

ANNUAL REPORT



About ACA - Conserving Alberta's Wild Side

Formed in 1997, the Alberta Conservation Association (ACA) is a provincial, non-profit, registered charitable association that is committed to conserve, protect and enhance wildlife, fish and habitat for all Albertans to enjoy, value and use. Evolving originally from the Alberta Fish and Wildlife Trust Fund, ACA is governed by a multi-stakeholder Board of Directors represented by hunting and fishing organizations, conservation groups, government and First Nations', Public at Large, industry and academic representatives.

ACA and its staff of conservation specialists initiate and oversee a wide variety of provincially run programs that support Alberta Sustainable Resource Development (ASRD) in their role in the development and implementation of management plans. Each program is continually reassessed to reflect current conservation priorities in Alberta. These programs encompass **Wildlife**, **Fisheries, Land Management, Human Interaction** and **Waterfowl Crop Damage Control**.

- 73% of all ACA spending goes directly into wildlife, fish or lands programs;
- 32% of ACA funds DO NOT come from levy revenues;
- \$8,205,158 was collected in levy revenue in 2006-2007, and \$8,115,142 total ACA spending went to wildlife, fish and land programs;
- 98.9% of the levy value is put directly into the resource by leveraging levy funds with partner dollars.

Our Mission

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

Our Vision

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









Contents

About ACA1	L
Chairman's Report	ł
President and CEO's Message	5
Board of Directors	5
Communications and Development	7
Our Employees)
Investing in our Employees	10
A Commitment to Health and Safety1	10
Our Dedication to Conservation	1
Delegated Roles and Responsibilities1	12
Wildlife Program	13
Fisheries Program2	23
Land Program	35
Human Interaction Program4	10
Waterfowl Crop Damage Control Program4	12
Conservation Reports4	13
Our Granting Programs	15
Grant Eligible Conservation Fund	16
Grants in Biodiversity4	18
Financial Highlights	19
Auditor's Report	50
Summarized Financial Statements5	51
Operational Results5	52



Chairman's Report



It gives me great pleasure to report on the many achievements accomplished by our organization over the past year. By any measure, the ACA has lived up to its commitments and delivered real, on-the-ground conservation programs.

We started off the year by finalizing and signing five-year program agreements with Alberta Sustainable Resource Development (ASRD).These agreements, which focus on Wildlife, Fish, Land and Support Programs are the most concise and detailed contracts ever entered in to. These agreements allow ACA to utilize its expertise to the fullest and provide ASRD with the services required to conserve, protect and enhance Alberta's fish and wildlife, and their habitats.

The ACA, in partnership with Alberta Parks, Recreation, Tourism and Culture and Robert Bateman launched a series of four special edition prints depicting wildlife in provincial parks. Proceeds from print sales support conservation through education to inspire future generations to care about our planet. I encourage you to treat yourself to a copy of these stunning works of art, all hand signed by the artist.

An extensive search was conducted for a new President and CEO for the organization. At the end of a long process, we were rewarded with the hiring of Todd Zimmerling. While Todd has not been with us for very long he has certainly proven himself a great asset.

The past year has also been a success in the delivery of our conservation driven programs such as Report A Poacher, lake aeration, the acquisition of recreational land, ungulate aerial surveys, the Grant Eligible and Biodiversity Grant Program. Our website is a great place to learn more about what the ACA does for Albertans.

In closing, I would be remiss to not recognize our greatest asset, namely our staff. These folks are world class and bring a passion and zeal to their work. In these days of "it's all about me," it's nice to meet some folks who practice "it's all about conservation."

I wish you the best in the upcoming year!

Brian Bildson, Board of Directors



President and CEO's Message



I have only recently stepped into my role at ACA; however, I can already say that I am proud to be associated with this organization. When I look back at how much has been accomplished over the past decade I am confident that ACA can continue to play a significant role in shaping conservation in Alberta.

Alberta is currently experiencing unprecedented economic growth resulting in rapid industrial development, as well as rapid expansion of our urban centres. This economic growth is placing tremendous pressure on our fish and wildlife populations, and the habitat they live in. I see the next decade as a critical one for fish and wildlife in Alberta, as we as a Province grapple with the ongoing issue of balancing economic development with conservation. Few people would argue against the importance of maintaining healthy and abundant fish and wildlife populations; however, there are also few people that will turn down benefits that come from a strong economy.

ACA's challenge in the future will not be to advocate for or against economic development, but to work towards greater conservation of our fish and wildlife

regardless of the economic climate that exists. I believe ACA is well-positioned and well-equipped to meet this challenge. We have a decade of experience as an organization; we have some of the best and brightest conservationists as employees; and we have strong partnerships with government, industry, hunters and anglers and other NGOs.

I have read numerous articles predicting doom and gloom for Alberta's fish and wildlife as a result of our economic prosperity; however, my outlook on the future is positive. There will be problems that will have to be dealt with, and difficulties we will have to get past, but overall I believe most Albertans and most of corporate Alberta is environmentally aware and socially responsible. As a result, I believe the future is ripe with opportunities for ACA to continue to partner with like-minded conservation organizations and look for new and unique opportunities to partner with corporations to take advantage of Alberta's current economic prosperity to produce long-term conservation value.

Change happens and development occurs in all societies, but rather than sitting on the sidelines complaining about the impacts, ACA will be at the forefront ensuring that wildlife, fish and the habitat they depend on are conserved, enhanced and maintained for future generations.

Jan frales

Todd Zimmerling



Board of Directors

The Alberta Conservation Association Board of Directors meets quarterly and consists of eight member group representatives; one provincial government representative; two appointed Public At Large representatives; four regional Public At Large representatives; and the ACA/University of Alberta Chair in Fisheries and Wildlife.

The Board's role is that of governance. The Board determines and oversees the organization's strategic direction and ensures compliance with legal requirements. It is ultimately accountable for, and has authority over the organization's resources and activities.

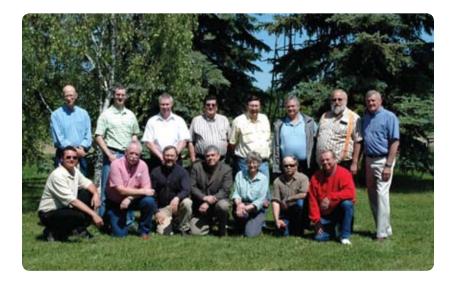
Brian Bildson, Chairman Alberta Trappers' Association Representative

Patrick Long, Vice Chairman Public At Large, Northwest Region

Calvin Rakach, Secretary Public At Large, East Slopes Region

Tom Bateman, Treasurer Alberta Hunter Education Instructors' Association Representative

Don Pike, Past Chair Trout Unlimited Canada Representative



Mark Boyce	ACA University of Alberta Chair in Fisheries and Wildlife			
Bob Byers	Alberta Professional Outfitters Society Representative			
Lee Foote	Public At Large, Academic Representative			
J.R. Giroux	Treaty 8 First Nations of Alberta Representative			
Colin Gosselin	Public At Large, Northeast Region			
Ward McLean	Pheasants Forever Alberta Council Representative			
Brad Pickering	Alberta Sustainable Resource Development Minister Representative			
Dave Powell	Alberta Fish and Game Association Representative			
Sandra Foss	Federation of Alberta Naturalists Representative			
Jeff Smith	Public At Large, Southern Region			
Roger Smith	Public At Large, Industry Representative			



Communications and Development

Robert Bateman Partnership

Robert Bateman entered into a partnership with ACA and Alberta Tourism, Parks, Recreation and Culture to create four paintings depicting wildlife in provincial parks. The focus of the initiative was to help celebrate Alberta Parks' 75th Anniversary and generate awareness about the Robert Bateman *Get To Know* Program and conservation in Alberta.

With our support, 12,000 special edition commemorative prints were produced. These paintings are sold through our retail partner, Canadian Tire and online at www.ab-conservaton.com. Approximately \$360,000 has been raised to date. The proceeds benefit the *Get To Know* Program in Alberta and environmental education programs aimed at raising a generation who will care for their wild neighbours and contribute to conservation for Albertans of today and tomorrow.

2007 Partners in Conservation Conference

Industry and Conservation: Bridging the Gap,

Collaborative Conservation Initiatives

The conference was held January 23 to 27 in Sherwood Park, Alberta and was attended by 140 participants from industry, conservation organizations, government and academia. The purpose of the conference was to increase ACA's profile and to provide opportunities for participants to share their knowledge and identify opportunities to work together for the benefit of our province's wildlife, fish and habitat and future generations.

An impressive roster of speakers was assembled including Mr. Preston Manning who delivered the keynote address, *Ecological Budget: Marrying Conservation and Economic Development* at the Networking Reception.

Our first-ever Photo Contest was held in conjunction with the conference with the aim to find the best wildlife photographs taken in Alberta. 200 entries were received from across the province. The winners were announced at the Networking Reception and the Overall Winner, Gerald Romanchuk received the honour of having his photograph of a Great Created Flycatcher published on the cover of the 10th Anniversary issue of *Conservation Magazine*.

We would like to acknowledge the following partners for their support: **Meal and refreshment sponsors** - Daishowa-Marubeni International Ltd., Pheasants Forever, Millar Western Forest Products; **Evening reception sponsor** - Encana; **Program printing sponsor** - Quality Color, An RR Donnelly Company; **Floral sponsorship** - Hole's Greenhouses & Gardens; **Photo contest** - Art Beat Gallery; **Conference bag** - Johnston Promotional Products; **Stress balls** - Bissett Investment Management Ltd; **Raffle prizes**: Alberta Professional Outfitters Society, Sheep Creek Lodge, Allison Argy-Burgess, Laura Watmough and David Kerslake.









Publications

Annual Report

This new Annual Report format is designed to provide our stakeholders and potential partners with important information related to our financial and reporting accountability, provincial program priorities and achievements while recognizing the valuable partnerships that made it possible.

Conservation Magazine

Our official publication, *Conservation Magazine* is published twice a year. It is distributed to more than 30,000 individuals from Alberta, the U.S. and other locations around the world. The magazine is also available through the ASRD Information Centre and online at www.ab-conservation.com. *Conservation Magazine* is a critical marketing tool that provides information on important conservation work undertaken by ACA and other like-minded organizations.

The magazine was redesigned in early 2007 and launched in the spring as a special 10th Anniversary issue, *Celebrating 10 Years of Conservation*, which offered our readers a retrospective look at our first decade.



Outreach materials

We develop numerous outreach materials in partnership with other organizations including the Teacher's Guide for the Alberta Amphibian Monitoring Program and a poster series on Alberta species. This year, we added the Grouse of Alberta to this series, which includes the following posters: Bats of Alberta, Amphibians of Alberta, and Snakes of Alberta.

The Grouse of Alberta poster was made possible with the support of the following partners: TD Friends of the Environment, the Alberta Government and the Alberta Grouse Technical Council.

Public Information, Education and Communications Operational Agreement

We work closely with ASRD to increase the profile and awareness of programs and projects that we jointly facilitate and identify strategic alliances necessary to deliver communications, public and education outreach messages.



OUR EMPLOYEES









Our Employees

Investing in Our Employees

The Alberta Conservation Association (ACA) employs approximately 60 full-time and 50 seasonal employees in regional offices throughout the province. ACA achievements are attributed to collective actions including a dedicated team of employees; 18 of which have been with the organization since its inception in 1997.

At ACA we continue to introduce and enhance programs that provide an environment that supports the health, safety and well being of our employees as well as invests in opportunities for personal development.

In 2006 – 2007, we launched a formal web-based competency mapping program to provide a way to assess employee strengths while identifying learning opportunities that enhance skills deemed necessary to deliver programs. This program links employees directly to the conservation priorities outlined in the Annual Operating Plan as well as provides a performance accountability system, which measures individuals against a common standard. This program also provides the tools to strengthen our recruitment and succession planning processes.

To remain competitive in the current labor market ACA underwent an annual comprehensive benefit and salary review and launched a health and wellness pilot program to provide flexibility within current health and wellness benefits. A "working remotely" framework is in development and is set to launch in spring 2008.

Our commitment to enhance the organization's scientific credibility is reflected in the revamp of the organization's existing professional development program, which provides employees with the opportunity to apply for formal academic upgrading funding. The organization supports ongoing daily learning through conferences and workshops, on-line learning and accredited courses.

Our Commitment to Health and Safety

At the Alberta Conservation Association safety isn't just a program or policy – it's our culture. We are a health and safety leader for non-profit conservation organizations in Alberta. We encourage everyone from the President and CEO to our field staff to make safety their personal responsibility.

Our Health and Safety Program, in its third year of implementation, continues to assess work tasks so that hazards are identified, assessed and controlled. Hazard control is accomplished by using safer equipment, developing safe work practices and safe operating procedures, improved training and using appropriate Personal Protection Equipment.

Safety training is an important component of our Health and Safety Program and is crucial to ensuring a safe workplace. The first step is mandatory training for all new employees in First Aid, CPR, WHMIS and defensive driving. Conservation work is often diverse and challenging, so employees may require specialized formal or on-the-job training according to the work they are involved with.

In our short 10-year existence, we have had one serious incident. Although minor accidents and near misses do occur, we treat these as warning signs and investigate these incidents, to identify the cause(s) and manage them so they don't happen again.

The Health and Safety Program continues to evolve, adopting higher standards each year. New policies are in development to maintain our high safety standards; these include a Drug and Alcohol Policy, Contractor Policy, Fatigue Management Policy and a Safety Eyewear and Footwear Policy.

OUR DEDICATION TO CONSERVATION



Delegated Roles and Responsibilities

ACA has special status as a delegated administrative organization (DAO), which means that ACA has accepted responsibilities to support the enhancement and management of Alberta's wildlife and fish resources as outlined in legislation and defined in a Memorandum of Understanding with the Ministry of Alberta Sustainable Resource Development. ACA works with the Ministry, particularly the Fish and Wildlife Division, in developing program priorities that best serve Alberta's natural biological resources. ACA is committed to providing resource managers with the most relevant, credible and timely information possible.

Memorandum of Understanding (MOU)

The MOU outlines the roles and responsibilities for the Alberta Conservation Association and Alberta Sustainable Resource Development in relation to a number of common activities and includes a process for the development of specific Program Agreements. These Program Agreements were renegotiated in 2006 with the focus to further define the role of ACA. The following Program and Operational Agreements specify each organization's roles and responsibilities with respect to program planning, implementation and reporting:

- Wildlife Program Agreement
- Fisheries Program Agreement
- Land Management Program Agreement
- Human Interaction Program Agreement
- Waterfowl Crop Damage Prevention Program Agreement
- Public Information
- Education and Communications Operational Agreement
- Shared Services Operational Agreement.





Wildlife Program

The Wildlife Program supports and enhances conservation activities that retain the diversity and abundance of populations and communities of wildlife in Alberta. It includes consideration of non-fish taxa, but has a strong focus on harvested species. The program includes components related to wildlife populations, their habitats and the ecosystems that support them.

The program informs and supports ASRD in the determination of species status; the development, communication and implementation of species recovery or management plans, and management of consumptive and non-consumptive use and users. This program supports the inventory and monitoring of priority species and their habitats, the retention and enhancement of priority habitats, and the restoration and reintroduction of priority populations.

Program activities may include, but are not limited to, population enhancement, applied ecological studies, and understanding and facilitation of users' needs and wants. An essential element is the monitoring, evaluation and adaptation of wildlife and habitat conservation activities.

ACA strives to enhance the sustainability of wildlife species through science-based conservation. The Wildlife Team has developed a program that focuses on four thematic areas including ungulates, upland game birds, waterfowl and species at risk. Program objectives are prioritized at the provincial scale through strategic and operational planning.

A pivotal step in our program development is ongoing discussion with ASRD and other external experts and stakeholders to gain insight and build opportunities for collaboration.

The following are Wildlife Program activities conducted in 2006/07:

- Aerial ungulate surveys
- Ungulate winter range restoration
- Elk habitat planning tool development
- Habitat selection of moose in northeast Alberta
- Sharp-tailed grouse habitat inventory
- Piping plover recovery program
- Northern leopard frog recovery program
- Alberta wildlife status reports
- Identification of provincial waterfowl priorities
- Waterfowl monitoring: Hay-Zama
- Impacts of use in Wildland Parks Natural Heritage
- Habitat selection of pronghorn antelope
- Demography of bighorn sheep in Yarrow-Castle
- Waterfowl crop damage prevention
- Nest tunnel waterfowl enhancement
- Cavity nest waterfowl enhancement
- MULTISAR
- Grasslands elk scoping



Key Findings:

- » Ewe survival rates are comparable to other populations though at the lower end of the range.
- » Lamb survival rates and recruitment rates are low.
- » Population growth is stable.



Bighorn sheep survival and demography in the Yarrow-Castle region of Alberta

Overview

During the early 1980s, pneumonia infected southwestern Alberta's Yarrow-Castle bighorn sheep population resulting in a dramatic die-off in which the population declined over a two-year period from approximately 400 sheep to fewer than 150. The population did show recovery from this die-off, but ewe numbers appeared to be decreasing between 1995 and 2002. Specific factors that could have influenced the ewe population are unknown; however, they may include spatial changes in range use, increased predation, reduced food quantity and/or quality, disease or poaching. Effective management to help restore a healthy sheep dynamic in this area requires the investigation of factors that may affect the size of the breeding population.

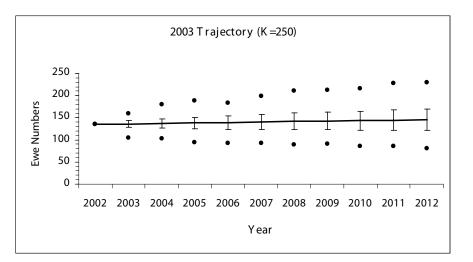
Method

The Yarrow-Castle Bighorn Sheep demographic study was initiated in 2002 as a collaborative effort between the Alberta Conservation Association and the Fish and Wildlife Division of Alberta Sustainable Resource Development (ASRD-FWD). The broad objective of this study was to gain an improved understanding of the factors that limit ewe numbers in the Yarrow-Castle region. Specific objectives were to quantify: i) survival of marked ewes and their lambs, ii) likely causes of mortality of marked ewes, and iii) marked ewe reproductive success. This was accomplished by radio-collaring 46 ewes and monitoring them using radio telemetry equipment over a three-year period.

Results

Study results indicate that ewe survival rates are comparable to other populations; though at the lower end, lamb survival and recruitment rates are low, and population growth is stagnant. Ewe mortalities are primarily caused by cougar and bear predation, but they are also succumbing to avalanches and falls. The cause of lamb mortalities is unknown. We were able to calculate population growth using the survival and reproductive information collected from this study, and then we projected population change over time, given a hypothetical female carrying capacity (K) ranging from 120 (a long-term estimate based on aerial survey ewe counts collected over the past 22 years, from 1983 to 2005) to 250 (the maximum number of ewes recorded for the Yarrow-Castle area, from 1970 to 2005) individuals. Population projections having a carrying capacity of 250 and an initial ewe abundance of 135 (2002 aerial survey ewe count), predict a ewe population that is increasing slightly. Based on a carrying capacity of 120, the ewe population slowly decreases with time (Figure 1).





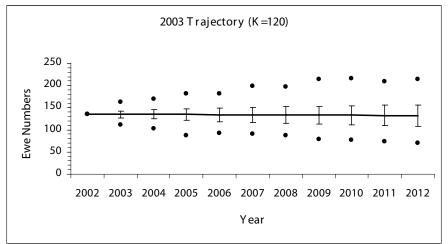


Figure 1: Predicted ewe population size over time based on the 2003 average survival and population growth estimates for the Yarrow-Castle region, Alberta. Model predictions are taken from 1,000 replications over a 10-year period, where the line represents an average population prediction, the bars represent \pm 1 S.D. and the dots represent the minimum and maximum predictions of those 1,000 replications.



Wildlife

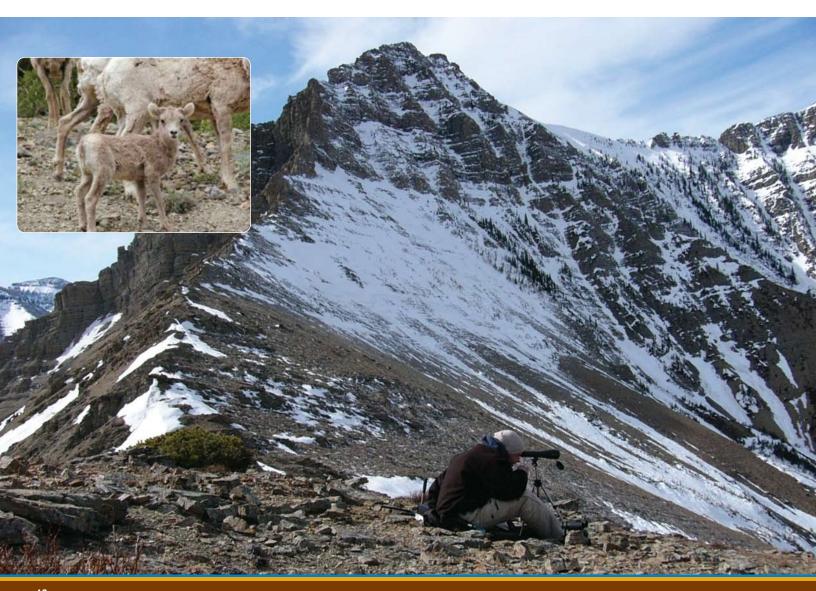


Conclusions

According to evidence provided in the study, Yarrow-Castle population demographics, though occasionally influenced by sporadic predation events, appears to be driven by density dependence and, therefore, is currently at or near their carrying capacity. Yarrow-Castle population demographic information will be provided to ASRD-FWD to assist with future management of this bighorn population.

Our Partners

We wish to acknowledge the following individuals, agencies, and corporations for their contributions and assistance in support of the Yarrow-Castle Bighorn Sheep Project: the Rocky Mountain Elk Foundation of Canada, Shell Canada Limited, the Alberta Chapter of the Foundation for North American Wild Sheep, Lethbridge and Fort Macleod Fish and Game Associations, the Willow Valley Trophy Club, Waterton Lakes National Park, veterinarian Richard Kennedy and Lethbridge Community College.





Cavity Nesting Waterfowl Enhancement

Overview

The absence of secure nesting habitat is a limiting factor, which negatively influences productivity of Common Goldeneye and Bufflehead ducks in the central parkland eco-region. The region has sufficient deep-water ponds for brood rearing, but lacks mature aspen needed for nest cavities. Through public education, this program creates awareness of the importance of preserving "old growth" woodlands. Nest boxes are used as a tool to promote land stewardship with cooperators and their neighbors. The program began in 1989 and has slowly expanded each year. To date, there have been approximately 1,250 nest boxes installed and maintained since 1989.

Method

- Approach landowners and various interest groups for sites to place nest boxes;
- Deliver a presentation (PowerPoint) describing species use, habitat requirements, etc. to the immediate family or group;
- Follow up with field trips, box-building seminars and nest box placement;
- Emphasize the value of "old growth" woodlands and the resulting replacement trees for the future of the cavity nesting species; and
- Introduce and recognize, reward and reinforce program to participating landowners as a method to remind future buyers, family members to save valuable habitat.

Results

- The Common Goldeneye population has increased five times and the Bufflehead population has doubled in a 15-year period in the Buffalo Lake Moraine area.
- Designed an information/education pamphlet, "Cavity Nesting Ducks in the Buffalo Lake Moraine."
- Produced the "Conserving Habitat" brochure for distribution to land managers.
- Master's degree completed on the "Introduction of Artificial Nesting Structures in the Buffalo Lake Moraine."
- Nest box use averages around 90% with a success rate of 75%.
- A durable, easy-to-mass-produce nest box was designed.
- 1,250 nest boxes are maintained (250 each year in a five-year cycle).
- Presentations attended by 1,084 adults and 937 youth.









Reports

The following reports are available upon request:

- Multiple Nesting (in same box, same year)
 1990
- Nest Box Placement/Monitoring
 1993
- Mixed Clutches, Dump Nesting, Clutch Size
 1994
- Seven Year Summary of Boxes BLM 1995
- Nest Box Designs, Twinning 2003
- Starling Population Dynamics 2004
- Winter Nest Checks Versus Summer 2005
- American Kestrel Nest Box Results 2005
- Northern Saw-whet Owl Nest Box Results
 2005

Conclusions

The conservation impact of the nest box program is about saving habitat. When old growth and replacement trees are saved for cavity nesting species, all the forest species benefit. Generally these sites are adjacent to wetland margins, so water quality improves along with nesting habitat for ground nesting waterfowl. Consumptive species, such as moose, deer, grouse and the furbearers all benefit.

The educational component of this program (in the long term) will probably outweigh habitat retention. The potential for changes to future land management practices may increase as more individuals, groups and land managers get involved and gain knowledge about cavity nesting species and their habitat requirements.

Waterfowl hunting is gradually changing in Canada to include diving ducks. The nesting success of the Common Goldeneye and Bufflehead are an addition to our hunting heritage in Alberta.

Our Partners

We wish to acknowledge the Ducks Unlimited Canada as a 50/50 partner in the Cavity Nesting Program and Windsor Plywood who donates materials for nest boxes.



Pronghorn Antelope Habitat Selection

Overview

Among the diversity of prairie wildlife, the pronghorn antelope is the most specialized and significant large mammal in the Grassland Natural Region. It is not typically found in any other natural regions of the province and is considered to be a vital grassland species. Since the late 1970s, little research has been done on pronghorn in Alberta, particularly on the influence of land-use practices for this species.

Method

In 2003, the Alberta Conservation Association, in partnership with the University of Calgary and the Fish and Wildlife Division of Alberta Sustainable Resource Development (ASRD), began a study to investigate habitat use and migration patterns of pronghorn in Alberta. Using Global Positioning System (GPS) collars, 74 pronghorn antelope were marked over a three-year period across the Grassland Natural Region of Alberta. We have successfully recovered 65 of the collars, resulting in data retrieval of 116,842 locations.

Results

Based on preliminary analyses, there appears to be two behavioral types of pronghorn in Alberta: those that migrate over long distances (Figure 1A) and those that remain more stationary (Figure 1B). We have documented significant movements of pronghorn, one of which may be the second-longest migration of a land mammal in North America (second only to barren ground caribou). For example, female P3, began her journey south of Manyberries, Alberta, traveled north through Canadian Forces Base Suffield and continued into west-central Saskatchewan, just east of Macklin; a one-way trip of 445 km in 3.5 weeks. She then returned to Alberta to fawn, traveled back to Saskatchewan to her summer range, before finally returning in the fall to winter on CFB Suffield (Figure 1A). There also appears to be two main habitat types selected: native prairie habitat and agricultural land (used exclusively by some individuals). Complete data analysis on habitat use will be completed in 2007-2008.

Key Findings:

- » There are two behavioral types of pronghorn antelope: those that migrate and those that do not.
- » Pronghorn migrate long distances of up to 445 km, and travel between Alberta and Saskatchewan.
- » Some pronghorn are using native prairie habitat, while others are selecting agricultural land, exclusively.









Conclusions

Information on the habitat use and movement of pronghorn will be provided to the ASRD to assist in the management of pronghorn. Knowing that Saskatchewan and Alberta are hosting the same pronghorn at different times of the year may have implications for population-level estimates during annual surveys. Annual surveys provide valuable information to managers setting hunting license allocations.

Our Partners

Support for this program was provided by the Alberta Fish and Game Zone 1; Alberta Tourism, Parks, Recreation and Culture; Alberta Professional Outfitters Association (Legacy Fund and Wildlife Management Fund); Alberta Antelope Guides; Canadian Forces Base Suffield; Federation of North American Wild Sheep – Eastern Chapter; Safari Club International; Safari Club International Northern Alberta Chapter (Hunting Heritage Fund); and Safari Club International Alberta Chapter.

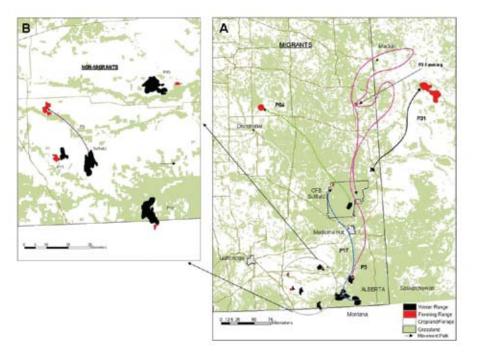


Figure 1: Migratory (A) and non-migratory (B) behavior exhibited by pronghorn antelope collared in Alberta. Note the long distance moved by pronghorn P3 (pink line) of 445 km in 3.5 weeks from southern Alberta to east of Macklin, Saskatchewan.



Piping Plover Recovery Program

Overview

The piping plover (*Charadrius melodus*) is a bluebird-sized shorebird that nests on gravel or sandy beaches. Large population declines led Canada to designate it as *Endangered* in 1985. It is listed as *Threatened* or *Endangered* throughout the United States and was designated as *Endangered* under Alberta's *Wildlife Act* in 1987.

Adult population surveys were conducted as a part of the 2006 International Piping Plover Census following protocols established by the United States Fish and Wildlife Service. The 2006 census in Alberta was coordinated by Alberta Sustainable Resource Development - Fish and Wildlife Division and was carried out by 32 individuals from a variety of organizations. ACA was responsible for carrying out approximately half of the surveys. In total, 71 waterbodies were surveyed and 274 adults were located on 25 different lakes.

One of the major factors limiting piping plover populations has been identified as the loss of nests to predators. As a result, predator exclosures (small metal cages that prevent access to the nest by predators, while allowing passage for plovers) have been erected over as many piping plover nests as possible throughout Alberta since 1998. Over the past 10 years, the majority of nests have been initiated during the second and third weeks of May (Table 1). As a result, nest surveys were initiated on 9 May 2006 and exclosures were placed over nests the same day that they were found. A total of 127 nests were found in 2006. Overall production per nesting attempt for all nests found in 2006 was estimated to be 0.92 chicks/nest. Ten years of data from Alberta has shown that pairs produce an average of 1.2 nests/pair. Using 1.2 as a multiplier, the overall fledging rate was calculated to be 1.10 chicks/pair. Since ACA began delivery of the exclosure program in 1998, Mayfield nest success for nests treated with exclosures is 66.8% (DSR = 0.9885 + 0.0011, Exp = 10108). Mayfield nest success for unexclosed nests is 32.9% (DSR = 0.9688 + 0.0043, Exp = 1632) over the same time period, and overall combined nest success was 60.6% (DSR = 0.9859 + 0.0011, Exp = 11740). Daily survival rates between exclosed and unexclosed nests (Table 2) were found to be significantly different (X2 = 19.7000, P<0.0001). We estimate that the use of exclosures had produced over 250 more piping plovers than what would have been produce with out the use of exclosures.

In addition to the exclosure program, ACA has played the lead role in conservation and enhancement of piping plover habitat in Alberta. To date, ACA has erected about 24 km of cattle fencing and 2.5 km of temporary electric fence. These enhancement activities could not have been accomplished without the participation of the 17 cooperating landholders.

Key Findings:

- » Over 10 years in Alberta, Mayfield nest success for nests treated with predator exclosures is more than double that of nests that are not treated with exclosures (66.8% vs 32.9%).
- » We estimate that by using predator exclosures we have produced 250+ more piping plovers than we would have without using predator exclosures.
- » Since 1998, the population of adult piping plovers has been as low as 134. However, the population has been steadily increasing over the past several years and we achieved a 10 year high in 2006 with a total of 274 adult piping plovers counted in Alberta.









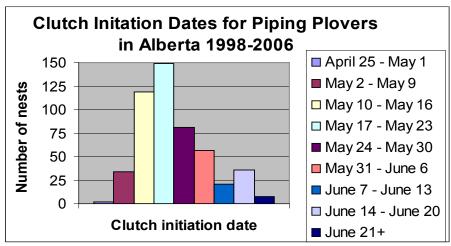


Table 1. Clutch initiation date for Alberta piping plover nests, 1998-2006.

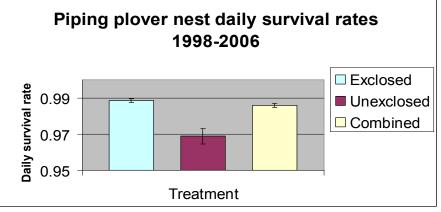


Table 2. Daily survival rate of piping plover nests in Alberta from 1998-2006 inclusive.

Our Partners

Conserving species at risk of extirpation or extinction is important to maintaining biodiversity in Alberta. Since 1998, the population of adult piping plovers has been as low as 134 and as high as 274 (2006). Conservation activities being undertaken by ACA and our partners Alberta Sport Recreation, Parks and Wildlife Foundation; Alberta Sustainable Resource Development; Alberta Tourism Parks, Recreation and Culture; Environment Canada Habitat Stewardship Program for Species at Risk; TD Friends of the Environment Foundation; World Wildlife Fund Canada; and the many landholders who provide access to their land each year are helping us inch ever closer to the provincial recovery goal of a stable population of 300 adult piping plovers in Alberta.



Fisheries Program

The Fisheries Program supports and enhances conservation activities that retain the diversity and abundance of fish populations and communities, and the biological communities and habitats that support them. The program supports responsible recreational fishing in the interests of Alberta's anglers.

The program informs and supports ASRD in their role in the determination of stocks and population status, the development and implementation of management plans, and management of consumptive and non-consumptive use and users.

Program activities include the inventory and monitoring of priority species and their habitats to determine distribution, abundance, status and trends. An essential element for all program components is the monitoring, evaluation, and adaptation of activities. Activities in this program support and inform an adaptive fisheries management program in Alberta.

The following are Fisheries Program activities conducted in 2006/07:

Fish stock assessment and monitoring

- Walleye stock status assessments at North Wabasca, Seibert, Goodfish and Bourque lakes
- General stock assessment: Goosegrass Lake
- Bull trout stock assessment: Kakwa and McLeod rivers, Waiparous, Prairie and Canyon creeks
- Arctic grayling stock assessment: Little Smoky River
- Cutthroat trout stock assessment: Waiparous, Prairie and Canyon creeks, upper Oldman River

Stream crossing assessments

- Kakwa stream crossing assessment report completion
- Slave Lake stream crossing program in development

Sport fishery monitoring

- Limited harvest regulation monitoring: Lac Ste. Anne and Pigeon Lake
- Bow River angler pressure assessment
- Lesser Slave Lake angler survey

Watershed assessments

- Battle River index of biological integrity (IBI)
- Winter fish condition relative to instream flow
- North Raven stock assessment relative to streambank fencing

Other fish-related programs

- Enhanced fish stocking
- Fish conservation planning
- Lake Aeration









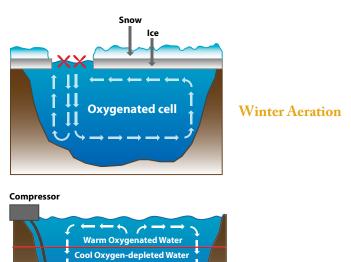
Provincial Lake Aeration Program

Overview

Alberta Conservation Association (ACA) is currently involved in the aeration of 15 lakes and ponds stocked with trout by Alberta Sustainable Resource Development (ASRD). The primary objective for lake aeration is to create recreational opportunities for Albertans by developing and maintaining lentic habitats for the successful overwintering of sport fish. Aeration is the fishery enhancement technique used by ACA to maintain dissolved oxygen levels in stocked lakes and ponds prone to seasonal oxygen depletion and subsequent fish die-off. Maintaining dissolved oxygen levels at or above 3.0mg/L in the upper half or deeper in the water column helps to ensure stocked fish survival, allow fish to live longer, grow larger and provide new and better recreational opportunities for Alberta anglers.

Method

Each lake aerated by ACA has its own aeration requirements based upon a variety of factors including: surface area, mean depth, vegetation productivity, etc. Currently, two methods of aeration are used: mechanical surface aeration for winter aeration, and point release system for fall destratification and summertime aeration. Mechanical surface aerators are used during periods of prolonged ice and snow cover (October to April) when oxygen producing photosynthesis is minimal. These aerators produce tiny droplets of water in a fountain-like spray adding oxygen to the water body via the open water created and maintained by the aerator. Point release systems utilize a subsurface bubble diffuser connected to an onshore compressor or a windmill to circulate or de-stratify the water column, thereby enhancing oxygen levels and creating a uniform thermal and oxygen gradient throughout the affected area improving the potential for fish survival.







Results

All 15 ACA-aerated water bodies successfully overwintered the 2006-2007 fiscal-year (April 1, 2006, to March 31, 2007).

Aeration Method	Aerated Water Body	
Mechanical Surface Aeration	NWBU: Moonshine Lake, Cummings Lake, Figure Eight Lake, Swan Lake, Sulphur Lake, East Dollar Lake, Spring Lake, Cecil Thompson Pond.	
	SBU: Coleman Fish & Game Pond.	
	ESBU: Beaver Lake, Mitchell Lake, Ironside Pond, Millers Lake.	
Point Release Aeration	NWBU: Spring Lake (Compressor).	
	SBU: Boehlke's Pond (Windmill), Hansen's Reservoir (Windmill).	
	ESBU: Beaver Lake	

Northwest Business Unit (NWBU); Southern Business Unit (SBU); East Slopes Business Unit (ESBU)

Summary

In 2006-2007:

- ACA was involved with the successful aeration of 15 water bodies throughout the province.
- Site enhancements including parking lot and lake access trail development, fencing, and partnership and informative signage were erected at the newly established aerated fishery, Ironside Pond (ESBU).
- Plans were being developed for another aeration development in the ESBU, Rocky Mountain House area.
- The completion of the ACA Provincial Aeration Guidelines (DRAFT) document, created to assist ACA personnel on how to manage existing aeration projects and screen potential projects in a consistent manner throughout the province. Information presented is intended to provide project managers with details of project initiation, development, operation, and maintenance. Upon completion this document will be made available to the public through the ACA website (www.ab-conservation.com).









Conclusions

This highly successful program creates new and/or year-round angling opportunities in various locations throughout the province. Aeration of stocked fisheries helps to ensure stocked trout survival throughout the year, allowing fish to live longer, grow larger and thus provide anglers with enhanced fishing opportunities.

Aeration enhanced stocked fisheries may reduce pressure on native/natural fisheries including northern pike, walleye, perch, burbot, whitefish, arctic grayling, and trout fisheries by providing new additional year-round fishing opportunities.

In 2005, in an effort to expand our knowledge and provide information to guide future aeration projects, ACA and the University of Alberta initiated studies to identify impacts of stocking and aeration on aquatic invertebrates, native minnow species and amphibians. These studies continued into 2006-2007 with preliminary findings identifying no strong evidence of adverse affects of stocking or aeration on invertebrates, native minnow species or amphibians. Studies are slated to continue through 2007-2008.

Our Partners

Aeration programming would not be possible if it weren't for the support from various partners including governmental and non-governmental organizations, and various interest groups that provide financial and in-kind assistance. Present and past partners include: Alberta Sustainable Resource Development, Trout Unlimited Canada Central Chapter, County of Clearwater, Northern Lights Fly Tying Club, Trout Unlimited Canada, Keyera Energy, Hunters and Anglers of Alberta, Alberta Fish and Game Association, TransAlta Utilities, Brightbank Lions Club, Village of Spring Lake, Edmonton Trout Fishing Club, Edmonton Old Timers Fishing Club, University of Alberta, Weyerhaeuser Canada Ltd., Canadian Forest Products Ltd., Daishowa Marubeni International Ltd., Moonshine Lake Provincial Park, Town of Fairview, Northern Sunrise County, Community Development-Parks and Protected Areas, Tolko Industries Ltd., Spray Lakes Sawmills, Devon Canada Corporation, Dale Linderman and Stettler County.



Enhanced Fish Stocking Program

Overview

The Enhanced Fish Stocking Program (EFSP) was initiated to provide larger rainbow trout (minimum 20 cm) to put-and-take ponds, thereby producing a better return for the angler. Historically, the program has delivered approximately 131,000 rainbow trout (20 cm) to about 66 water bodies. All water bodies are put-and-take ponds that frequently winterkill. The water bodies are generally less than 10 hectares and require less than 6,000 rainbow trout. The majority of stockings occur in the southern and northeast regions, east of Highway 2. In addition, all water bodies are outside the green zone to prevent interaction with native stocks.

Method

All rainbow trout stockings are delivered through contracts with private rainbow trout growers. An invitation to bid on a contract is sent to suppliers 1.5 years in advance of stocking to ensure that the grower has ample opportunity to plan, obtain stock and grow the fish to the required size. Growers can bid on all 10 contracts, but can only receive a maximum of three contracts in a given year. Winning bids are selected, based on bid price and past experience. Once growers are ready to ship fish, they arrange a date with the load-out monitor and the lake contact. The load-out monitor travels to the grower's operation to inventory fish being shipped. The load-out monitor and grower count fish and measure a randomly taken sub-sample. The load-out monitor observes the condition of the fish, checking for obvious signs of disease, deformity, and condition factor (plumpness). Once the correct number of fish are loaded into the transport containers, the load-out monitor and grower sign a form indicating how many and what size of fish were shipped. The lake contact is present when the fish arrive at the designated water body, and monitors the stocking and condition of the fish planted.

Results

The majority of the water bodies receive two stockings, with a handful receiving as many as three stockings. The first stockings generally occur prior to the May long weekend. The second and third stockings occur by June 30th and September 30th, respectively. In 2006, a total of 64 water bodies were stocked with approximately 118,000 rainbow trout (20 cm) during 77 stocking events.

Key Findings:

- > 118,000 rainbow trout stocked out.
- » 64 angling opportunities were created.







Conclusions

The stocking of rainbow trout enhances and increases fishing opportunities for Alberta anglers by providing a chance to catch 20 cm+ rainbow trout in areas of the province which otherwise would not exist. The Enhanced Fish Stocking Program also provides angling opportunities for children, who are the future anglers.

Our Partners

The ACA works closely with the Provincial Hatchery Specialist (under ASRD) and the Alberta Aquaculture Association to ensure that the rainbow trout are delivered in a timely manner within the numbers and sizes set in the contracts.





2006 Lesser Slave Lake Angler Survey

Overview

Fisheries managers from Alberta Sustainable Resource Development (ASRD), Fish and Wildlife Division use angler surveys and index netting to monitor the health and stability of sportfish populations in Alberta.

The purpose of the Lesser Slave Lake (LSL) Angler Survey conducted by ACA from May 18 to August 31, 2006 was to describe the current level of angler use and provide data to fisheries managers to evaluate the status of the walleye *(Sander vitreus)* and northern pike *(Esox lucius)* sport fishery in response to regulatory changes in 2006. The 2006 LSL Angler Survey was designed to allow direct comparison to the estimates obtained from the 2005 LSL Angler Survey and Fall Walleye Index Netting (FWIN) conducted by the ACA in partnership with SRD.

Method

As in 2005, the 2006 survey was conducted as a reduced effort angler survey of four commonly used access points located around Lesser Slave Lake, Alberta; Canyon Creek, Norm's Walleye Camp (Lesser Slave River), Shaw's Point Lakeside Resort, and Spruce Point Park.

Two crews of two creel clerks interviewed anglers as they returned from completed trips between 08:00 and 23:00 on days surveyed. Sampling occurred on a schedule of 10 days on, four days off, surveying every weekend. Each crew surveyed two access points during the course of a 10-day shift. Survey effort was split such that five days of each shift were spent at each access. There resulting data were provided to SRD fisheries biologists who extrapolated the data to determine an overall estimate for angler effort, catch rates and harvest.

Creel staff were also tasked with collecting test angling data and aerial boat counts to validate angler data and provide a ratio of use for each launch when extrapolating data.

Results

In 2006, ACA creel staff interviewed 12,611 anglers at Lesser Slave Lake who reported catching 63,934 walleye and harvesting 15,678 of those fish.

Using data from the 2006 angler survey, fisheries managers estimate 151,000 anglers put 317,000 hours of angling effort into Lesser Slave Lake. The result was an estimated total of 582,000 walleye caught and of those 148,000 were harvested.

Key Findings:

- » Angler response to small fish harvest opportunity was measured and the results suggest appreciable increase in harvest with minimal increase in effort and reduced catch rates.
- » Knowledge that was gained contributed to regulation adjustments to ensure long-term sustainability of fishery.
- » Walleye special fish harvest license monitoring (Pigeon and Wolf lakes)
- » Anglers are able to harvest walleye in a sustainable fashion at lakes with populations that can supply a controlled harvest opportunity.





Summary

After the Angler Survey and FWIN at Lesser Slave Lake in 2005, fisheries managers determined that the walleye population in LSL could sustain additional harvest of small fish on a short-term basis. Analysis of the data collected in the 2006 LSL Angler survey allowed fisheries managers to estimate angler response to the increased harvest opportunity provided by the new regulation in 2006. When combined with the FWIN estimates, the results of the 2006 Angler Survey showed that total walleye harvest doubled from 2005 to 2006, while angler effort only increased slightly. Furthermore, the overall catch rate of walleye declined by one third. Lower catch rates and higher harvest indicated to fisheries managers that the new regulation was not sustainable. In an effort to return to a more sustainable balance, a new regulation was adopted for 2007, which allowed for a more conservative harvest of walleye.

Conclusion

The 2006 LSL Angler Survey benefits Alberta anglers by providing current data to fisheries managers allowing them to maintain a long term sustainable fishery. Up-todate data are necessary to ensure that anglers will continue to have the opportunity to harvest walleye from what is arguably Alberta's most important walleye fishery.

Our Partners

Both the 2005 and 2006 LSL Angler Surveys and FWIN were conducted in collaboration with ASRD, Fish and Wildlife Division. In 2006, SRD completed the analysis and reporting portions of the LSL Angler Survey as well as providing financial support for several aerial boat counts. The 2006 Lesser Slave Lake FWIN was also conducted by SRD with logistical support from the ACA.



Bull Trout Stock Assessment Program

Overview

Bull trout are the only native char to historically occupy all the drainages of the eastern slopes of the Rocky Mountains in Alberta. Though once numerous, bull trout populations have been in decline for the last century throughout the native range, including Alberta. Declines are typically attributable to human impacts on populations and their habitats, including habitat degradation and fragmentation, non-native fish species introductions, and overharvest. To aid in species recovery, a zero-bag limit for bull trout was implemented throughout Alberta in 1995. Bull trout are aggressive foragers that historically achieved weights in excess of 4.5 kg (10 lb) in many of Alberta's rivers and, where carefully managed, support popular recreational fisheries in the spectacular scenery of the Rocky Mountains. Requiring cold, clean waters and diverse, interconnected habitats for their survival, bull trout are also synonymous with healthy stream ecosystems in Alberta's eastern slopes and for many are a necessary element of a backcountry 'wilderness' angling experience.

Method

Bull trout monitoring methods have evolved to meet the changing attitudes of successive generations of Alberta anglers and conservationists. Often viewed as 'trash' fish and much maligned in the opening decades of the 20th century, practically no bull trout monitoring work was performed in Alberta prior to the 1970s. As bull trout grew increasingly scarce and fisheries management paradigms across North America shifted away from supplemental stocking programs and toward maintenance of naturally-reproducing, native stocks, the need for rigorous study of bull trout habitat use, abundance and distribution grew. In Alberta, the research focus in the 1980s and 1990s was on identifying bull trout distribution, migration patterns (bull trout may travel hundreds of kilometres to access suitable spawning habitat) and critical habitats in the major river systems of the eastern slopes. While this information is still required for some stocks since imposition of the zero-bag limit in 1995, an emphasis has been placed on obtaining precise estimates of the abundance, distribution and size-structure of bull trout stocks at the watershed scale.

Evidence linking watershed health to native fish community health is growing. Increasingly, land-use planners and fisheries managers require a comprehensive understanding of species abundance and distribution throughout river drainage to assess and mitigate potential threats that often occur at the watershed or sub-watershed scale. This information is also useful for evaluating the result of over a decade of catchand-release regulations for bull trout. The Alberta Conservation Association has been instrumental in developing, assessing and refining watershed-based approaches to assessing abundance, distribution and size-structure information for river stocks of bull trout.

Key Findings:

- » Bull trout stocks were assessed in three watersheds.
- Assessment methodologies have been tested and refined to improve accuracy and efficiencies.
- » Baseline assessments formed the basis for long-term monitoring.









Results

In the 2006/07 program year the Alberta Conservation Association assessed bull trout stocks in the Kakwa, McLeod and Waiparous watersheds. In total, 132 survey sites or more than 231 km of stream were surveyed. During the assessments, 747 bull trout were captured, the largest of which was over 70 cm (27 in) in length. Unfortunately sufficient data for evaluation of longer-term trends is extremely limited; in many cases assessments performed by the Alberta Conservation Association constitute the baseline against which future bull trout assessments will be compared.

Summary

Interim reports have been completed for all projects; final reports are scheduled for release early 2008. Presentations have been made to stakeholder groups and the general public including presentation to an international gathering of bull trout biologists and researchers, which was well received.

Conclusions

Results of the Alberta Conservation Association's Bull Trout Stock Assessment program are currently being used by provincial fisheries managers for their update of the Bull Trout Management and Recovery Plan, and for regional management initiatives. Our work is typically performed in partnership with local resource sector companies and study information is made available to these companies for incorporation into their land-use planning process. Bull trout often co-occur with other sport fish species (e.g. Arctic grayling, cutthroat trout, and mountain whitefish); information is typically collected for non-target sport species during our bull trout assessments. Improvements made to stock assessment methods through program development will be transferable to future assessment of river stocks of bull trout and other sport species.

Our Partners

In-kind and financial partners for the 2006/07 program year include: Alberta Sustainable Resource Development, Devon Energy Incorporation, Talisman Energy Incorporation and Weyerhaeuser.



Battle River Index of Biotic Integrity

Overview

The cumulative effect of human activities on aquatic ecosystems can alter fish abundance and assemblage. The impact of anthropogenic activity on the Battle River has been significant—flows altered by dams, water withdrawals, potential navigational barriers (weirs, crossings) and general land use. The majority of the watershed is dominated by agricultural activity and riparian areas along the Battle River, and its tributaries have been degraded in many places. Alberta Environment is currently developing a water management plan for the Battle River to support the management of water resources in the drainage. A key part in the development of the plan is consideration of the aquatic environment and in particular, the status of the Battle River fish assemblage. A fish based index of biological integrity (IBI) has been identified as an approach that uses fish assemblages to assess the health or biological condition of streams or watersheds.

Method

The IBI is a multi-metric approach that uses fish assemblages to assess the biological condition of streams or watersheds (Karr et al. 1986). Fish are useful organisms for biological assessments because they are sensitive to a wide array of stresses (Boyer et al. 2003), relatively long-lived and hence provide a long-term record of environmental stress, and fish assemblages can be used to evaluate societal costs of degradation as their economic and aesthetic values are widely recognized (Fausch et al. 1990). The IBI has been utilized in other jurisdictions, primarily in the U.S., since the early 1980s, but is relatively new to Alberta.

Results

Fish assemblage data was collected from 34 sites on the lower portion of the Battle River in 2006. A total of 2,516 fish representing 12 species and 7 families were captured. White sucker was the most abundant species captured comprising 37% (n=942) of the total electrofishing catch, followed by longnose dace at 23 % (n=585), and lake chub at 17% (n=433). Correspondingly, white sucker had the highest species catch-per-unit effort, whereas goldeye, fathead minnow, longnose sucker, and burbot had an extremely low catch-per-unit effort relative to the other species. White suckers were captured in all sites sampled in 2006. Top predators, northern pike and walleye, represented 4.9 and 2.9 percent of the total catch, respectively.

Key Finding:

 A demonstration tool was developed to describe linkages between fish stocks and land-use practices.







Summary

Efforts in 2006 focused on fish assemblage data collection and a preliminary correlation between the fish assemblage and land use within the Battle River basin, specifically at sites on the Battle River from Forestburg Reservoir to the Saskatchewan border. The data collected will be utilized in the future development and testing of a fish-based index of biotic integrity. In 2007, efforts will focus on completing the data collection of the remaining fish assemblage data from Battle Lake to Forestburg Reservoir, riparian assessments of select parameters, instream measurements, water chemistry, landscape variables, and the calculation of watershed characteristics. Efforts will also focus on the data analysis, which will include the development and validation of IBI metrics based on the parameters above, and the completion of a technical report.

Conclusion

The Battle River IBI supports the management of water resources for Alberta Environment and supports the management of fish resources in the Battle River by Alberta Fish and Wildlife. The data collected from this fish-based IBI will provide a better understanding of the fish assemblage and how it relates to land use along the Battle River and, as a result, provide the managers with a greater ability to improve the fish assemblage, thus benefiting the Alberta angler and the fishery resource.

Our Partners

Support for this program was provided by Alberta Environment, ATCO (Forestburg), the Department of National Defence, CFB Wainwright and Alberta Sustainable Resource Development.





Land Management Program

The Land Management Program (LMP) involves effective management of wildlife and fisheries habitat resources (on public and private lands) for conservation, protection and enhancement. This Program Agreement applies to the acquisition, stewardship and divestiture of properties under the management of the Alberta Conservation Association.

The Land Management Program encompasses activities intended to conserve, protect and enhance fish and wildlife habitat, and to increase consumptive and non-consumptive recreational opportunities including angling and hunting.

The three major activities of this program are:

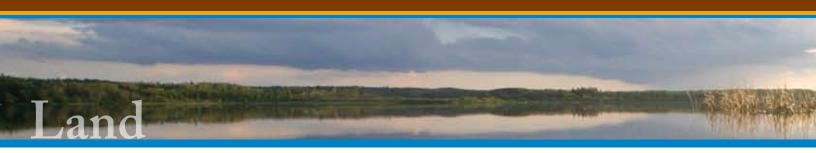
- Habitat securement
- ACA Conservation Site maintenance and management
- · Recreational opportunity initiatives.

Habitat securement identifies and prioritizes important habitats as well as land that increases or enhances recreational opportunities, both consumptive and non-consumptive. Securement may occur through direct purchase, conservation easements, donations, term lease, or protective notation.

Maintenance and management of ACA Conservation Sites on crown and privately owned lands are completed in compliance with location-specific management plans, habitat type, or stewardship agreements that are developed by ACA in collaboration with ASRD and other conservation partners.

Recreational opportunity initiatives on private land focus on communication tools and activities required to promote and increase public access to wildlife and fisheries habitat resources where stewardship of conservation-rich habitat is recognized.









Habitat Securement

Overview

The ACA collaborates with a wide variety of partners (industry, conservation agencies, and local clubs and societies) to secure, protect and maintain high priority wildlife and fish habitat that provide sustainable recreational opportunities. This is achieved through land purchase, conservation easements and land leasing. As an ongoing program of ACA, it is delivered in target areas identified across the province.

Method

The ACA has been involved in securing high-priority habitats since its inception in 1997. Target areas are identified within each of the four business units across Alberta with the objective to secure lands within these target areas in collaboration with other conservation partners that have overlapping interests. In 2004, the ACA entered into a formal Memorandum of Understanding (MOU) with Ducks Unlimited (DUC), Nature Conservancy of Canada (NCC), and Alberta Fish and Game (AFGA). This MOU has formalized and streamlined habitat securement procedures and collaboration among the four major habitat securement partners within the province. In addition, the ACA is in the process of transferring lands owned by the Rocky Mountain Elk Foundation (RMEF) to the Alberta Conservation Association, Alberta Fish and Game Association and the Nature Conservancy Canada.

Results

The ACA purchased two properties in Alberta in 2006-2007 totaling 480 acres. These properties were acquired in collaboration with other conservation partners.

In regards to RMEF land transition to the ACA, there are six properties (770 acres) and seven conservation easements protecting 1,660 acres in total. The legal transfer of these lands will be completed in 2007/08. In addition to these major partners, the ACA collaborates with a wide variety of smaller clubs and societies that share mutual interest in protecting habitat in perpetuity.

Project	Acres	Habitat Type	Partners & Collaborators
Caine 3	320	Aspen Parkland	AFGA, DUC, NCC
Kerbes 2	160	Aspen Parkland	DUC
RMEF Prop. Transition	770	Mixed (6 properties)	AFGA, NCC
RMEF CE's	1660	Mixed (7 easements)	AFGA, NCC

* Legal transfer of RMEF properties will be complete in 2007/08.



Summary

Lands secured under this program receive maximum protection from industrial impacts, and are carefully managed to provide a diverse assemblage of high quality habitats. This stewardship insures that the secured lands provide an abundance of food, cover, and a wide range of habitat types. This increases the sustainability and diversity of local wildlife populations. The goal of this program is to secure large blocks of high quality habitat to ensure connectivity of the landscape as well as provide additional areas for hunters and anglers to enjoy.

Conclusions

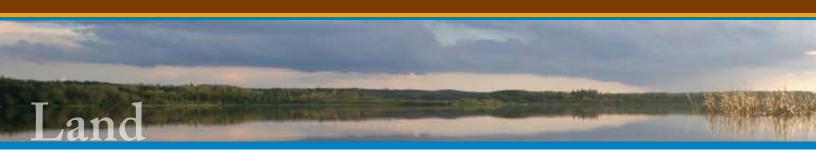
The Habitat Securement Program provides permanent protection for wildlife and fish habitat and provides Albertans with a wide range of sustainable recreational opportunities (both consumptive and non-consumptive). Secured lands are managed to maximize the quality of habitat and to optimize biodiversity. Lands owned by the ACA and its conservation partners (AFGA, DUC, NCC and others) are open for public foot access throughout the year.

Our Partners

Our key partners are AFGA, DUC, NCC, industry and other conservation clubs and associations across the province. In addition we are currently involved in a formal partnership with Suncor; additional partnership opportunities are being explored.











Suncor Boreal Habitat Conservation Initiative

Overview

ACA is committed to maintaining and enhancing Alberta's wildlife, fish and natural habitat by working collaboratively with partners and stakeholders to deliver programs that positively impact conservation in Alberta.

The Boreal Habitat Conservation Initiative is a three-year (2005-2008), \$1 million commitment by Suncor Energy Foundation to help offset their environmental footprint in other areas of the province by protecting boreal forest habitat in Alberta. The project began on the shorelines of Winagami Lake, a bird watcher's paradise, and has led to the protection of 600 acres of boreal habitat in northern Alberta.

Method

Six focus areas of ecologically significant parcels of boreal habitat were identified for purchase by ACA, three in the northwest and three in the northeast. ACA and Suncor coordinate the conservation areas through a joint advisory committee to ensure alignment of priority landscapes. Within each focus area, each quarter was ranked according to a developed set of criteria. This ranking process identified the most ecologically significant quarters, creating a basis point to the land acquisition process.

Results

Project	Acres	Habitat Type	Partners & Collaborators
West Neerlandia	159	Boreal Forest	Suncor
South Plain Lake	319	Wetland/upland	Suncor, DUC
Faust	4.5	Boreal Forest	Suncor, AFGA, ASRPW, Sawridge Inn and Conference Centre, TD Friends of the Environment, Royand A. Michener School
North Fawcett	150	Boreal Forest	Suncor, ASRPW, AFGA
Flatbush	306	Boreal Forest	Suncor



Summary

A meeting occurred with Suncor to provide progress updates made to date and to discuss changes to the communications policy. Changes will be implemented for 2007-2008.

Conclusions

Lands secured under this program receive maximum protection from industrial impacts, and are carefully managed to provide a diverse assemblage of high quality habitats. This stewardship insures that the secured lands provide an abundance of food, cover, and a wide range of habitat types. This increases the sustainability and diversity of local wildlife populations. The goal of this program is to secure large blocks of high-quality habitat to ensure connectivity of the landscape and recreational opportunities for Albertans.

Our Partners

Ducks Unlimited Canada has partnered on this initiative and, in one case, has assumed responsibility for the reclamation work occurring on a property. Alberta Sports Recreation Parks and Wildlife has contributed financially to the project, as has Alberta Fish and Game Association. Several other groups including the Roland A. Michener School in Slave Lake, the Sawridge Inn and Conference Centre, and TD Friends of the Environment Foundation have supported this initiative.







Human Interaction Program

The Human Interaction Program is comprised of three components: Report A Poacher, Wildlife Predator Compensation, and Shot Livestock Compensation. These programs work to maintain relationships between resource users and others affected by their activities. It aims to balance wildlife management interests and the interests of livestock producers who are negatively affected by wildlife. These programs are established to promote recreational opportunities for hunting on private lands and to involve the public in taking responsibility for conservation of Alberta's resources.



The Report A Poacher Program provides Albertans with an opportunity to participate in the detection and apprehension of resource abusers. In addition, the RAP promotes both the value and importance of conserving Alberta's wildlife and fisheries, and a positive image of resource users.

Alberta's fisheries are under a tremendous amount of pressure. With only 800 lakes with fish and potentially over 400,000 anglers, it is encouraging to see that during the past four years, Report A Poacher has paid out more rewards for fisheries offences than for wildlife. The public has a greater respect of our resources and is doing their part in ensuring that it continues by reporting illegal activities.

Rewards are based on the quality of information provided by the informant. Key information, which aids in a charge or warrant, translates into higher rewards. This information can include a vehicle licence plate number or a suspect's name. All details are important and should be reported immediately to the Report A Poacher line at 1-800-642-3800.



Results

- 3,400 Report A Poacher calls received.
- 1,200 charges and warnings laid.
- \$37,550 paid in rewards.

Shot Livestock Compensation

This program is designed to compensate livestock producers that have cattle, sheep, goats, bison, hogs, and horses that are killed or injured from accidental or negligent actions incurred by persons using a weapon. A person whose livestock is killed or injured during an open season for bird game or big game hunting must contact the Royal Canadian Mounted Police to initiate the investigation. Program expenditures were \$13,480.

Wildlife Predator Compensation Program

The purpose of this program is to reduce the financial burden incurred by livestock producers due to wildlife predation or injury of livestock and intended to encourage producers to report predator attacks and submit claims to ASRD – Fish and Wildlife Division. Compensation payments are funded by ACA for livestock killed by wolves, grizzly bears, black bears, cougars, and eagles.

In this past year, 121 claims were approved for compensation resulting in \$95,342 in program allocation expense. Three predator claims were for bald eagles, six for grizzly bears, 10 for cougars, 12 for black bears, and for 90 livestock kills from wolves.

Our Partners

Addenda Studios, Hunting for Tomorrow, Alberta Hunter Education Instructors' Association, Royal Canadian Mounted Police, Independent Display Services, King Motion Picture Corporation, Alberta Professional Outfitters Society, Alberta Game Warden Magazine, Alberta Sustainable Resource Development – Fish and Wildlife, Alberta Bowhunters Association, and the citizens of Alberta.

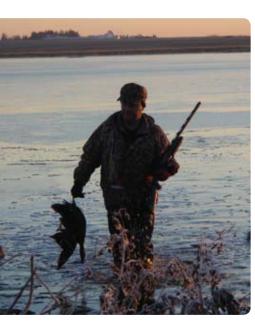






Key Highlights:

- » 11 feeding stations provided.
- » 7526 bushels of barley for 846,798 duck-days of use.
- » 114 scare cannons requested by producers.
- » 23 landowners signed up for hunting access.
- 736 total web hits to site with 248 visits that proceeded to the map page.



The Waterfowl Crop Damage Prevention Program

This is a joint program between Environment Canada and Alberta Sustainable Resource Development and is delivered by the Alberta Conservation Association. The program helps reduce the amount and severity of damage and economic losses caused by waterfowl damage to cereal grain crops during the fall harvest season.

The Waterfowl Crop Damage (WCDPP) operates feeding stations as alternate feeding sites for waterfowl at select waterfowl staging lakes and provides scare cannons and advice to producers with waterfowl crop damage problems.

Throughout the harvest season (August to October), the WCDPP makes scare cannons available to producers through a network of distribution centres located in areas where waterfowl crop damage is common. A provincial map displayed on the ACA website www.ab-conservation.com is updated weekly highlighting possible waterfowl concentrations as indicated by the number of cannons requested by producers. Names and phone numbers of producers willing to use hunting to enhance their waterfowl damage prevention efforts are available by contacting regional coordinators.

Northeast Distribution Centres:

Andrew, Atmore, Bonnyville, Boyle, Holden, Mannville, Myrnam, Paradise Valley, Smoky Lake, St. Paul, Two Hills, Vegreville, Vermillion, Viking, Vilna.

Northwest Distribution Centres:

Fairview, Manning, High Prairie, Grimshaw, Valleyview, Girouxville, La Crete, Nampa, Spirit River, La Glace and Hythe.

South Distribution Centres:

Bashaw, Bawlf, Bentley, Byemore, Camrose, Castor, Killam, Lougheed, Pine Lake, Provost, Stettler, Olds, Red Deer, Wetaskiwin, Coronation and Ponoka.



Conservation Reports

Scientific understanding and knowledge are vital to making sound conservation decisions. We conduct and commission a broad range of wildlife, fish and habitat work across the province. This scientific information guides our conservation efforts and in turn is made available to others through the **Report Series**. The following are reports completed and published in the 2006-07 fiscal year. All reports are available on our website under reports at www.ab-conservation.com.

- Blackburn, M., and C.F. Johnson. 2004. Status and distribution of Arctic grayling (*Thymallus arcticus*) in the Pembina River. Technical Report, T-2004-003, produced by Alberta Conservation Association, Edson, Alberta, Canada. 25 pp +App.
- Fortier, G., J. Tchir, and L. Sawdon. 2004. Angler survey and walleye abundance in Fawcett Lake, Alberta, 2003. Data Report, Report code number D-2004-022, produced by Alberta Conservation Association, Peace River, Alberta, Canada. 15 pp + App.
- Fortier G.N., T. Johns, and J.P. Tchir. 2005. Status of sport fishes in Gods Lake, Alberta, 2004. Data report, D-2005-022, produced by Alberta Conservation Association Bag 900-26, Peace River, Alberta, Canada. 19 pp + App.
- Fortier, G.N. and Tchir, J.P. 2005. Sport fish stock assessment of Long Lake, Alberta, 2004. Data report, D-2005-018, produced by Alberta Conservation Association Bag 900-26, Peace River, Alberta, Canada. 20 pp.
- Fortier G.N., T. Johns, and J.P. Tchir. 2005. Status of sport fishes in Round Lake, Alberta, 2004. Data report, D-2005-024, produced by Alberta Conservation Association Bag 900-26, Peace River, Alberta, Canada. 20 pp + App.
- Fortier G.N., T. Johns, and J.P. Tchir. 2005. Status of sport fishes in Graham Lake, Alberta, 2004. Data report, D-2005-026, produced by Alberta Conservation Association Bag 900-26, Peace River, Alberta, Canada. 20 + App.
- Fortier, G.N. and J.P. Tchir. 2006. Status of sport fishes in Vandersteene Lake, Alberta, 2004. Data report, D-2005-019, produced by Alberta Conservation Association, Peace River, Alberta, Canada. 20 pp + App.
- Furukawa, T., B. Patterson, and S. R. Grossman. 2005. Status of walleye stock at Wolf Lake, Alberta, 2003. Data Report D-2005-016, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 11 pp + App.
- Grossman, S. R. and R.B. Stavne. 2005. Use and habitat characteristics of sharp-tailed grouse leks in northwest Alberta. Technical Report, T-2004-004, produced by Alberta Conservation Association, Peace River, Alberta, Canada. 20 pp. + App.
- Hudson, Velma. 2005. Alberta Waterfowl Crop Damage Prevention Program, 2004. Data Report, D-2005-020, produced by the Alberta Conservation Association, St. Paul, Alberta, Canada. 21 pp + App.
- Hudson, Velma. 2006. Alberta Waterfowl Crop Damage Prevention Program, 2005. Data report, D-2006-002, produced by Alberta Conservation Association, St. Paul, Alberta, Canada. 24 pp. + App.
- Johnston, F., W. Patterson, and M. Sullivan. 2006. Assessment of the Summer Sport Fishery for lake trout at Lake Minnewanka, Alberta, Banff National Park, Alberta, 2005. Data Report, D-2006-001, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 26 pp. + App.
- Johnston, F.D. and Paul A.J. 2006. Review and assessment of walleye genetics and stocking in Alberta. Technical report T-2006-002 produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 91 pp + App.



- Jokinen, M. 2005. A summary of sport fish communities in seven high mountain lakes in Southwest Alberta. Data Report, D-2005-010, produced by Alberta Conservation Association, Blairmore, Alberta, Canada. 19 pp + App.
- Mills, B. and G. Scrimgeour, 2004. The effectiveness of aerial videography to characterize lakeshore condition. Data Report D-2005-017 produced by Alberta Conservation Association, Location, Alberta, Canada. 52 pp. + App.
- Patterson, B. 2004. An Assessment of the summer sport fishery for walleye and northern pike at Pigeon Lake, 2003. Data Report D-2004-015, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 26 pp + App.
- Patterson, B. and S. R. Grossman. 2004. Status of walleye stock at Elinor Lake, Alberta, 2003. Data Report D-2004-019, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 13 pp + App.
- Patterson, B. 2005. Assessment of the summer sport fishery for walleye (*Sander vitreus*) and northern pike (*Esox lucius*) at Orloff Lake, Alberta, 2004. Data Report D-2005-007, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 27 pp. + App.
- Patterson, B. and Stephanie R. Grossman. 2005. Status of walleye stock in Lac Bellevue, Alberta, 2003. Data Report, D-2005-003 produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 12 pp. + App
- Patterson, B. and S. R. Grossman. 2005. Status of walleye fishery (*Sander vitreus*) in Orloff Lake, Alberta, 2004. Data Report D-2005-006, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 30 pp.
- Patterson, B. and S. R. Grossman. 2005. Status of walleye stock at Touchwood Lake, Alberta, 2004. Data Report, D-2005-021, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 12 pp. + App.
- Stevens, C., G. Scrimgeour, W. Tonn, C. Paszkowski, M. Sullivan and S. Millar, 2006. Development and testing of a fish-based index of biological integrity to quantify the health of grassland streams in Alberta. Technical report T-2006-001 produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 50 pp + App.
- Rodtka, M. 2005. Status of bull trout in the Upper Clearwater River 2004. Technical Report, T-2005-003, produced by Alberta Conservation Association, Rocky Mountain House, Alberta, Canada. 42 pp. + App.
- Tchir J.P., T.W. Johns, and G.N. Fortier. 2004. Abundance of Arctic grayling in a 30-km reach of the Wapiti River, Alberta. Data report, D-2004-020, produced by Alberta Conservation Association, Peace River, Alberta, Canada. 13 pp.
- Wright K.D. 2004. Hay-Zama lakes waterfowl staging and bald eagle nesting monitoring program, 2003. Data report, D-2004-021, produced by Alberta Conservation Association, Peace River, Alberta, Canada. 22 pp. + App.

Reports completed in previous years but revised and/or published in the 2006-07 fiscal year:

- Engley, L., and D. Prescott. 2005. Use of predator exclosures to protect piping plover nests in Alberta, 1998-2001. Technical report, T-2005-002, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 18 pp.
- Osokin, L., Tchir, J. 2006. South Heart River walleye project 2004. Data Report D-2004-018 produced by Alberta Conservation Association, Slave Lake, Alberta, Canada. 34 pp.
- Patterson, B. and S. R. Grossman. 2005. Status of walleye (*Sander vitreus*) fishery at Ironwood Lake, Alberta, 2003. Data Report D-2005-008, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 12 pp.

OUR GRANTING PROGRAMS



Key Highlights:

- » 122 funding requests were received requesting a total dollar value of approximately \$2.26 million.
- » A total of \$1,151,122 was granted to 57 projects.
- » Project budgets ranged from \$600 to \$70,000.
- » A demonstration tool was developed to describe linkages between fish stocks and land-use practices.

Our Granting Programs

We have been awarding environmental conservation grants since 1997, and this year we are proud to have completed our 10th year of conservation funding. The goal of our granting programs is to enable and support others to carry out work that supports the ACA in its mission to conserve, protect and enhance Alberta's wildlife and fish and their habitats.

A diverse cross-section of Alberta's population submit applications and the increasing number of applicants indicates that our programs are becoming widely known. The results of the funded projects are contributing significantly to conservation efforts in Alberta Conservation efforts are supported through three distinctive funding programs.

Available Program Funding

Grant Eligible Conservation Fund	\$1,200,000
Habitat Securement Fund	\$ 500,000
ACA Grants in Biodiversity	\$ 225,000

In 2006-2007, up to \$1,925,000 was made available for conservation efforts in Alberta.

Grant Eligible Conservation Fund

The Grant Eligible Conservation Fund (GECF) formally began in 2002, making 2006-2007 the fifth funding cycle in the new, streamlined format. Since inception, over \$5 million have been provided to 286 conservation projects implemented by the conservation community, leveraging an estimated \$29 million for conservation work across Alberta.

Each application is reviewed and assessed by an appointed Granting Committee established by the ACA Board of Directors. The committee is comprised of three board members and 10 citizens of Alberta. The funding priorities for 2006-2007 were based on our mission and Strategic Business Plan to increase the impact and synergy of Grant Eligible Conservation Fund projects with the ACA Wildlife, Fisheries and Land programs.

Conservation Impacts

During the course of 2006-2007, many GECF projects supported opportunities to enhance consumptive and non-consumptive wildlife-related recreational experiences for all Albertans. For example the Onoway Birdhouse project, implemented by the Onoway and District Fish and Game Association, constructed and distributed 180 bluebird birdhouses with volunteer efforts. Another project entitled 'New field techniques for estimating wolf densities and predation rates in Central East Slopes of Alberta', led by Dr. Merrill of the University of Alberta, is developing a technique which can be applied to ungulate harvest models used by SRD Fish and Wildlife for establishing hunting season quotas.



Another strong focus of GECF projects in 2006-2007 was to secure, develop, protect and maintain high-priority wildlife and fisheries habitats, and habitats that provide recreational opportunities. For example, the 'Recreation and Wildlife in the Rockies' project of the Miistakis Institute examined wildlife use of recreational trails and wildlife responses to recreational demands—data which can be used to help solve the human-animal conflicts arising in this popular recreational area.

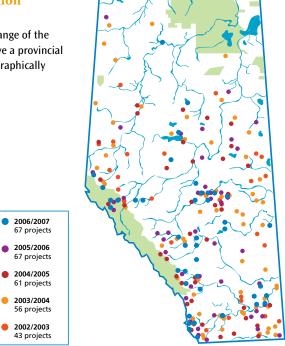
Collaboration with various stakeholders is another strength of the GECF projects for 2006-2007; several projects were very active in working with landowners to develop habitats or improve (riparian) ecosystem health; e.g. Partners in Habitat Development, Cows and Fish, and Operation Grassland Community to name a few.

2007-2008 FUNDING APPLICATION CYCLE DATES

Posting of the Guidelines and Application Forms on ACA's website	December 15, 2007
Window to receive completed applications	January 1-31, 2007
Proposal Review Committee Adjudication Meeting	February 28, 2008
Notification of Applicants as to Funding Status	March 2008
Projects Work Occurred	April 1, 2008 through March 31, 2009

Grant Eligible Conservation Fund Project Locations

ACA's GECF projects cover a wide range of the province. Many of the projects have a provincial scope and, therefore, are not geographically represented on the map.









ACA Grants in Biodiversity The ACA Grants in Biodiversity prog

The ACA Grants in Biodiversity program provides research funds to outstanding graduate students and post-doctoral fellows doing Alberta-based research. The mandate of the program is to increase knowledge of the flora and fauna of Alberta, covering broadly the fields of biodiversity, conservation biology and ecology.

ACA's Grants in Biodiversity Program is run in collaboration with the Alberta Cooperative Conservation Unit, which represents a consortium of Alberta Universities including: University of Alberta, University of Calgary and the University of Lethbridge. The ACA's annual financial contribution to the fund is \$225,000.

Graduate students and post-doctoral fellows are invited to submit applications. Successful applicants receive grants of up to \$20,000 in support of field and research expenses. Grant applications are adjudicated once each year with results released in March. This year, 18 projects were supported.

For more information on current projects visit the ACA Grants in Biodiversity Program website at: http://www.biology.ualberta.ca/biodiversity/

Interested in applying?

Visit our website under the funding section www.ab-conservation.com or call toll free 1-877-969-9091.



FINANCIAL HIGHLIGHTS







Auditors' Report

To the members of Alberta Conservation Association:

The accompanying summarized statements of financial position and results from the operations are derived from the complete financial statements of Alberta Conservation Association as at March 31, 2007 and for the year then ended. In our auditors' report on the complete financial statements dated May 18, 2007, we expressed a qualified opinion because we are unable to satisfy ourselves concerning the completeness of 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.

Kungston Ross Pagnak up

Kingston Ross Pasnak LLP Chartered Accountants



Summarized Financial Statements

Alberta Conservation Association—Year Ended March 31, 2007

RESULTS FROM OPERATIONS	2007	2006
REVENUES		
Fees and assessments	8,204,672	7,646,963
Partner contributions	2,943,142	1,990,959
Other	821,016	792,964
	11,968,830	10,430,886
EXPENDITURES		
Salaries and benefits	4,255,804	3,914,980
Grants	2,097,862	2,007,850
Contracted services	1,583,491	1,335,852
Rentals	941,470	842,360
Office	521,268	611,566
Travel	590,127	582,744
Materials and supplies	309,903	390,973
Amortization	314,697	340,762
Advertising	383,248	251,227
Landowner agreements	116,592	97,486
	11,114,462	10,375,800
EXCESS OF REVENUES OVER EXPENDITURES	854,386	55,086
ASSETS		
Current assets	554,287	714,964
Long-term investments (market value - \$9,352,888)	9,082,034	9,015,484
Property and equipment (net of accumulated amortization)	2,912,574	2,089,268
	12,548,895	11,819,716
LIABILITIES		
Current liabilities	2,441,679	2,566,871
	2,441,679	2,566,871
NET ASSETS		
Invested in property, plant and equipment	2,912,574	2,089,268
Internally restricted	944,438	8,537,074
Unrestricted	6,250,204	(1,373,495)
	10,107,216	9,252,847
	12,548,895	11,819,716







