitats.

Partnerships

Agriculture and Agri-Food Canada, Alberta Agriculture and Rural Development, Alberta Environment, Alberta Stewardship Network, Alberta Sustainable Resource Development, Cows and Fish, Fisheries and Oceans Canada, Grey Wooded Forage Association, Lacombe County, Penn West Energy, Ponoka County, Red Deer County, Red Deer River Watershed Alliance, Royal Bank of Canada, Stantec, Vermilion River Flow Advisory Committee

Sport Fishery Surveys: Christina, Ethel, Fickle, Grist, Hilda and Shiningbank Lakes, Alberta, 2009

High fishing pressure, coupled with slow-growing and late-maturing populations, have resulted in the over-harvest of many of Alberta's sport fish populations including walleye, northern pike and lake trout. To aid in the recovery of these species and generate the information required for effective management, we conducted creel surveys on six priority lakes (Christina, Ethel, Fickle, Grist, Hilda and Shiningbank) during the summer of 2009. Estimated total angling hours ranged from a low of 3,013 hours at Grist Lake to a high of 7,546 hours at Fickle Lake. Fishing pressure ranged from a low of 2.7 hours/ha at Grist Lake to a high of 19.8 hours/ha at Christina Lake. Catch rate for walleye was highest at Hilda (0.99 fish/hour) and Fickle (0.90 fish/hour) lakes and lowest at Shiningbank Lake (0.04 fish/hour), with intermediate values at Christina (0.43 fish/hour) and Ethel (0.37 fish/hour) lakes. For northern pike, catch rate was highest at Shiningbank Lake (2.00 fish/hour) and lowest at Grist Lake (0.11 fish/hour), with intermediate values at Christina (0.75 fish/hour), Ethel (1.20 fish/hour), Fickle (0.32 fish/hour) and Hilda (1.25 fish/hour) lakes.

Total yield of walleye ranged from a low of eight fish in Shiningbank Lake to a high of 341 in Fickle Lake. In contrast to walleye, total yield of northern pike was highest at Shiningbank Lake (500 fish). Catch rate of lake trout at Grist Lake was 0.13 fish/hour, with a total yield of 106 fish.



Partnerships

Alberta Sustainable Resources Development, Christina Lake Lodge, Grist Lake Lodge

Summary of 2009 creel survey data from Christina, Ethel, Fickle, Grist, Hilda, and Shiningbank Lakes, Alberta. Means and associated 95% confidence intervals (95% CI) were estimated using bootstrap techniques.

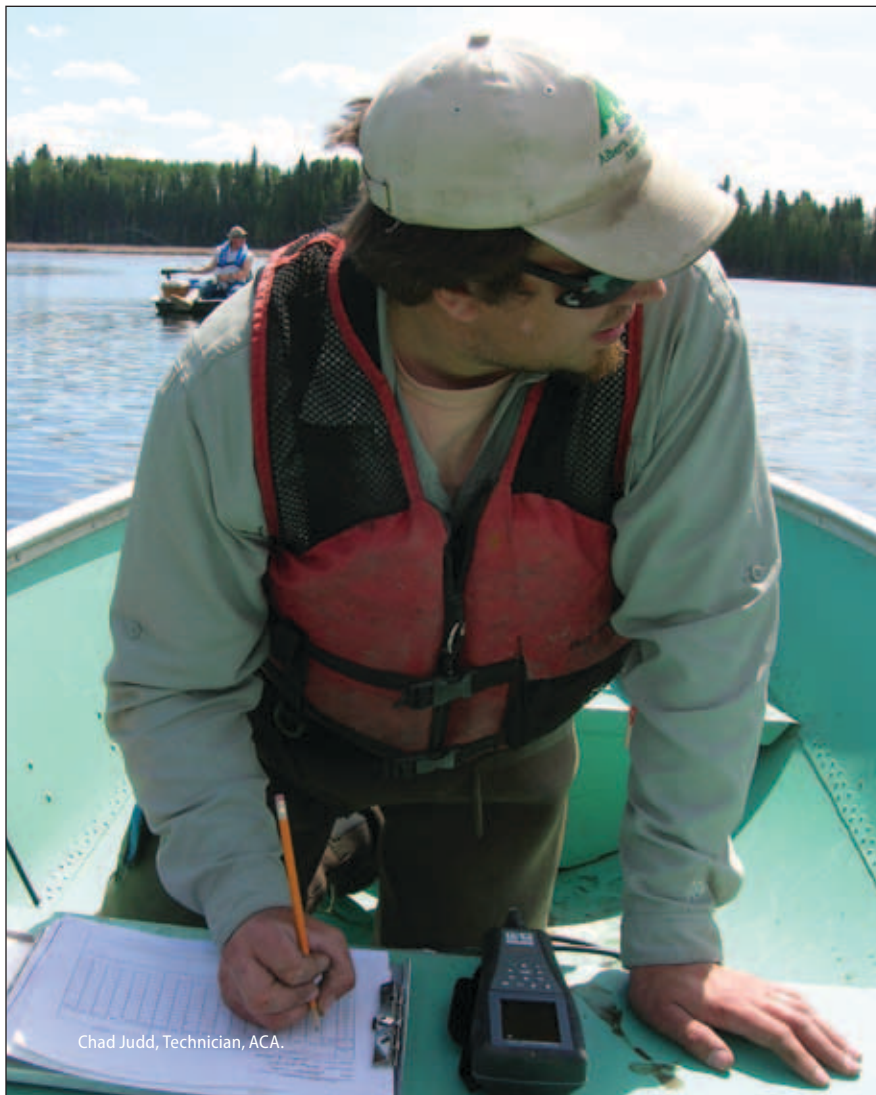
Lake	Number of Trips		Total Number of Hours		Fishing Pressure (h/ha)	
	Mean	95% CI	Mean	95% CI	Mean	95% CI
Christina	2,214	1,946 - 2,474	5,921	5,213 - 6,664	2.7	2.4 - 3.1
Ethel	2,112	1,178 - 3,412	6,243	3,550 - 9,780	12.7	7.2 - 20.0
Fickle	3,407	3,012 - 3,815	7,546	6,629 - 8,529	19.8	17.4 - 22.3
Grist	1,081	952 - 1,209	3,013	2,270 - 3,863	2.7	2.0 - 3.5
Hilda	2,004	1,042 - 3,295	4,122	2,200 - 6,499	11.6	6.2 - 18.3
Shiningbank	1,600	1,283 - 1,932	4,821	3,472 - 6,508	10.6	7.6 - 14.3

Summerkill Prevention Investigation in ACA Aerated Lakes

In an effort to prevent summerkill, we initiated summer water quality monitoring on five winter-aerated lakes prone to summerkill. We measured temperature and dissolved oxygen from May to September to identify timing and depth of thermal and dissolved oxygen stratification. Onset of thermal and dissolved oxygen stratification ranged from late May in Beaver Lake to mid-July in Swan Lake. A thermocline developed 2 m below the surface in Dipping Vat, Figure Eight and Swan lakes and 4 m below the surface in Beaver and Fiesta lakes. We observed anoxic (lack of oxygen) conditions within 1 m of the lake bottom from mid-July to early September in Dipping Vat and Figure Eight lakes and within 2 – 3 metres of the lake bottom from late May to mid-September in Beaver and Fiesta lakes; there was little evidence of anoxic conditions in Swan Lake. Maximum surface water temperature ranged from 21.9 to 23.3°C in all five lakes.

Partnerships

Alberta Sustainable Resource Development



Chad Judd, Technician, ACA.

Todd-Beaver Creek Riparian Conservation

In previous years, our riparian conservation projects in southern Alberta involved partnerships with watershed groups in two small sub-watersheds of the Oldman River, the Beaver and Todd creeks. More recently, new watershed groups have been formed within the Oldman River watershed creating opportunities for ACA to partner with these groups and engage more landowners in our riparian conservation projects. In partnership with the Lyndon Creek Watershed Group, we conducted a public tour of the watershed to showcase riparian projects; we provided an electrofishing demonstration during the tour. We also participated in an electrofishing demonstration day on Drywood Creek, hosted by the Drywood/Yarrow Conservation Partnership and Trout Unlimited Canada. We established two landowner partnership fencing agreements, one on Drywood Creek and the other on Five Mile Creek, (tributary to Beaver Creek) and participated in the Pincher Creek Watershed Group annual 'Blueweed Blitz' weed pull and education day. We maintained communication with existing partners and established four new partnerships, with the Lyndon Creek Watershed Group, Drywood/Yarrow Conservation Partnership, Pincher Creek Watershed Group, and the Oldman Watershed Council.

Partnerships

Alberta Agriculture and Rural Development, Alberta Riparian Habitat Management Society (Cows and Fish), Alberta Sustainable Resource Development, Beaver Creek Watershed Group, Drywood/Yarrow Conservation Partnership, Indianfarm Creek Watershed Group, Lyndon Creek Watershed Group, Oldman Watershed Council, Penn West Energy, Pincher Creek Watershed Group, Prairie Farm Rehabilitation Administration, Royal Bank of Canada, South Eastern Alberta Watershed Alliance, South Western Alberta Conservation Partnership, Trout Unlimited Canada, Upper Todd Creek Watershed Group

Stream Crossings and Arctic Grayling Conservation in the Athabasca River Basin

Alberta Arctic grayling populations have been severely declining since the 1950s. Habitat fragmentation from improperly installed hanging culverts is often cited as the major contributing factor. Despite dramatically declining populations, there is currently no provincial standardized Arctic grayling population sampling method. We determined effective Arctic grayling monitoring protocols in Athabasca River wadeable streams by comparing field efficiency, how temporal and stream characteristics influence grayling catch rates, and comparing population estimates of two commonly used fisheries assessment methods. In addition, to detect habitat fragmentation, we compared grayling abundance above and below stream crossing structures, and on a larger sub-basin scale. Overall, our results indicated that angling is the most effective grayling sampling method; however, electrofishing should be used as well since it captured young-of-year grayling. Additionally, sampling would be most effective in the later summer months when electrofishing and angling catches increase substantially. Although we found no evidence to support that culvert networks have fragmented grayling populations, we believe that Athabasca River tributary populations may already be too fragmented for us to detect any discernable changes.

Our study sites were generally on the southern limit of Alberta's Arctic grayling range where population declines have been most pronounced. Thus, our results should serve as a guide until similar region-specific studies have been undertaken.

Partnerships

Alberta Sustainable Resource Development,
University of Alberta



Trout Stocking Evaluation

Stocking fish to waterbodies can serve to maintain, establish or create fisheries and to provide angling opportunities. ACA and Alberta Sustainable Resource Development stock over three million rainbow trout into 266 lakes annually. However, despite this considerable effort, the success and benefits of these programs are poorly understood, and are unmeasured. The objective of the Trout Stocking Evaluation project is to develop tools to assess stocked trout sport fisheries and advance the provincial stocking programs. In 2009, we evaluated trout sport fisheries at Salter's, Star and Heritage lakes using low-effort summer angler surveys, a brief face-to-face questionnaire, and a fall gill netting protocol. Salter's, Star and Heritage lakes are stocked annually with approximately 20,400, 8,100, and 9,000 rainbow trout, respectively. Average angling pressure at these stocked lakes was 335 angling-hours per hectare. The angling effort to harvest a rainbow trout ranged from 6 to 10 hours. Generally, anglers were satisfied with their fishing experiences. The most frequent suggestions by anglers were to "increase the numbers and size of fish," "improve services," and "change nothing." Based on positive correlation with angler catches, the fall gill netting protocol provides accurate estimates of abundance.

Partnerships

Alberta Fish and Game Association – Onoway Chapter, Alberta Student Temporary Employment Program, Alberta Sustainable Resource Development

Upper Oldman Drainage Adult Bull Trout Population Assessment

Bull trout populations in most of Alberta's East Slope drainages are in decline due to habitat loss, migration barriers, over-fishing and competition with non-native fish species. These effects are attributed to an increase in industrial and recreational activity throughout the bull trout range, including the Oldman River drainage. As a result, we initiated a four-year population assessment to evaluate the adult migratory component of the bull trout population in the upper Oldman River drainage. We installed aluminum conduit fish traps in four key bull trout spawning tributaries, Hidden Creek, Livingstone River, Racehorse Creek and Dutch Creek, to capture and mark post-spawn bull trout prior to their downstream migration. We also conducted redd surveys to account for spawning fish that were not intercepted by fish traps and to identify other critical bull trout spawning habitat in the drainage. During 2009, we intercepted a total of 78 fish: 59 from Hidden Creek, seven from the Livingstone River, eight from Racehorse Creek, and four from Dutch Creek; catch rates were lower than observed in 2007 at all locations. Similarly, we observed fewer redds in Hidden Creek in 2009 ($n = 77$) than in 2008 ($n = 108$). We discovered new spawning areas in the upper Livingstone River, South Racehorse Creek and Dutch Creek. It is evident that Hidden Creek is a critical migratory bull trout spawning tributary in the upper Oldman drainage, given that the majority of spawning fish (71%; $n = 279$) were captured in this creek. Observed number of redds far out-numbered migratory fish captured in the fish traps, suggesting the occurrence of stream-resident bull trout populations in the upper Livingstone River, Racehorse Creek and Dutch Creek.

Partnerships

Alberta Sustainable Resource Development,
Devon Canada Corporation



Wabasca Lakes Walleye Movement Study

A spring conservation closure (April 1 – June 1) has been established at two inlets, Drowned-horse Creek and Willow River, on North and South Wabasca lakes, respectively, to protect spawning walleye from seasonal harvest. The primary purpose of this study was to assess the effectiveness of these closure zones by tracking the distribution of mature walleye implanted with radio transmitters within the lakes before, during and shortly after the spawning season. In 2008, we implanted 35 mature walleye (15 from Drowned-horse Creek, 15 from Willow River, and five from North Wabasca Lake). In 2009, we implanted an additional 30 fish (nine from Drowned-horse Creek, 10 from Willow River, and 11 from North Wabasca Lake). We tracked fish movement weekly from April 19 to June 20, 2009. More than half of the located fish in both South and North Wabasca lakes occupied the closure zones between April 26 – June 6 and June 7 – 13, respectively; proportions of tagged fish in the closure zones of both lakes dropped to less than 50% thereafter. Thus, the existing closure period of April 1 – June 1 was useful in protecting the majority of spawning walleye from harvest in South Wabasca Lake, but less so for North Wabasca Lake as >50% of tagged fish in North Wabasca Lake remained in the closure zone two weeks (June 13) after the zone was opened to fishing on June 1. We found two fish tagged in North Wabasca Lake in South Wabasca Lake suggesting movement of fish between the two basins.

Partnerships

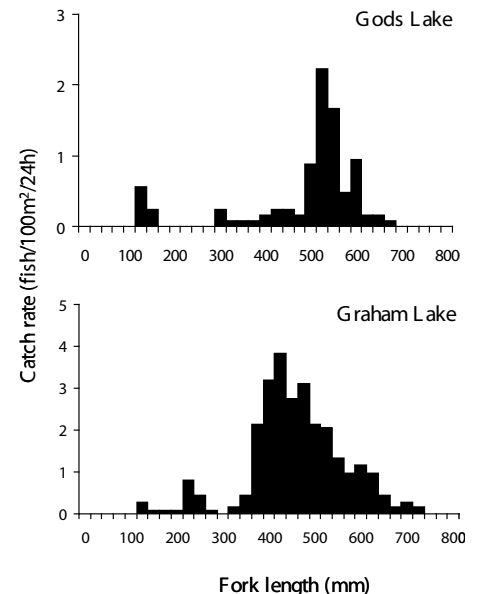
Alberta Sustainable Resources Development

Walleye Stock Assessment Program 2009/10

As part of the Alberta Walleye Management and Recovery Plan (AWMRP), we conducted index netting surveys at Buffalo, Gods and Graham lakes to collect information on walleye population structure and growth. We captured walleye using gill nets following the Fall Walleye Index Netting (FWIN) protocol. Each net consisted of eight 7.6 x 1.8 metre panels of different mesh sizes, ranging from 25 to 152 millimetres, and was set for approximately 24 hours. Contrary to the anecdotal information suggesting that walleye occurred in Buffalo Lake, we did not capture any walleye from this lake during our survey. Gods Lake had an estimated mean catch rate of 8.7 fish per 100 m² of net per 24 hours, while Graham Lake exhibited a mean walleye catch rate of 27.2 fish per 100 m² of net per 24 hours. Walleye ranged in size between 104 – 651 millimetres fork length in Gods Lake and between 105 – 718 millimetres fork length in Graham Lake. Based on the AWMRP criteria, walleye populations in both Gods and Graham lakes displayed wide age-class distributions, moderate growth rates and early maturity. Information gathered in this study will help provincial resource managers to determine the current status of these walleye populations and will aid in future management decisions.

Partnerships

Alberta Sustainable Resources Development



Land Management Program

The Land Management program encompasses activities intended to conserve, protect and enhance wildlife and fish habitat, and increase recreational opportunities. The major activities include Habitat Securement, ACA Conservation Site Management and Recreational Opportunity Initiatives.

In 2009/10, we acquired 13 new Conservation Sites and seven Conservation Easements conserving over 4,100 acres with an estimated land value of over \$4 million. Most of our acquisitions have been collaborative efforts with other conservation organizations (the Alberta Fish and Game Association, Ducks Unlimited, Nature Conservancy of Canada), government, corporate partners and private landowners, who graciously donated land or conservation easements to ensure these areas remain protected. In partnership with Suncor Energy Foundation and Shell Canada Energy, we continued to implement a terrestrial conservation program.

Our efforts go far beyond Habitat Securement. We also actively manage our lands to control invasive weeds, maintain fences and other infrastructure, conduct site inspections, monitor habitat, and maintain and expand partnerships to assist with site stewardship. In 2009/10, we completed inspections and maintenance on over 187 Conservation Sites across the province that covers nearly 100,000 acres of habitat.

We continue to promote ACA and partner-owned Conservation Sites across Alberta in our *Discover Alberta's Wild Side—Guide to Outdoor Adventure*. The guide promotes Conservation Sites that are available for all types of sustainable recreational opportunities including hunting, angling, wildlife viewing and hiking.

Our program is increasingly focused on enhancing and restoring habitat at our Conservation Sites to improve habitat quality for a variety of wildlife and fish species. In 2009/10, we completed habitat enhancements on seven Conservation Sites to benefit upland game birds, ungulates and various other wildlife species. Enhancements included developing a five-acre wetland, additional wetland improvement projects, waterfowl nest tunnel and nest box construction, site preparation for various vegetation enhancements, and tree planting at several sites. We also completed routine maintenance and installed new signage at 23 of these sites and another six at our fisheries access sites.

In 2009/10, we inspected and maintained 31 fisheries access sites across the province. They provide enhanced opportunities for anglers to access key streams, stocked ponds and lakes, thereby increasing recreational opportunities for public use. Collaboration with volunteer stewards, industry, government, municipalities and other organizations helped us achieve management and maintenance of these Conservation Sites. We completed site enhancements and installed new facilities at five fisheries access sites to enhance the experience of anglers.

Our Land Management program activities in 2009/10 involved over 60 partners and collaborations, including government, industry, NGOs, counties/municipalities, leaseholders, private landowners, and other interested groups.



Andy Murphy, Senior Technician, ACA.

"The future is looking bright and I am looking forward to the challenges we face to ensure we continue to make a difference on Alberta's landscape."

Darren Dorge, ACA

2009/10 Overview

- 13 new Conservation Sites secured
- 4,100 acres of new lands secured
- \$4,000,000 value of lands secured (approximate value)
- 218 Conservation sites inspections and maintained
- 9 Conservation Sites underwent habitat enhancements
- 29 new Conservation Sites signs installed.
- 21 Conservation Sites required recommendations on land use referrals
- 101 water control structures inspected
- 5 management plans completed
- 35 management plans drafted or in development
- 60 partners and collaboration involved in Land program activities



COMPLETED
WILDLIFE PROGRAM
CONSERVATION
WORK FOR 2009/10:

Boreal Habitat Conservation

ACA's Boreal Habitat Conservation Program secures land through corporate partnerships conserving and enhancing important native habitat areas for wildlife. It is guided by its agreements developed with corporate partners. Corporate partnerships and collaborations with other conservation agencies allow us to maximize assets and overall efficiency of our provincial habitat conservation program. In 2009/10, we and our corporate partners secured eight new Conservation Sites totaling 1,408 acres of high-quality habitat with a land value of approximately \$525,000.

Partnerships

Alberta Fish & Game Association, Alberta Sport, Recreation, Parks and Wildlife Foundation, Ducks Unlimited Canada, Shell Canada Energy, Suncor Energy Foundation



“The great thing about the Schroeder Conservation Site is that it’s so close to Red Deer. Tree Canada and Shell have planted 100,000 aspen there already, and have offered to plant 30,000 white spruce too. With this help we’re turning abandoned cultivation into valuable wildlife habitat and outstanding recreational opportunities – just 10 miles from a major urban center. ”

Andy Murphy, ACA

Corporate Partner Securement Transactions in 2009/10

Region & Project Name	Corporate Partner(s)	Size (ac)	CPP Focus Area
Wolters NE15-73-12-W5M	Suncor Energy Foundation	160	Lesser Slave Lake
South Peavine N4-78-16-W5M	Suncor Energy Foundation	230	Kimiwan / Winagami / South Heart
East South Heart SE6-77-17-W5M	Suncor Energy Foundation	88	Kimiwan / Winagami / South Heart
Winagami Southwest 2 SE29-75-19-W5M	Suncor Energy Foundation	160	Kimiwan / Winagami / South Heart
East Oakley Lake NW7-67-18-W4M	Suncor Energy Foundation	143	Rochester / Newbrook / Tawatinaw
East Oakley Lake NW6, SW7-67-18-W4M	Suncor Energy Foundation	320	Rochester / Newbrook / Tawatinaw
North Fawcett 4 NW6, SW7-67-18-W4M	Shell Canada Energy	147	Athabasca / Hubert Lake
Flatbush 4 NE10-66-1-W5M	Shell Canada Energy	160	Athabasca / Hubert Lake
TOTAL		1,408	

Conservation Site Management

The Land Management Program (LMP) encompasses activities intended to conserve, protect and enhance wildlife and fisheries habitat, and to increase sustainable recreational opportunities including angling and hunting. One of the core activities of the LMP is the management of Conservation Sites. Conservation Sites are managed on a provincial scale to promote consistency and efficiency, but delivered on a regional scale to maximize local knowledge and partnership opportunities. Conservation Site management involves the maintenance and management of conservation assets that have been accumulated through historic projects and new conservation initiatives. We inspected and maintained 187 Conservation Sites, completed enhancements on nine sites, installed project signs at 23 sites and provided recommendations on 21 land use referrals. We also completed 101 inspections of water control structures to help identify ACA's future role with managing these structures. Overall, new acquisitions increased by approximately 3,300 acres lands. There is over 200,000 acres on more than 300 Conservation Sites.

Partnerships

Alberta Ecotrust, Alberta Fish and Game Association, Alberta Sport, Recreation, Parks and Wildlife Foundation, Alberta Sustainable Resource Development, Fish and Wildlife Division and Lands Division, Clearwater County, County of Barrhead, County of Lamont, County of Lethbridge, County of Newell, County of Two Hills, County of Warner, Ducks Unlimited Canada, Eastern Irrigation District, Forest Resource Improvement Association of Alberta, Land Stewardship Resource Centre, Millar Western Forest Products Ltd., Nature Conservancy of Canada, North Raven River Working Group, Partners in Habitat Development, Pheasants Forever, Private Landowners, Rocky Ridge Vegetation Control, Shell Albian Sands, Shell Canada, Suncor Energy Foundation, The Rocky Riparian Group, Total E&P Canada, Tree Canada, Trout Unlimited Canada, Central Chapter



Fisheries Access Site Management

ACA's Land Management Program (LMP) encompasses activities intended to conserve, protect and enhance fish and wildlife habitat and to increase sustainable recreational opportunities including angling and hunting. One of the activities of the LMP is the management of fisheries access sites across the province. The Fisheries Access Site Management Program is intended to provide angling opportunities to key streams, rivers and lakes throughout the province. We maintained 31 fisheries access sites across the province in 2009/10 and upgraded six sites with improvements to parking areas (two sites), day use facilities such as outhouses and garbage disposal bins (five sites), structures such as boat launches and ladders to help anglers cross fences (two sites), perimeter fencing (two sites), and signage (one site). Overall partnerships remained the same from the previous year at 28 in 2009/10.

Partnerships

Alberta Environment, Alberta Fish and Game Association, Alberta Sustainable Resource Development, Fish and Wildlife Division and Lands Division, Alberta Tourism, Parks and Recreation, Burnstick Lake Campground, Canfor, Caroline Chamber of Commerce, Clearwater County, County of Camrose, County of Newell, County of Stettler, County of Warner, Daishowa-Marubeni International Ltd., Devon Canada Corporation, Grimshaw Agricultural Society, Hillcrest Fish and Game, Lamont Fish and Game, Municipal District of Rocky View, Municipal District of Sunrise County, North Raven River Working Group, Shell Canada, Town of Fairview, Town of Lamont, Trout Unlimited Canada, Central Chapter, Volunteer Stewards, Weyerhaeuser, Zama Lake Society



Landowner Habitat Program

In 1986, Alberta's Fish and Wildlife Division launched the Landowner Habitat Program (LHP) to prevent the destruction of native habitat on privately-owned lands. The program was structured to make annual or lump-sum payments to landowners who agreed to retain wildlife habitat on private land. While the LHP provided a very cost-effective tool for preserving wildlife habitat, it did not guarantee outdoor enthusiasts access to the habitat for recreational enjoyment. In 2008, ACA modified the LHP agreement to address recreational access. The new program required landowners to provide reasonable public foot access to the habitat lands under agreement, in addition to conserving the habitat. Fiscal year 2009/10 was just the second year that ACA offered these agreements to landowners. Many landowners who we approached were unwilling to provide reasonable public foot access. Two landowners did agree to the terms of the new LHP and signed 10-year agreements. These agreements conserve 829 acres and provide reasonable public foot access for recreational opportunities.

Partnerships

Landowners

Management Plan Development

ACA is dedicated to efficiently managing Conservation Sites that we either hold title to or manage on behalf of the Crown. Development of management plans provides clear direction for the overall future management of our Conservation Sites. Plans also act to streamline the roles and responsibilities and other activities that are agreed upon by our conservation partners. In 2009/10, we completed management plans for five titled sites, including South Peavine, Beltz Lake, East South Heart, North Fawcett 4, South Peavine and Winagami Southwest 2. We also completed draft management plans for 14 additional sites (11 titled and three Crown) and began developing plans for 21 other sites (nine titled and 12 Crown) scheduled for completion by March 31, 2011.

Partnerships

Alberta Fish and Game Association, Alberta Sustainable Resource Development, Ducks Unlimited Canada, Nature Conservancy of Canada, Shell Canada Energy, Suncor Energy Foundation, Wildlife Habitat Canada

"It's rewarding when we look back and see how much we have accomplished, and that we are making a positive impact on conserving and managing wildlife and fish habitat."

Darren Dorge, ACA



"We conserve habitat on the landscape so the kids of tomorrow can enjoy the outdoor experience like I do today." Jennifer Straub, ACA

Provincial Habitat Securement Program

ACA's Provincial Habitat Securement Program secures important wildlife and fisheries habitats. These habitats also provide Alberta's outdoor enthusiasts with year-round recreational opportunities. The program is guided by its 'Habitat Securement Fund Terms of Reference' and by its priority 'Focus Areas'. Partnerships, land donations and collaborations with other conservation agencies allow ACA to maximize assets and overall efficiency of our habitat securement program. In 2009/10, we and our conservation partners secured five new Conservation Sites totalling 1,895 acres of high-quality habitat with a land value of approximately \$3,000,000.

Partnerships

Alberta Fish and Game Association, Alberta Sustainable Resource Development, Fish and Wildlife Division and Lands Division, Buffalo Lake Naturalists, Ducks Unlimited Canada, Government of Canada Natural Areas Conservation Program, landowners and lessees, Nature Conservancy of Canada, Pheasants Forever, private donors, Trout Unlimited Canada, Wildlife Habitat Canada

Securement Transactions in 2009/10

Region & Project Name	Securement Tool & Partners	Size (ac)	Special Features
Golden Ranch Pt. of E35-51-21-W4M	A partnership land acquisition between ACA, AFGA and NCC.	137	This site is 27 km east of Edmonton. It includes over a mile of Cooking Lake shoreline. It provides important shorebird habitat and a multitude of hunting opportunities. It's the first stage of a planned 1,500 acre purchase.
Gouin S30 and NE30-60-24-W4M	A private land donation to ACA.	480	This site is 56 km north of Edmonton. It includes a large permanent wetland and a wide variety of upland habitats.
Grieve NE19-60-24-W4M	A private land donation to ACA.	158	This site is immediately adjacent to the Gouin Conservation Site (56 km north of Edmonton). Like the Gouin site, it supports great upland habitat diversity.
Bohomolec SW18-8-4-W5M	An NCC purchase with a donated CE to ACA.	160	This site is located n the Crowsnest Pass 7 km west of Blairmore. It provides critical winter range for elk.
Wild Rose 36 and N25-3-23-W4M	A partnership purchase between ACA, AFGA, NCC with assistance from the Natural Areas Conservation Program (Federal Funds).	960	This site is located along the western edge of the Milk River Ridge adjacent to McIntyre Ranch and Deseret Ranch. The site supports fescue grassland and provides exceptional sharp-tailed grouse habitat.
TOTAL		1,895	



Streambank Fence Renegotiation Strategy

The Alberta Government's Buck for Wildlife Streambank Fencing Program was initiated to protect fish and wildlife habitat as well as provide public access to angling streams. Alberta Conservation Association (ACA) is currently responsible for honouring maintenance commitments of inherited landowner agreements, which has become a significant logistical burden. In 2009, we continued with work initiated the previous year to develop the Streambank Fence Renegotiation Strategy. The goal of the project is to reduce annual logistical issues and programming costs, while continuing to protect riparian habitat and provide angler access to priority streams.

We formed the Streambank Fence Strategy Committee to gain the support of key stakeholders, and developed a new riparian lease agreement structure. We will continue to implement the project in 2010/11 as a pilot project to evaluate the proposed leasing option and evaluate if this is a feasible method of enhancing our Riparian Conservation Program.

Partnerships

Alberta Sustainable Resource Development, Fish and Wildlife Division, Dickson Fish and Game, Golder Associates, Trout Unlimited Canada, Central Chapter and Edmonton Chapter

Use Respect – Ask First

In 1986, the Use Respect program was initiated to address the lack of recreational access available on privately-owned lands. The program's intent was to educate recreationalists to seek landowner permission to access private land through signage and personal communication, and to identify potential lands/landowners that would allow access. Over time, awareness and delivery of the program diminished. In 2008, ACA took the lead in gathering a group of interested individuals and organizations to discuss a revitalization of the program. It was determined that the program needed to be revived with a fresh appearance. Our Communications department developed a new logo and signage that was endorsed by the group. The revitalized program, Use Respect – Ask First, ensures signs are available, free-of-charge, to private landowners through various supporting organizations.

Partnerships

Alberta Beef Producers, Alberta Fish and Game Association, Alberta Hunter Education Instructors' Association, Alberta Professional Outfitters Society, Alberta Sustainable Resource Development, Alberta Trappers' Association, Bow River Irrigation District, County of Warner, Cypress County, Ducks Unlimited Canada, Wild Sheep Foundation of Alberta, Federation of Alberta Naturalists, Hunting For Tomorrow, Municipal District of Taber, Pheasants Forever, Report A Poacher, Trout Unlimited Canada, Western Stock Growers Association



Conservation Reports

All projects listed in this annual report have had a year-end summary report produced, which has been posted to our website and is available for public viewing. In cases where the project is complete and the level of information is considered substantial, a Conservation Report is produced. Conservation Reports are generally more comprehensive, are published in both electronic and hardcopy, and are numbered as part of ACA's Report Series.

The following Conservation Reports were completed and published in the 2009/10 fiscal year and are available on our website and in print as part of the Report Series:

- Blackburn, J. 2010. Abundance and distribution of Westslope Cutthroat Trout in the Castle River Drainage, Alberta, 2008 - 2009. Technical Report, T-2010-002, produced by the Alberta Conservation Association, Lethbridge, Alberta, Canada. 39 pp + App.
- Ganton, B.P. 2009. Summer sport fishery assessment: Buck, Moose, Pine, and Pinehurst lakes, Alberta, 2008. Data report, D-2009-006, produced by the Alberta Conservation Association, Sherwood Park, Alberta, Canada. 49 pp. + App.
- Ganton, B. and C. James. 2010. Sport fishery surveys: Christina, Fickle, Grist and Shiningbank lakes, Alberta, 2009. Data report, D-2010-004, produced by the Alberta Conservation Association, Sherwood Park, Alberta, Canada. 31 pp. + App.
- Hermanutz, R., R.B. Stavne. 2009. Inventory of biophysical features and off-highway vehicle trails in three parks in the Peace River Corridor. Technical Report, T-2009-003, produced by the Alberta Conservation Association, Peace River, Alberta, Canada. 39 pp + App.
- Hudson, V. 2009. Alberta waterfowl crop damage prevention program, 2008. Data Report, D-2009-007 produced by the Alberta Conservation Association, St. Paul, Alberta, Canada. 10 pp + App.
- Hudson, V. 2010. Alberta Waterfowl Crop Damage Prevention Program, 2009. Data Report, D-2010-001 produced by the Alberta Conservation Association, St. Paul, Alberta, Canada. 7 pp + App.
- Patterson, B. 2009. Winter Sport Fishery at Gull Lake, Alberta, 2009. Data Report, D-2009-010, produced by the Alberta Conservation Association, Sherwood Park, Alberta, Canada. 17 pp. + App.
- Rodtka .M., C. Judd, and K. Fitzsimmons. 2010. North Saskatchewan and Ram Rivers Bull Trout Spawning Stock Assessment, Alberta, 2007-2009. Technical Report, T-2010-001, produced by the Alberta Conservation Association, Rocky Mountain House, Alberta, Canada. 28 pp + App.
- Webb, S.M., and R.B. Anderson. 2009. Predicting habitat value for elk in the Central East Slopes of Alberta. Technical Report, T-2009-002, produced by the Alberta Conservation Association, Rocky Mountain House, Alberta, Canada. 32 pp. + App.
- Webb, N., and R. Anderson, editors. 2009. Delegated aerial ungulate surveys, 2007/2008 survey season. Data Report, D-2009-008, produced by the Alberta Conservation Association, Rocky Mountain House, Alberta, Canada. 89 pp
Specific section:
- Grue, M., and K. Morton. 2009. Pronghorn. Pages 6 – 9. In: N. Webb and R. Anderson, editors. Delegated aerial ungulate surveys, 2007/2008 survey season. Data Report, D-2009-008, produced by the Alberta Conservation Association, Rocky Mountain House, Alberta, Canada.
- Webb, N., and R. Anderson, editors. 2009. Delegated aerial ungulate surveys, 2008/2009 survey season. Data Report, D-2009-009, produced by the Alberta Conservation Association, Rocky Mountain House, Alberta, Canada. 91 pp
Specific section:
- Grue, M., and K. Morton. 2009. Pronghorn. Pages 6 – 10. In: N. Webb and R. Anderson, editors. Delegated aerial ungulate surveys, 2008/2009 survey season. Data Report, D-2009-009, produced by the Alberta Conservation Association, Rocky Mountain House, Alberta, Canada.
- Wood, S. and James, C. 2010. An assessment of Walleye populations in Buffalo, Gods, and Graham lakes, Alberta, 2009. Data Report, D-2010-003, produced by the Alberta Conservation Association, Sherwood Park, Alberta, Canada. 16 pp. + App.
- Wright, K. D. 2010. Hay-Zama lakes waterfowl staging and bald eagle nesting monitoring program, 2009. Data Report, D-2010-002, produced by the Alberta Conservation Association, Peace River, Alberta, Canada. 19 pp. + App.

The following publication is not available in print:

MacPherson, L. and T. Furukawa. 2010 Preliminary report: Stream crossings and Arctic Grayling conservation in the Athabasca River Basin. Produced by the Alberta Conservation Association, Sherwood Park, Alberta, Canada. 30 pp + App.

Report A Poacher and Compensation Programs

ACA and ASRD continue to deliver the Report A Poacher (RAP) and Compensation Programs in a partnership outlined in a Memorandum of Understanding. ACA leads the promotion and administration of both programs, while ASRD is solely responsible for liaising with informants, investigating reports and managing enforcement.

Report A Poacher (RAP) was created in 1990 as a community-based program to assist Albertans in protecting Alberta's wildlife, fish and the habitat in which they live. RAP provides a toll-free phone number (1-800-642-3800) for people to report suspected illegal activity 24 hours a day, seven days a week. In addition, the program educates Albertans about the value and importance of conserving Alberta's wildlife and fish and promotes a positive image of resource users.

ACA and ASRD are working together to revitalize the program, which includes new messaging for promotional materials and www.reportapoacher.com, replacing old roadside signs that are either significantly deteriorated or missing completely with new signs that have a bright reflective red RAP logo for improved visibility and recognition. In addition, ACA is also working with private landowners to install new RAP signs along roads in rural locations to promote the RAP Program and encourage responsible resource use.

2009/10 Overview

- *7,509 calls from the public to reporting suspected illegal activity to our wildlife resources*
- *241 offenders charged with poaching*
- *\$44,350 in rewards paid out to individuals whose call and information led to an arrest or fines*



Compensation Programs

The Wildlife Predator Compensation and Shot Livestock Compensation programs provide compensation to producers for livestock lost to predators (black bear, grizzly bear, cougar, wolf and eagle) and livestock shot during a hunting season. ASRD is responsible for investigating these incidents, while ACA is responsible for the promotion of the programs and management of the compensation funds.



2009/10 Overview

Wildlife Predator	Claims	Compensation
Eagle	3	\$1,109.75
Cougar	8	\$4,664.62
Black Bear	7	\$4,462.05
Grizzly Bear	10	\$15,347.67
Bear (unidentified species)	5	\$3,823.48
Wolf	127	\$107,150.98
Unknown Predator	14	\$7,815.90
TOTAL	174	\$144,374.35

Shot Livestock	14	\$15,983.16
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Our Granting Programs

Erin Vandermarel and Corey Rasmussen, Biologists, ACA.

2009/10 Overview

- *116 applications were received for a total of \$2.7 million*
- *68 applications were approved for a total of \$997,462*

In addition to delivering our own conservation programs throughout the province, we have supported the conservation efforts of others through the provision of funding and grants since 1997. In 2009/10, we directed almost \$2 million to our dedicated and hardworking conservation partners through three distinct funding programs: the Grant Eligible Conservation Fund; the Habitat Securement Fund; and ACA Grants in Biodiversity. The goal of these funds is to enable and support work that conserves and enhances Alberta's wildlife and fish populations, as well as their habitats.

Grant Eligible Conservation Fund

Funded by the province's hunters and anglers through levies on licenses, the Grant Eligible Conservation Fund (GECF) 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. Operational since 2002, this Fund has provided approximately \$8.5 million to 492 projects carried out in Alberta by the conservation community. Furthermore, the funding provided by the GECF continues to leverage more than six times its value in conservation dollars—money that has been directly used for conservation work in Alberta.

In 2009/10, we made some changes to the GECF. First, we raised the small grant's maximum award from \$2,500 to \$3,000. Second, applications relating to the recruitment and retention of hunters, anglers and trappers, were handled by the new ACA Recruitment and Retention of Hunters, Anglers and Trappers program. Finally, we added six funding priorities (listed below) to the GECF funding guidelines. The GECF accepted applications that did not relate to these priority areas; however, projects that addressed one or more of these priorities had a better chance of being funded.

Since 2002, the GECF has provided approximately \$8.5 million to 492 projects carried out in Alberta by the conservation community.

The GECF leverages more than *six times* its value in conservation dollars—money that has been directly used for conservation work in Alberta.

The GECF accepted applications in January 2009, and these were processed and reviewed in February 2009. The ACA Board appointed Funding Review Committee comprised of three board members and ten citizens of Alberta made its funding recommendations on February 27, 2009. Project work was carried out between April 1, 2009 and March 31, 2010.

"I have the pleasure of communicating with all the dedicated and hard-working individuals and organizations also working on conservation issues – it's nice to see that grant money goes a long way in supporting conservation activities across our province."

Amy MacKinven, GECF Coordinator, ACA

2009/10 GECF Funding Priorities

- ① Habitat enhancement activities specifically listed on provincial recovery plans for Alberta's endangered species (to be conducted in co-operation with recovery teams).
- ② Site specific enhancements of habitat, structures and facilities aimed at increasing recreational angling or hunting opportunities, improving habitat or increasing wildlife/fish productivity on the site (i.e., planting/seeding vegetation, development of new fisheries access sites, nest box initiatives, food plot trials and cover plot trials, spawning bed enhancement, etc.).
- ③ Urban fisheries development, including: initial evaluation of water quality aspects of existing ponds to determine their suitability for fish stocking; purchase of equipment required to ensure suitable water quality for fish stocking (e.g., aeration equipment); fish stocking in public ponds; promotion of an urban fishery (including natural waterbodies).
- ④ Stewardship initiatives (e.g., on-going maintenance of Conservation Sites including fisheries access sites, adopt a fence, property inspections for invasive weeds, manual weed control, grass mowing).
- ⑤ Impacts of non-native species on persistence of native species.
- ⑥ Improvements and innovations in matching sportspeople with landowners (e.g., facilitating hunter access to waterfowl, elk and deer).

2009/10 GECF Project Highlights

The 68 projects funded in 2009/10 yielded many results and deliverables, which are described in more detail in the GECF Annual Report. A few projects that received funding include:

In 2009/10 a grant was awarded to the Alberta Fish & Game Association's (AFGA) first phase of the *Pronghorn antelope migration corridor fencing enhancement project*. This project emerged from recommendations of an earlier GECF-supported research project on pronghorn migration by Michael Suitor of the University of Calgary in 2007/08. Through collaboration with key partners, such as provincial and federal government departments, conservation agencies, Fish & Game clubs, the Southern Alberta Bowhunters Association, and the hard work and commitment of 45 volunteers, the AFGA co-ordinated the removal of 80 kilometres (50 miles) of hazardous barbed wire and installation of double-stranded smooth wire in various targeted areas in southern Alberta, namely the north boundary of Canadian Forces Base Suffield, a key migration corridor north of Medicine Hat, and Antelope Creek Ranch west of Brooks.

Several projects funded in 2009/10 tackled the problem of invasive non-native plant species in Alberta, including: the Alberta Invasive Plants Council's Weed Wise Alberta program; the Prairie Conservation Forum's "Invasive alien plant education" project; the Weaselhead/Glenmore Park Preservation Society's invasive plant project at the Weaselhead Natural Environment Park; and the Alberta Native Plant Council's Adopt-a-Plant Alberta program that produced a pamphlet on the exotic species, baby's breath, which may be threatening several listed plant species and native grassland habitat. All groups working on projects involving invasive plants were put in contact with each other to encourage collaboration and awareness of invasive plant work being conducted by other Alberta groups.

The discovery of Cardinal Lake as a significant moulting and staging site for Barrow's goldeneye provided an opportunity for Ducks Unlimited Canada (DUC) to research the post-breeding ecology of this under-studied sea duck. Ducks Unlimited Canada was awarded a grant to study the basic aspects of moulting and staging ecology of Barrow's goldeneye in the Peace Parklands of northern Alberta, as well as to provide insights into population affiliations (site use, site fidelity). During the 2009 field season, DUC monitored Barrow's goldeneye use of Cardinal and Leddy lakes, captured and banded approximately 600 moulting Barrow's goldeneye. A variety of body measurements were taken from captured individuals, and 50 birds were fitted with VHF radio transmitters so that foraging, movement and survival could be monitored on a weekly basis throughout the moulting and staging periods. An additional 20 birds were implanted with satellite transmitters to monitor large-scale and longer-term movements of ducks from the Peace Parklands of Alberta to their wintering and breeding sites. These birds provided numerous new insights into the timing, habitats and routes used to return to wintering areas along the Pacific Coast during fall migration. Furthermore, they provided interesting insights into the potential level of hunting mortality on this population.



Grant Eligible Conservation Fund Recipients for 2009/10

Small Grants Awarded (\$3,000 and under)

Alberta Stewardship Network Society, 2009
Grassroots Awards for Environmental Stewardship (3rd Annual), \$1,290

Alberta Stewardship Network Society, 2009
Stewards in Motion VII Workshop, \$2,350

Andrew Stiles, *Nest box deployment with youth to inspire stewardship*, \$2,500

Ann & Sandy Cross Conservation Area,
Conservation Discovery Education 2009, \$3,000

Camps for Children Educational Association,
Phase 3 Riparian Area Fencing Project, riparian area brochure printing and fish pond stocking at Aspen Ranch Outdoor Education Facility, \$3,000

Cochrane Branches and Banks Environmental Foundation, *Big Hill Creek habitat enhancement and interpretive sign project*, \$3,000

Cows and Fish, 2010 *Alberta environmental stewardship calendar*, \$3,000

Fort Saskatchewan Fish and Game Association,
Nature walking trails and birdhouse placement, \$2,000

Friends of Fish Creek Provincial Park Society,
Baseline study of amphibians in Fish Creek Provincial Park, \$3,000

Friends of Kerbes Pond Society, *Maintaining and operating of existing aeration system*, \$1,200

Helen Schuler Nature Centre, *Rattlers, People & Parks: Lethbridge Rattlesnake Conservation Program*, \$1,500

Helen Schuler Nature Centre, *2nd annual city-wide coulee clean-up*, \$2,500

Lethbridge College, *Soil bioengineering and bank enhancement along the Oldman River*, \$3,000

Onoway and District Fish and Game Association, *Blue-bird house project*, \$700

Prairie Conservation Forum, *Invasive alien plant education, Alberta*, \$2,500

University of Alberta Chapter of the Wildlife Society, *Urban deer project*, \$1,500

University of Alberta, *Evaluating the abundance of the western grebe (Aechmophorus occidentalis) in Alberta*, \$3,000

University of Alberta, *Management of earthworm invasions in Alberta*, \$3,000

Weaselhead/Glenmore Park Preservation Society, *Invasive plant project at the Weaselhead Natural Environment Park*, \$3,000

Large Grants Awarded (over \$3,000)

Alberta Fish and Game Association, *Pronghorn antelope migration corridor fencing enhancement*, \$25,000

Alberta Fish and Game Association, *Volunteer habitat lands stewardship*, \$27,000

Alberta Fish and Game Association, *Operation Grassland Community*, \$35,000

Alberta Foothills Network, *Maintaining the foothills' natural and economic values – working cooperatively to find balanced solutions*, \$37,000

Alberta Hunters Who Care, *Wild Game for Foodbank Program*, \$20,000

Alberta Invasive Plants Council, *Weed Wise Alberta*, \$31,000

Alberta Native Plant Council, *Adopt-a-Plant Alberta 2009*, \$13,688

Beaverhill Bird Observatory, *Elson's nestbox trail and grid*, \$5,000

Beaverhill Bird Observatory, <i>Beaverhill Lake Natural Area, stewardship and monitoring</i> , \$6,000	Nature Conservancy of Canada – Alberta Region, <i>Effectiveness and compliance monitoring of Nature Conservancy of Canada properties in Alberta</i> , \$44,000	University of Alberta, <i>Long-term vegetation and population monitoring for managing the Ya Ha Tinda elk herd</i> , \$20,000
Bird Studies Canada, <i>The Prairie & Parkland Marsh Monitoring Program: Years 2-5</i> , \$25,000	Partners in Habitat Development, Eastern Irrigation District, <i>Partners in Habitat Development</i> , \$18,000	University of Alberta, <i>Lynx cycles and barriers: evaluating dispersal versus climate change in flatlining populations</i> , \$20,000
Bow Valley Habitat Development, <i>Horse Creek railway culvert and stream channel modifications and enhancement measures</i> , \$6,951	Rangeland Conservation Service Ltd, <i>Small mammal wildlife habitat enhancement berms: wildlife movement across pipeline rights-of-way</i> , \$10,000	University of Alberta, <i>Does petroleum development effect burrowing owl nest-site selection, reproductive success or nocturnal space use?</i> , \$23,520
Bow Valley Habitat Development, <i>A comprehensive fisheries study on Bighill Creek</i> , \$10,506	Red Deer County, <i>Off the Creek Program</i> , \$25,000	University of Alberta, <i>Habitat and prey selection of a re-established cougar (Puma concolor) population</i> , \$25,750
Castle-Crown Wilderness Coalition, <i>SAR in the Castle Wilderness</i> , \$17,000	Society of Grassland Naturalists – Medicine Hat Interpretive Program, <i>Moths and butterflies of Medicine Hat and area</i> , \$8,000	University of Alberta, <i>Ecological effects of sportfish stocking and aeration in Boreal Foothills lakes</i> , \$28,370
Chuck Priestley, <i>Bat Hibernacula Monitoring in Alberta Caves – A Volunteer Monitoring Program</i> , \$5,290	Town of McLennan, <i>McLennan Pond fishery enhancement project (dock structure installation)</i> , \$5,000	University of Alberta, <i>Effects of access management on elk in southwestern Alberta</i> , \$32,200
Cows and Fish, <i>Developing urban fisheries improvements and enhancing riparian sites through stewardship</i> , \$20,000	Trout Unlimited Canada, <i>Late fall fisheries investigation in diversion canals of southern Alberta</i> , \$7,000	University of Alberta, <i>Restoration of rough fescue grassland on oil and gas sites in central Alberta</i> , \$33,800
Ducks Unlimited Canada, <i>Ecology and population affiliations of moulting and fall staging Barrow's goldeneye at Cardinal Lake, Alberta</i> , \$18,000	Trout Unlimited Canada, <i>East Slopes Fishery Enhancement Program</i> , \$31,000	University of Idaho, <i>Genetic diversity analysis of southern Alberta plains sharp-tailed grouse (Tympnanuchus phasianellus jamesi), endangered sage-grouse (Centrocercus urophasianus), and their hybrids</i> , \$20,000
Federation of Alberta Naturalists, <i>Stewards Network for Alberta's Important Bird Areas</i> , \$15,000	Trout Unlimited Canada – Bow River Chapter, <i>Bow River riparian fencing project</i> , \$10,000	University of Lethbridge, <i>Examining resiliency of bull trout populations to brook trout invasives</i> , \$20,000
Federation of Alberta Naturalists, <i>Riparian Water Quality Improvement Project</i> , \$20,000	University of Alberta, <i>Russian thistle (Salsola kali) impact on ungulate habitat in the montane grasslands of Jasper National Park</i> , \$8,500	Water Matters Society of Alberta, <i>Land and water – connecting science, stewardship and public awareness</i> , \$5,000
King's University College, <i>Reproductive ecology of endangered populations of limber and whitebark pine in Alberta</i> , \$15,000	University of Alberta, <i>Floristic survey of Kootenay Plains and Coyote Lake Nature Sanctuary</i> , \$13,400	Western Sky Land Trust Society, <i>The Bow and Beyond</i> , \$14,000
Laval University, <i>Ecology, conservation and population dynamics of mountain goats in Alberta</i> , \$18,683	University of Alberta, <i>Predicting the spread of CWD from Saskatchewan into southern Alberta</i> , \$16,357	Woodlot Extension Program/Woodlot Association of Alberta, <i>Riparian reforestation and wildlife enhancement of Beaverlodge Watershed – Phase II</i> , \$36,000
Lesser Slave Lake Bird Observatory, <i>Migratory and breeding bird research in northern Alberta</i> , \$22,000	University of Alberta, <i>Effects of roads and road access management on grizzly bear (Ursus arctos) habitat use and movement</i> , \$18,500	
Miistakis Institute, <i>Developing a private land conservation strategy for the Crowsnest Pass</i> , \$20,907	University of Alberta, <i>Ecology and behaviour of grizzly bears (Ursus arctos horribilis) in response to open-pit mining, and implications for management and conservation</i> , \$20,000	
Mountain View County, <i>Riparian area management improvements</i> , \$25,000		

Grants in Biodiversity

Grants in Biodiversity provide research funds to outstanding graduate students and postdoctoral fellows conducting research based in Alberta. ACA annually contributes \$225,000 to the grant, which is operated through the Alberta Cooperative Conservation Research Unit—a partnership between the University of Alberta, the University of Calgary and the University of Lethbridge. The research supported by the Grants in Biodiversity furthers the conservation, protection and enhancement of Alberta's wildlife, fish and natural habitats.

The ACA Grants in Biodiversity program awarded its \$3 millionth dollar in 2008. Over its 14 year history, the program has awarded \$3,065,139 to 302 researchers; some of whom joined become staff in recent years. In 2008/09, these 20 promising graduate students and post-doctoral fellows received grants.

For more information on current projects visit the ACA Grants in Biodiversity Program website at: www.acabiodiversity.ca.



2010 ACA Grants in Biodiversity Recipients

Baerwald, Erin	Dept. of Biological Sciences	University of Calgary	Dr. Robert Barclay	The biology of bat migration
Bevan, Tisa	Dept. of Agriculture, Food and Nutrition Sciences	University of Alberta	Dr. Edward Bork	Habitat selection of feral horses in the Alberta Foothills
Brinkmann, Lars	Dept. of Biological Sciences	University of Lethbridge	Dr. Joseph Rasmussen	Combined effects of food web structure and bioenergetics on mercury biomagnification in northern pike (<i>Esox lucius</i>) in reservoirs with impoverished food webs
Chung, Cecilia	Dept. of Biological Sciences	University of Calgary	Dr. Leland Jackson	Effects of spatial nutrient accumulation on fish health in the South Saskatchewan River Basin
Dennenmoser, Stefan	Dept. of Biological Sciences	University of Calgary	Dr. Steven Vamosi	Status and genetic population structure of freshwater sculpins (<i>Cottidae</i>) in the Peace River region, with special emphasis on a potential invader, <i>Cottus asper</i>
Doyle, Amanda	Dept. of Biological Sciences	University of Alberta	Dr. Jens Roland	The role of host-plant/larvae interactions in regulating the population dynamics of an alpine butterfly species
Duke, Lisa	Dept. of Biological Sciences	University of Calgary	Dr. Leland Jackson	<i>Didymosphenia geminata</i> and organic phosphorus, a nuisance bloom forming combination?
Evans, Megan	Dept. of Biological Sciences	University of Calgary	Dr. Ralph Cartar	Influences of landscape and grazing regime on bee pollinators and their floral resources in rough fescue prairie
Found, Robert	Dept. of Biological Sciences	University of Alberta	Dr. Colleen Cassidy St. Clair	Behavioural syndromes and their application to the management of habituated and non-migratory elk
Glasier, James	Dept. of Renewable Resources	University of Alberta	Drs. Scott Nielsen and John Acorn	Diversity and habitat associations of ants (Hymenoptera: Formicidae) on jack pine dominated sand hills of Alberta, Canada
Graham, Erica	Dept. of Renewable Resources	University of Alberta	Dr. Ellen Macdonald	The effects of underplanted white spruce on understory vegetation and environment in aspen-dominated stands of the Western Boreal forest
Hache, Samuel	Dept. of Biological Sciences	University of Alberta	Dr. Erin Bayne	Extent of natal dispersal in songbirds among landscapes with different disturbance regimes
Illerbrun, Kurt	Dept. of Biological Sciences	University of Alberta	Dr. Jens Roland	Rising tree-line and shrinking habitat: Implications for an alpine butterfly and its host
Leung, Magdalene	Dept. of Biological Sciences	University of Calgary	Dr. Anthony Russell	A phylogeographic study of the Greater Short-Horned Lizard (<i>Phrynosoma hernandesi</i>) in Alberta
MacLennan, Megan	Dept. of Biological Sciences	University of Alberta	Dr. Rolf Vinebrooke	Interactive effects of size-selective fish predation and climate warming on planktonic food webs in alpine lakes of the Alberta Rockies
Martin, Alexandre	Dept. of Biology	Université de Sherbrooke	Dr. Fanie Pelletier	Phenotypic and demographic determinants of male reproductive success in a hunted population of bighorn sheep (<i>Ovis canadensis</i>)
Morris, Matthew	Dept. of Biological Sciences	University of Calgary	Dr. Sean Rogers	The genetics of phenotypic plasticity in post glacial fish
Nguyen-Phuc, Bao Tan	Dept. of Biological Sciences	University of Alberta	Drs. JC Cahill and Mark Dale	The effect of landscape features on the genetic diversity of <i>Gaillardia aristata</i> Pursh (Asteraceae)
Olson, Cory	Dept. of Biological Sciences	University of Calgary	Dr. Robert Barclay	Roosting ecology of little brown bats (<i>Myotis lucifugus</i>) and northern long-eared bats (<i>Myotis septentrionalis</i>) in the boreal forest
Pilgrim, Nicole	Dept. of Biological Sciences	University of Lethbridge	Dr. Alice Hontela	Toxicity of maternally-transferred selenium to embryos and larvae of rainbow trout and brook trout
Thomson, Melissa	Dept. of Biological Sciences	University of Lethbridge	Dr. Cameron Goater	Epidemiology of an emerging parasite in co-grazing ungulates in Cypress Hills Park, Alberta
Watts, Alexander	Dept. of Geography	University of Calgary	Dr. Shelley Alexander	Comparing urban and rural coyote (<i>Canis latrans</i>) parasitism and diet in Calgary, Alberta
Wilson, Matthew	Dept. of Biological Sciences	University of Alberta	Dr. Suzanne Bayley	Differences in environmental conditions that affect bird and plant biodiversity in compensation and natural wetlands: Guidelines for management

Habitat Securement Fund

The Habitat Securement Fund (HSF) is available to any group in Alberta to apply to, including ACA's Land Management Team for the sole purpose of conservation land purchases. Applications to the HSF are reviewed and approved by the Board of Directors.

2009/10 Overview

- *\$500,000 set aside for land securement*
- *5 Conservation Sites secured*
- *1,895 acres conserved*
- *\$3,000,000 total estimated land value*
- *1 Conservation Easement acquired on 160 acres of critical elk winter range in the Crowsnest Pass (NCC property)*





Financial Highlights

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Auditors' Report

May 14, 2010
Edmonton, Alberta

To the members of Alberta Conservation Association:

The accompanying summarized statements of financial position and results from operations are derived from the complete financial statements of Alberta Conservation Association as at March 31, 2010 and for the year then ended. In our auditors' report on the complete financial statements dated May 14, 2010, we expressed a qualified opinion because we were unable to satisfy ourselves concerning the completeness of donations and partner contribution revenue. The fair summarization of the complete financial statements is the responsibility of management. Our responsibility, in accordance with the applicable Assurance Guideline of the Canadian Institute of Chartered Accountants, is to report on the summarized financial statements.

In our opinion, the accompanying financial statements fairly summarize, in all material respects, the related complete financial statements in accordance with the criteria described in the Guideline referred to above.

These summarized financial statements do not contain all the disclosures required by Canadian generally accepted accounting principles. Readers are cautioned that these statements may not be appropriate for their purposes. For more information on the Association's financial position and results of operations, reference should be made to the complete financial statements.

Kingston Ross Pasnak LLP

Kingston Ross Pasnak LLP

Chartered Accountants

Summarized Financial Statements

ALBERTA CONSERVATION ASSOCIATION

Year ended March 31, 2010

RESULTS FROM OPERATIONS

	2010	2009
REVENUES		
Fees and assessments	\$ 10,544,363	\$ 10,344,875
Other	4,283,473	1,079,327
Partner contributions	1,879,567	2,053,881
	16,707,403	13,478,083
EXPENDITURES		
Salaries and benefits	5,630,108	5,513,887
Grants	1,827,460	1,479,588
Contracted services	1,029,829	1,616,331
Rentals	858,339	962,708
Office and sundry	796,050	963,395
Travel	768,211	701,442
Amortization	601,308	617,320
Materials and supplies	567,053	307,075
Advertising	359,779	262,956
Landowner agreements	89,230	103,821
	12,527,367	12,528,523
OTHER REVENUES		
Unrealized gain/(loss) on investments	1,210,013	(1,409,831)
Gain on disposal of property, plant and equipment	8,047	3,725
(Loss)/Gain on sale of investments	(37,798)	66,253
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	\$ 5,360,298	\$ (390,293)

FINANCIAL POSITION

ASSETS		
Current assets	\$ 863,582	\$ 464,263
Long-term investments	6,301,066	5,788,389
Property, plant and equipment (net of accumulated amortization)	12,739,810	7,770,420
	\$ 19,904,458	\$ 14,023,072
LIABILITIES		
Current liabilities	\$ 4,544,254	\$ 4,023,166
NET ASSETS		
Invested in property, plant and equipment	12,739,810	7,770,420
Internally restricted	250,899	459,466
Unrestricted	2,369,495	1,770,020
	15,360,204	9,999,906
	\$ 19,904,458	\$ 14,023,072

APPROVED BY THE BOARD

 Director

 Director



Financial Highlights

Summarized Financial Statements

In 2009/10, ACA received \$10,548,415 in levy revenue from hunting and angling licenses, which is a 4.7% increase from the previous year. Our Wildlife, Fisheries, Land Management and Communications programs combined expenditures totaled \$13,991,022, including land purchases and donations – meaning that 133% of the levy value collected went back into conservation of Alberta's resources.

ACA received more than \$6.1 million in non-levy revenue. These funds came from a variety of donors, including individuals, corporations, granting foundations, the Federal Government, and other conservation organizations.

EXPENDITURES by PROGRAM

Often stakeholders want to determine what funds are being directed towards their particular passion. When examining the Expenditures by Program, please keep in mind that the numbers shown are somewhat arbitrary and do not necessarily represent all projects that may relate to a particular program area. For instance:

The Fisheries program had expenditures of approximately \$2.2 million (approximately 20% of levy revenue); however, this does not include our riparian fencing project or our fisheries access site maintenance project. Both projects are budgeted within the Land Management program.

The Communications program saw a significant budget increase from the previous year, most of which is a result of the pilot project in Retention, Recruitment and Education of Hunter, Anglers and Trappers. For accounting purposes, this project is included within the Communications program.

REVENUE BY SOURCE

Thirty seven per cent of ACA's total operating budget was generated from non-levy sources (\$6,158,988). This represents an increase of more than \$3 million in non-levy revenue over 2008/09. As the vast majority of the non-levy revenues were land donations or funds for land purchases, ACA did not end the year with a significant cash surplus; however, we did end the year with 3,800 acres conserved for future generations.

2009/10 Overview

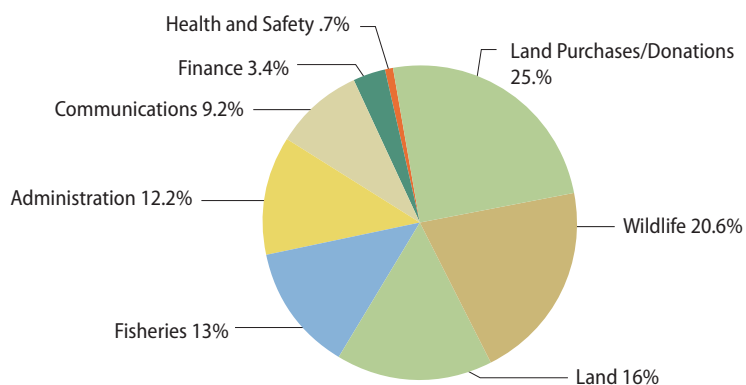
- *\$10,548,415 received from levies on hunting and fishing licenses*
- *\$6.1 million received in non-levy revenue*
- *\$13,991,022 in levy value directly applied towards the conservation of Alberta's wildlife, fisheries and habitat*

The pie charts provide a summary of the expenditures in each program area. We encourage you to review the entire Annual Report to gain a greater understanding of the conservation projects undertaken within each program, and how they may relate to your particular passion.

Expenditures By Program

Land Purchases/Donations	4,173,735
Wildlife	3,434,539
Land Management	2,672,446
Fisheries	2,179,936
Administration	2,039,759
Communications	1,530,366
Finance	562,118
Health and Safety	108,203

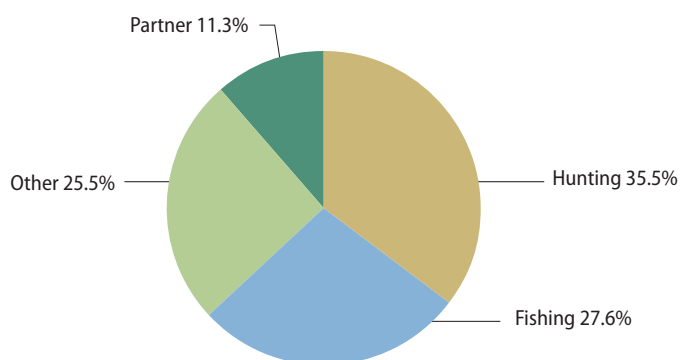
TOTAL 16,701,102



Revenue By Source

Hunting	5,930,485
Fishing	4,617,930
Other	4,263,735
Partner	1,895,253

TOTAL 16,707,403





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