AUSABLE BAYFIELD CONSERVATION AUTHORITY 2009 ANNUAL REPORT

TREES PROTECT



ABCA ANNUAL REPORT 2009 TABLE OF CONTENTS

Pages 2 – 6 Corporate Services

- Page 2 Message from the Chair of the ABCA Board of Directors (2009)
- Page 3 Board of Directors' Message, Staff Report
- Page 4 General Manager's Report
- Page 5Conservation Education
- Page 6 Junior Conservationist Report

Pages 7–15 Water Management

	e
Page 7	Flood Forecasting and Warning
Page 8	Flood Summary, Flood Emergency Planning
Page 9	Low Water Response
Page 10	Groundwater Monitoring
Page 11	Structures Operation and Maintenance
Page 12	Water and Erosion Control
Page 13	Geographic Information Systems Mapping
Page 14	Planning Input and Review
Page 15	Regulations

Page 16 Drinking Water Source Protection





Pages 17 – 23	Healthy Watersheds
---------------	--------------------

- Page 17 Monitoring
- Page 18Bayfield North Watersheds Management Plan, Ridgeway Drain Water Quality ProjectPage 19Trick's Creek, Port FranksD20
- Page 20
 Old Ausable River Channel (OAC) Management Strategy Implementation
- Page 21
 Ausable River Recovery Strategy Program Evaluation, Species at Risk
- Page 22Healthy Headwaters Wetlands InitiativePage 23Lake Huron-Georgian Bay Watershed South East Shore Working Group

Pages 24 – 27 Conservation Land Management

- Page 24 Conservation Land Management
- Page 25 Conservation Area Development
- Page 26 Forest Management on ABCA Lands
- Page 27 Terrestrial Species at Risk
- Pages 28-29Watershed StewardshipPage 28Private Land Stewardship Program
 - Page 29 Tree Planting Program Report, Conservationist of the Year

Page 30 Financial Summary

Pages 31 – 32 Ausable Bayfield Conservation Foundation



FRONT COVER PHOTO ILLUSTRATION features two photos. The top photo, courtesy Peter Burtch (Lake Simcoe Region Conservation Authority), shows the Youth Summit hosted by Ausable Bayfield Conservation Authority and the Lake Huron - Georgian Bay Canadian Framework for Community Action. The second photo shows ABCA field staff member Wayne Ford driving a tractor, with staff behind him, to mechanically plant trees, with tree in the foreground. The surrounding objects on the table show facets of ABCA's work – improving forest conditions, monitoring and protecting water quality and drinking water sources, protecting species at risk (including rare mussels along the Ausable River), mapping, land use planning and regulation, watershed stewardship, conservation education, enhancing wetlands, and more.

ABCA's partners will play even bigger role in coming years

By Lawrence McLachlan, Chair, 2009 ABCA Board of Directors

he importance of partnerships is not new. What *is* new is that the Ausable Bayfield Conservation Authority Board of Directors has adopted a ten-year business plan, *Towards a Healthier Watershed*, that embraces an integrated model of management.

This innovative new way of doing business creates a larger role for you, and our other partners, in setting the course for the future.

ABCA has been able to enact watershed improvements through many important partnerships that have been developed over the years.

Why are partners so important to an integrated model of watershed management?

Building environmental conscience, and healthier watersheds, occurs with the help of our 12 member municipalities. They have a vision for the future and they see beyond their individual jurisdictional boundaries as they deliver their mandate.

The support of those municipalities, and their ratepayers, makes it possible for ABCA to bring in three dollars of outside funding for every dollar invested through the levy.

That effective leveraging of funds supports programs like private land stewardship, wetlands restoration, educating the watershed stewards of tomorrow, protecting life and property through good planning, protecting and improving and monitoring water quality and quantity, planting tens of thousands of trees – and much, much more.

Watershed success takes place with the partnership of landowners who have the greatest ability to take positive action on the land.

Improved forest conditions, better water quality and quantity, education of our future generations – these successes are all possible only through



Lawrence McLachlan, 2009 Chair, ABCA

CHAIRMAN'S REPORT

partnerships.

Our partners are governments – federal, provincial, county, municipal.

Our partners are non-governmental organizations and foundations and service organizations.

Our partners are volunteers and private landowners.

Our partners include you – whether you are a resident of the area or otherwise a friend of this watershed.

ABCA was the first conservation authority in the province and it continues to be a leader in its approach to managing the watershed resources.

We are proud of the six decades of success of this organization but we also understand the need to review our goals with public input to ensure we continue moving in the right direction.

Environmental issues are growing in importance to society, and the role of the conservation authority is also becoming increasingly important.

We invite you to be part of a new model of effective delivery of services. We invite you to help chart the course for the next ten years through a review of the *Conservation Strategy*. Together we can move towards a healthier watershed.

> Lawrence McLachlan, Chairman

Mission Statement

Our mission is to provide leadership and management, in cooperation with the community, to maintain and enhance the watershed resources now and in the future.

Vision Statement

Our vision is one of clean and useable watersheds where human needs and the needs of the natural environment are balanced to ensure quality of life and biological diversity today and in the future.

CORPORATE SERVICES

ABCA board members key conservation voices at municipal council tables

welve lower-tier municipalities appoint representatives to the Board of Directors of the Ausable Bayfield Conservation Authority.

These board members also need to represent ABCA at their respective municipal councils. This two-way communication is key for the success of both organizations.

Municipalities were the leaders who saw the need for conservation authorities and, with the Province of Ontario, made that vision reality.

The ABCA and its member municipalities are partners in environmental management. It is vital ABCA board members are

BOARD OF DIRECTORS' MESSAGE

knowledgeable about the work of ABCA so they can provide answers to ongoing questions from council.

ABCA staff members are happy to attend any council meeting but they are not always present when questions arise so the local organization relies on its board members as the communication link.

Areas of common interest are programs, policies and funding for conservation and the environment.

Board members are important champions for the overall health of our watersheds.



Mark Funk

Glenn Lynch

Hendry Hoffmeyer

Boles

Jean Eagleson Walker

ABCA staff work towards healthier watersheds

Jr. Conservationist, students provide valuable assistance

The Ausable Bayfield Conservation Authority welcomed new contract staff member Glenn Hendry in 2009. ABCA Board of Directors and

STAFF REPORT

General Manager thank all staff for your passion for the environment and your commitment and efforts to make a positive difference to the health of our watershed communities. We also want to thank the summer contract staff who provided assistance on main projects during 2009:

- Jenni Boles, Education Assistant
- Mark Funk, Stewardship Assistant
- Jean Eagleson, Assistant Water Resources Technician (SEP)
- Lukas Walker, Resources Planning Assistant (SEP)
- Katelyn Lynch, Assistant Water Resource Technician

We hope your work with the ABCA provided you with a learning opportunity and some direction to your future academic endeavors.

ABCA also thanks junior conservationist Jessica Hoffmeyer. Her work here was made possible by Ausable Bayfield Conservation Foundation.

2009 **Board of Directors**



Bill Siemon Huron East



David Bolton Adelaide Metcalfe & Middlesex Centre



George Irvin Bluewater



Jim Ginn Central Huron



Dave Frayne South Huron & Perth South



Lawrence McLachlan North Middlesex



Bob Norris West Perth

Paul





Hodgins Lucan Biddulph Mark Simpson Lambton Shores & Warwick

Protecting environmental health more important than ever

By Tom Prout, General Manager and Secretary Treasurer, ABCA

ecision makers increasingly understand that preserving natural capital is in the longterm environmental, economic and health-related interest of ratepayers.

Healthy Watersheds = Healthy Great Lakes = Healthy Economies

Ausable Bayfield Conservation Authority, in cooperation with its partners, needs to make educated decisions about directions we will take, how much it will cost, where the money will be found, and how the outcomes will improve the health and resiliency of our watersheds.

That direction and leadership will come from a community of people with a common purpose.

> "We need a critical mass of leaders rather than relying on a hero to come along and save the day."

- from Made in Canada Leadership, 2007.

The past year was exciting. Landowners showed leadership at the local level in watershed planning efforts in communities including Bayfield North Watersheds, Ridgeway Drain, Port Franks and the Old Ausable River Channel.

The year 2010 will see even more involvement of the public – across the entire ABCA area and beyond – as residents and other partners become integrated into a more collaborative management model, as identified in our new ten-year business plan, and join in a review of the *Conservation Strategy*.

ABCA needs to be able to adjust to changes in environmental and social needs. We are dealing with a more educated public, with higher demands on the environment, and greater expectations of agencies like conservation authorities. We need to move, together, towards achieving environmental conscience, positive action and a healthier watershed.

We need to manage the environmental issues that were identified in the 1940s with the development of the *Conservation Authorities* Act – and newer issues,



ABCA General Manager Tom Prout

GENERAL MANAGER'S REPORT

such as climate change.

We also need to change the way we manage those issues. Effective watershed management requires educated decisions that balance costs and benefits. The business of managing watershed resources is no different. Making the best decisions makes it imperative that we consult with our community partners and stakeholders, as well as all levels of government.

We will move *Towards a Healthier Watershed* and create the foundation for a healthier population and a healthier economy – and we will do it together.

Tom Prout,

General Manager and Secretary Treasurer, Ausable Bayfield Conservation Authority

ABCA staff shares expertise

The ABCA's Human Resources Planning Framework encourages staff to develop their skills and to share their expertise at the local, provincial, national and international levels.

• Tracey Boitson, GIS Specialist, presented to A. D. Latornell Conservation Symposium on the **camaps.ca** mapping portal partnership. Tracey also sits on the events planning committee for URISA (Urban and Regional Information Systems Association).

• Ausable Bayfield - Maitland Valley consulting group facilitator Mary Lynn MacDonald spoke on the community working group model at the Latornell Symposium in Alliston in November.

• Kate Monk, ABCA Supervisor of Stewardship and Conservation Lands, represented the ABCA and Conservation Ontario at a national consultation in Ottawa – the National Ecological Goods and Services Technical Meeting.

• Tim Cumming, ABCA Communications Specialist, was named Vice President of the Huron Tourism Association (HTA).

Spring Water Awareness Program (SWAP) breaks attendance record

By Julie Stellingwerff, ABCA Conservation Education Specialist

ducation programs and special events in 2009 instilled environmental conscience to students and adults alike through positive and memorable outdoor experiences.

Conservation Education

The Ausable Bayfield Conservation Authority Winter, Spring, and Fall Nature Programs have provided watershed youth with memorable environmental education experiences in an outdoor setting or classroom, for the past nine years.

In 2009, 1,469 students participated in either half-day or full-day curriculum-linked nature program in the classroom, or at one of ABCA's conservation areas. The two most popular programs booked by schools in 2009 were *Puddles & Pollywogs* and *Fantastic Fossils*.

A record-breaking number of students, 2,195 participated in the free Spring Water Awareness Program (SWAP), held at watershed schools in February and March, with students learning about river systems and the dangers around waterways during the transition from winter to spring.

Camp Sylvan Conservation Program

It was another great spring for the Sylvan Conservation Program at Camp Sylvan. schools attended. Eight Students from grades six through eight took part in 1.5 or 2.5 days of ecology-based, outdoor experiential programs on a variety of topics such as Orienteering, What's in the Wilderness Survival, Water. Habitat Improvements and the popular Go Wild/survival program.

Special Events

A brand new beachfront environmental festival, Grand Bend *Aquafest*, had its debut in August, 2009.

Special Event Attendance			
Spring Water Awareness Program	2,195		
Senior Walks & Talks	30		
Family Day - Winter Wonderland	24		
Envirothon	75		
Agriculture & Water Festival	619		
Earth Day Tree Planting	18		
Aquafest	700		
Bannockburn Fall Hike	165		
Owl Prowl	190		
March Break Day Camps	10		
Summer Day Camps	133		
Other Events Attended: Inventors' & Science Fair Rekindle the Spark Workshop 			

CONSERVATION EDUCATION REPORT

Held in conjunction community with many partners, the ABCA department education developed several waterthemed activity stations, each with a water theme from the water cycle to water conservation and water quality. Despite rainy weather, participation in the children's water activities was high.



ABCA conservation education staff Julie Stellingwerff and Denise Iszczuk.

Non-profit Programs and Presentations

The ABCA receives regular requests for one-hour presentations or two-hour programs for organizations on a variety of topics, from spring flowers, to winter birds, and pond studies. In 2009, four presentations and four non-profit programs were delivered.

Thank you, volunteers and supporters

Thank you to those who volunteered and supported the education department during the ABCA's 63rd year. Without you, many of our education programs and special events would not be possible.

In 2010...

In 2010, the focus for the ABCA Conservation Education Department will be on creating new school programs and delivering more in-class programs to watershed schools. This will, as a result, increase the environmental awareness and conscience of the people living within our watershed.

Working at ABCA gave me experiences I would never have had

By Jessica Hoffmeyer, Junior Conservationist

y time spent at the Ausable Bayfield Conservation Authority in the summer of 2009 was remarkable. I was exposed to different aspects of

conservation, including education, biology, wetland conservation, and species at risk.

Everyone at ABCA was unbelievably kind and willing to help with anything, whether teaching me to use the photocopier or how to identify an insect.

There were endless chances to learn. I learned when you are in waders in water, quick reflexes are a must. When explaining the need for windbreaks and buffer strips to 20 excited children it's best to give them freezies so you can talk. I learned searching for endangered species feels like panning for gold.

Most importantly, I've learned that conservation is one of my passions and I hope to further a career in conservation someday after I have completed my studies at the University of Guelph.

I worked closely with many different departments and people. Some aspects of the job are particularly worth mentioning. Tuesday was beach day, Jenni and I would walk waist-deep in water at four beaches to take E. coli level samples. Walking along beaches may sound like a pretty awesome job, but there were some days where the water was freezing (as was the air) and there were waves almost knocking me over.

We had our fair share of soaked clothes and wet car seats, but I still looked forward to beach day.

Wednesdays were Nature Day Camps. Each week Denise, Jenni and I had an eclectic group of students eager to learn (most of the time), and carry out the theme of that week, like: *Planet Protectors, Hug a Tree* and *Creepy, Crawly Critters*, to name a few.

It was a joy to the participants take home a nature craft and a better understanding of their world.

Twice a month, Brynn and I would go out sampling the Bayfield River and its tributaries for E. coli and dissolved oxygen levels. It was always an adventure and we got a chance to see some pretty engaging wildlife in its natural habitat.

It was always nice to get out of the office and into the field. I was able to go to wetland site visits with Angela, and I was amazed at how many species of insects and plants that she could not only identify, but also tell you almost a paragraph about. I had



Junior Conservationist Jessica Hoffmeyer leads education activity at first Grand Bend Aquafest.

JUNIOR CONSERVATIONIST REPORT

never seen someone get so excited about bugs until I met Angela. I now have a new outlook on wetlands and their contribution to our environment.

I also got the chance to hike out with Glenn and Mark to do species-at-risk inventory, and although I seemed to be the main target of a swarm of mosquitoes, I agree with Glenn when he says: "A bad day in the field is better than a good day in the office" (and it was a bad day in the field).

Julie and Denise have an amazing way of teaching people and I enjoyed helping prepare for the water education event at *Aquafest*. I sincerely thank you.

When I wasn't busy with sampling or site visits, I would help Mari with beach surveys, or help the women in the shop with baseflow. There was never a dull day at work and, for that, I am thankful.

I've been told by different people that school can only get you so far, and life experience will carry you the rest of the way. I feel so privileged I got this remarkable experience to take with me, and I am forever grateful to all the amazing people of the Conservation Authority and Conservation Foundation for giving me the chance to be a part of all of this, and for the hard work that they do to help ensure our world stays beautiful.

The Junior Conservationist position is made possible thanks to the Ausable Bayfield Conservation Foundation.

Monitoring network provides valuable data in advance of floods

By Davin Heinbuck, ABCA Lands and Water Technologist

atershed municipalities and residents require advance warning of life-threatening flood events in the watershed. That is one of the reasons the Ausable Bayfield Conservation Authority, in cooperation with the Ontario Ministry of Natural Resources (MNR) and Environment Canada, maintains and operates a data collection network within its watershed area.

This monitoring network also provides information on low water conditions, groundwater and surface water interactions, and the relationship of stream flow to aquatic health.

The data collection network allows staff to monitor watershed conditions, including water levels and precipitation on major channels of the Ausable River, Bayfield River and Parkhill Creek watersheds.



Davin Heinbuck, ABCA Lands and Water Technologist.

MONITORING WATER LEVELS AND STREAM FLOWS

In addition, the ABCA also has the ability to monitor groundwater levels in some of the significant aquifers in the watershed.

Computerized monitoring systems, in the field, transmit information by telephone line directly to the office in Exeter.

With funding support from the MNR, maintenance of the streamflow monitoring

stations is shared by ABCA and Environment Canada staff. Through an agreement with the Ontario Ministry of the Environment (MOE), the ABCA is responsible for maintenance of groundwater monitoring stations (see groundwater studies).

Changes over five years can enhance flood forecasting, warning

By Alec Scott, P. Eng., ABCA Water and Planning Manager

n 2008, a document entitled Provincial Flood Forecasting and Warning Implementation Guidelines for Conservation Authorities and the Ministry of Natural Resources was approved by the Ontario Ministry of Natural Resources (MNR) and endorsed by Conservation Ontario and Environment Canada.

The purpose of the document is to provide guidance for the minimum level of a flood forecasting and warning program and implementation that is expected from the MNR and Conservation Authorities in Ontario.

While the document recognizes that not all agencies involved in flood forecasting and warning will have identical programs, it sets out minimum suggested standards and recommends that all agencies perform a self-assessment to determine if there are areas that program improvements are required.

In 2008 and 2009, Ausable Bayfield Conservation Authority staff completed a review of the current ABCA Flood Forecasting and Warning program in relation to the guidelines document, to provide documentation of any improvements that may be

FLOOD FORECASTING AND WARNING PROGRAM

required, costs associated with improvements, and a suggested time frame to update the ABCA program if required.

While the ABCA Flood Forecasting and Warning program meets all of the minimum requirements as recommended in the guidelines, a number of areas were identified which would improve the overall effectiveness of the program if implemented. The recommended improvements included better document organization, review of forecasting models, ongoing training and updated flood plain mapping. The estimated total costs for making all of the improvements over the next five years was \$332,850.

The report on assessment of the ABCA Flood Forecasting and Warning program was accepted by the ABCA Board of Directors, subject to sufficient funding being available in future budgets.



Parkhill Dam control building is shown at reservoir during time of high water.

Parkhill Dam operated for flood control for first time since 1985

By Alec Scott, P. Eng., ABCA Water and Planning Manager

2009 Flood Summary

he year 2009 would have been a calm year from a flood forecasting and warning perspective, if it were not for an exceptional snowmelt and flooding event in February. The February flood event in itself was extremely significant, with flows typical of a 25-50 year return period. However, this was the second event of this magnitude in as many months.

The February event was caused by a number of factors. Snowpack water equivalent through much of the watershed was between two and four inches.

Several days of warm weather, combined with up to 45 millimetres of rainfall, caused a very rapid thaw and runoff event. Many area roads were closed or washed out, some for up to one week.

Unlike the December event, where river ice was minimal, rivers were covered with up to 12 inches of ice.

Rising streamflows caused ice to break up and move downstream, threatening ice-jam prone areas such as Port Franks and Bayfield.

Ice jamming issues were reported in Port Franks and some roads were closed. More significant damage occurred at the mouth of the Bayfield River in the marina area.

The February event also marked the first time since 1985 that the Parkhill Dam was operated for flood control purposes.

Following the operations guide, staff operated the dam for three days to ensure that reservoir levels and downstream flows were managed to limit downstream damage or disruption.

MONITORING WATER LEVELS AND STREAM FLOWS

Ausable Bayfield Conservation Authority (ABCA) staff monitored forecast models closely to determine the rainfall patterns and the potential flooding impacts. In total, seven flood safety/monitoring bulletins and two flood advisories were issued to member municipalities in 2009.

All of these, with the exception of three flood safety/monitoring bulletins, occurred during the February event.

Flood Emergency Planning

The ABCA hosted a flood emergency planning meeting in the spring of 2009, as part of its responsibility to promote planning for flood emergencies among its watershed municipalities.

The workshop was well attended by municipal, county and provincial agencies. In addition to general discussion about emergency planning, the workshop included presentations by ABCA staff on roles and responsibilities in flood emergencies, current watershed conditions, recent flooding events and results from the flood communications during those events.

Beyond the annual flood emergency planning meeting, the ABCA was invited to a Middlesex County Fire Chiefs' meeting to present on the December 2008/February 2009 flood events and the role of ABCA's Flood Forecasting and Warning Network.

Water Response Team declared Level 1 Low Water condition

By Alec Scott, P. Eng., ABCA Water and Planning Manager

Low Water Response

uring 2009, the Ausable Bayfield Conservation Authority continued to be involved in the Ontario Low Water Response (OLWR) Program, which was created after extreme dry conditions were experienced in parts of the province in 1999.



Alec Scott, Water and Planning Manager

The OLWR plan is used as a guiding document for how municipal and provincial agencies

should react during periods of water shortages and defines levels of response to low water conditions.

Low water conditions cause concerns relating to lack of water for proper crop production, industrial and recreational uses, and for domestic supply.

A lack of water supplies also raises concerns for ecosystems, wetlands and fisheries.

The ABCA Low Water Response Team (WRT) is made up of municipal and provincial agency representatives as well as representatives from the ABCA; Ontario Stone, Sand and Gravel Association; Golf Course Owners' Association; Alliance of Ontario Food Processors; Thedford-Grand Bend Vegetable Growers; Huron County Federation of Agriculture; and the Ontario Federation of Anglers and Hunters. A representative from the Ontario Greenhouse Vegetable Growers was added to the WRT in 2009.

In 2009, the ABCA received funding from the Ontario Ministry of Natural Resources to review the WRT Terms of Reference, Watershed Characterization, and communication materials. Information on the socio-economic impacts of severe low water conditions was also gathered to support decisions relating to entering a Level III low water condition.

During the year, the WRT only held three meetings and five e-conferences.

A Level I Low Water condition was declared on September 8, 2009 and removed on November 10, 2009.

Approximately 20 volunteer rain gauge readers continue to provide valuable information on the extent and amount of precipitation received in the

MONITORING PRECIPITATION AND STREAM FLOWS

Levels of Response			
• Level I			
– Voluntary Reduction 10%			
• Level II			
– Voluntary Reduction 20%			
• Level III			
– Mandatory Water Use Restrictions			

watershed. This supplements the existing automated rain gauge network operated by the ABCA to support its water quantity programs.



The need for low water response is illustrated by these photos showing the same Parkhill Creek locations in different years (above in 2008, below in 2007).



ABCA has 14 groundwater monitoring wells through network

By Davin Heinbuck, ABCA Lands and Water Technologist

partnership between c o n s e r v a t i o n authorities, and the Ontario Ministry of the Environment, maintains a network of groundwater monitoring wells across the province.

The Provincial Groundwater Monitoring Network (PGMN) initiative has led to the development of more than 400 monitoring wells since 2001.

The Ausable Bayfield Conservation Authority currently has 14 active wells throughout the watershed, five bedrock wells and nine wells drilled into the overburden. Hourly groundwater level data has been logged for more than seven years most of these wells.

Telemetry at each well enables access to current water level information through a web-based component of the network. The groundwater level data shows that annual

cycles in groundwater levels are consistent and highlight the critical annual recharge periods of fall and spring. Based on the program's short period of record the general trend is that groundwater levels have risen from where they were in 2002.

The significant snowmelt events in December of 2008 and February 2009 raised levels in many of the shallow overburden aquifers to their highest levels since the inception of the program.

Water quality sampling is another critical component of the PGMN and the ABCA has groundwater quality data available for each well from 2003 to 2009.

To match the core requirements province-wide, water quality is analyzed for nutrients, metals,



ABCA lands and water technologist Davin Heinbuck checks one of 14 active monitoring wells in Ausable Bayfield watersheds.

ABCA GROUNDWATER RESOURCES AND PROVINCIAL GROUNDWATER MONITORING NETWORK

Ontario.

A \$25,000 Ontario Ministry of the Environment (MOE) investment in the Sinkhole Monitoring Well has allowed the continuous monitoring of water quality at the site and has been in place for over a year now. With satellite telemetry, access to hourly levels of nitrate, chloride, pH, conductivity and dissolved oxygen is available. Prior to this initiative, these parameters were measured annually.

It is expected that hourly monitoring will provide valuable data on the possible surface and groundwater interaction in the area.

PGMN data also supports both the Flood Forecasting and Warning and Ontario Low Water Response Program.

general chemistry, and bacteria.

In December of 2006. the ABCA adopted the Protocol for Actions, whereby notices of exceedences of groundwater quality parameters are to be sent, in writing, the respective to municipality and landowners on whose property the monitoring well is located.

Since that time, numerous exceedence notices have been issued, which most of for were sodium (aesthetic drinking objective) water and fluoride, which naturally occurs in elevated levels throughout much of Southwestern

ABCA carries out minor repairs on water, erosion control structures

By Alec Scott, P. Eng., ABCA Water and Planning Manager

Structures Operation and Maintenance

he Ausable Bayfield Conservation Authority inspected and performed maintenance on water and erosion control structures owned or constructed by the ABCA, as part of the CA's mandate and agreements with watershed municipalities.

These structures include Parkhill Dam, Morrison Dam, a number of flood control channels, and erosion control structures in various parts of the watershed.

Most of the inspections and actual maintenance work are carried out by ABCA staff unless it is determined that it would be more efficient to contract the work out to local companies.

As a result of the inspections, ABCA staff completed minor repairs on a number of structures. Work included vegetation control around structures and general minor repairs to prevent larger maintenance problems in the future.

Water and Erosion Control Infrastructure Funding Program (WECI)

Since 2003, the Ontario Ministry of Natural Resources Water and Erosion Control Infrastructure (WECI) funding program has been available to fund major maintenance work on conservation authority flood and erosion control projects. Under this program the ABCA can apply for 50 per cent grant funding for major maintenance projects.

In 2009, the following WECI projects were continued or completed:

Port Franks Ice Management Project

The Port Franks Ice Management project involves proposed maintenance dredging of the 1949 Ausable River Cut project to reduce ice jamming potential in the Port Franks area.

In 2008, a report was prepared including information from soundings of the channel, environmental investigations and creation of a hydraulic model for the channel. Critical areas for

WATER AND EROSION CONTROL

 Gate controller for Parkhill Dam.

dredging were identified in the report.

In addition, due to the possible presence of speciesat-risk mussels in one of the potential dredging areas, a mussel survey was conducted. The results of the survey indicated that no species-at-risk mussels were in the potential dredge area.

Late in 2008, the Municipality of Lambton Shores decided that they did not wish to proceed with any dredging work at this time.

Therefore, the Ice Management Report was finalized in 2009 with a section outlining the steps which would be required if dredging is considered in future years.

Parkhill Dam Gate Controller Servicing

The motors and gearboxes which control the operation of the gates at Parkhill Dam have been in service with no operational issues for over 40 years.

In 2009, contact was made with the original manufacturer to get prices for the maintenance and refurbishing of these critical mechanical components. On-site meetings were held to determine the requirements for refurbishing the units as well as preparing a budget to be used to complete the work in 2010.



Photos show Exeter Dam. This municipal dam in South Huron was studied to gauge future costs to maintain.

Exeter Dam studied, repair costs determined, decision yet to be made

By Alec Scott, P. Eng., ABCA Water and Planning Manager

Exeter (MacNaughton Park) Dam Environmental Assessment

usable Bayfield Conservation Authority organized a public meeting in October 2008, at the request of the Municipality of South Huron, to discuss options for the future of Exeter Dam.

Because one of the possible options would include decommissioning of the dam, grant funding for this work was provided through the Water and Erosion Control Infrastructure (WECI) funding program.

Following this meeting, South Huron Council requested a structural review of the dam with an indication of the potential future costs to maintain the dam. The ABCA engaged B. M. Ross and Associates to complete this study. It was determined that over the next five years, repairs and maintenance costs of \$148,900 could be expected.

A final decision on the future of the dam has not yet been made.

Parkhill and Morrison Dam Embankment Surveys

When the dam safety reviews for these dams were completed in 2005, it was noted that there had been no existing condition surveys done of the upstream and downstream slopes of the earthen embankments of the dams since the original construction.

Four cross-section surveys of the embankments were completed for each dam and compared to the original design drawings.

WATER AND EROSION CONTROL

While there did not appear to be any unusual changes, this information will be available when the next dam safety review is completed.

Walker Drain Area 1 Erosion Control

As a result of a large slump in the bank of the Walker Drain just downstream of the original Walker Drain Erosion Control project, the Municipality of Lambton Shores asked the ABCA to investigate options for correction of the bank erosion.

Riggs Engineering Limited was asked to investigate the erosion area and provide options for remedial works.

The options will be presented to Lambton Shores for consideration during the 2010 budget discussions.

Port Franks Plan 41 Erosion Extension

In 1984, the Port Franks Plan 41 Erosion Control Project was completed as an ABCA project. In recent years, changes in river channel geometry in the area have caused increased erosion on the downstream end of this project, with the potential to impact the original project.

Through cooperation with the affected landowners, the original project was extended by approximately 60 metres to ensure the long-term stability of the original project.



The ABCA's new ten-year business plan, approved in December of 2009 and to be published early 2010, stresses the need to communicate technical work well. Mapping is a big part of that communication effort.

Mapping products now more accessible to public, ABCA staff

By Tracey Boitson, ABCA GIS/CAD Specialist

eographic Information Systems, or GIS, supports both programs and projects at the Ausable Bayfield Conservation

GIS, as the name implies, has information that is linked to a spatial or geographic location. It is for the storage, display, and analysis of geographic data. GIS staff, at the ABCA, can be involved in creating databases, linking databases to a spatial layer, data manipulation (aggregation, changing file formats, etc.), map creation,

or more complex analysis involving queries, map algebra, or modeling.

Staff are also involved in acquiring data such as aerial photography or vector (line, polygon, and point) sets.

In 2009, we saw the continuation of many projects and programs related to and relying on GIS.

The ABCA continues to be involved in the partnership of six conservation authorities in the web-based mapping project giving the public access to ABCA data via a web mapping portal. You can visit the site at **www.camaps.ca**. The site has undergone changes and now uses a Bing mapping service as a base for roads, giving it a look that is similar to many internet mapping sites users are familiar with.

The ABCA internal GeoPortal sites continue to expand, with more information now available to staff. Twenty-one staff members received hands-on training in the ABCA boardroom on GeoPortal use in the month of April.

Along the Lake Huron shoreline, elevation models



Tracey Boitson, ABCA GIS/CAD Specialist

GIS MAPPING REPORT

were created to allow for a 'semi-automated' process to determine the 3:1 slope. Layers depicting the toe of the slope, top of the slope, and the 3:1 slope (measured from the toe) were created along the shore and up the gullies to Highway 21. This allowed for updates to the regulation limit for the gullies and will facilitate future updates to the *Shoreline Management Plan*. The 3:1 slope was also provided to Huron County

planning staff for use in zoning and bylaw updates. GIS staff also worked, in 2009, to:

- Align watercourses with the 2006 photo base
- Create a database for fishing records and modify existing mussel database
- Create a database to house species at risk, ELC and survey information for ABCA properties
- Provide assistance in flood forecasting data collection
- Provide mapping for sub-watershed studies and other projects as requested
- Participate in the SWOOP 2 project to acquire air photos in 2010
- Provide computer hardware and software support
- Provide air photos and/or other data to private sector consultants or consultants working on behalf of a municipality
- Update shoreline regulation screening maps
- Provide GIS live at public meetings



Erosion is present along shorelines. Life and property can be better protected through good planning.

ABCA provides formal comments to municipalities on planning

By Geoffrey Cade, ABCA Supervisor of Water and Planning

he Conservation Authority is the lead provincial agency providing natural hazard comments to landowners and municipalities.

Ausable Bayfield Conservation Authority comments are intended to help limit or prevent future risks to life and property, and to protect the interests and limit the liability of our member municipalities.

The ABCA is also a key agency providing Natural Heritage advice to landowners and

municipalities. Land development or re-development needs to respect significant natural areas and those areas which provide a source for clean ground and surface water.

Despite the severe economic downturn, land development, re-development or property transactions only fell marginally from 2008 levels.

In 2009, the Conservation Authority provided formal comment to its member municipalities on 85 different planning applications.

The ABCA also provided formal written response to 98 legal inquiries and many more walk-in, or telephone, inquiries.

The bulk of Conservation Authority comments continue to involve property either on, or in close proximity to, the Lake Huron shoreline. In the last few years these areas have been experiencing increased erosion. It is important that we inform landowners of the risks associated with these areas. The natural beauty of the shoreline is obvious. The



Geoffrey Cade

PLANNING INPUT AND REVIEW

natural hazards are often not always as obvious.

The management of the quantity and quality of the drainage leaving new development sites is

important to protect downstream watercourses and landowners. In 2009, the ABCA's new stormwater management policy was formally approved

for use – replacing the previous policy, in place since 1994.

The Ausable Bayfield Conservation Authority, again in 2009, presented evidence at the Ontario Municipal Board. The proposed development is on the Lake Huron shoreline and is also affected by two streams and their associated gullies crossing the property on their way to the lake. The Conservation Authority provided testimony regarding the hazardous nature of the lake's bluff and the two gullies.

The Conservation Authority furnished suitable development setbacks for these features. The ABCA is also providing review of the proposed stormwater management required for the development and the potential impacts to the natural areas on the property.



Increase in slope-related failures underlines need for regulations

By Andrew Bicknell, P. Eng., ABCA Regulations Coordinator

he Ausable Bayfield Conservation Authority has seen an increased incidence of slope-related failure throughout the watershed in 2009, in comparison to recent years. That sloperelated failure has been particularly evident in areas adjacent to the gullies which drain to Lake Huron and along the lake bank.

There are many factors which can influence when, and how severe, such occurrences are likely to be. Because of the complexity of the many natural processes which are occurring, the response and severity when slides or slope failures do occur are to a great extent unpredictable.

When these events do occur, it can serve as a reminder of the need for responsible regulations and control where new development is being contemplated in close vicinity to these particularly vulnerable, hazardous locations.

The ABCA's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 147/06) is the legal mechanism under Section 28 of the Conservation Authorities Act which empowers the ABCA to regulate development within environmentally sensitive areas and hazard lands and activity around watercourses.

Lands which fall under the category of Natural Hazard predominantly include flood-susceptible areas, valleylands, lakeshore areas, and wetlands. Development affecting these areas may require the permission of the Conservation Authority to ensure that

the control of flooding, erosion, dynamic beaches, pollution, or the conservation of land, is not affected.

Conservation Authority staff continue to work closely with the federal Department of Fisheries and



Andrew Bicknell, Regulations Coordinator

Statistics for 2009

- 65 Applications for Permission
 - 69 Minor work
- permits • One hearing
- conducted (*Ontario Regulation 147/06*)
- Five drain reports reviewed

• 93 letters of

advice issued (under

agreement with Department of

Fisheries and Oceans)



REGULATIONS REPORT

Oceans (DFO) in conducting day-today business wherein water works are proposed.

Staff review work proposals and provide initial screening to ensure that watercourse alterations are carried out in accordance with the provisions of the Federal Fisheries Act.

Where an initial project screening reveals that there are possible Species at Risk (SAR) considerations, the Conservation Authority will refer the file to the DFO for review.

Additionally, the work proposal must be screened to ensure compliance under the provincial *Endangered Species Act (ESA), 2007.*

The proponent is typically referred to the Ontario Ministry of Natural Resources (MNR) to facilitate such screening. It is anticipated that staff will continue to receive training in 2010 in regard to "harmonization" efforts with application of both the provincial and federal *Species at Risk* legislation.

It is important that staff are informed in regard to the relevant legislation in order to be positioned to lead a proponent through the most seamless process possible in regard to regulatory approvals.

Terminology which may be heard more frequently in the future is the concept of a 'Risk Management Framework' (RMF).

The RMF methodology was introduced by the DFO in efforts to improve the review process with increased transparency and accountability. The RMF methodology is not new, however staff now regularly apply the framework in our review of work proposals in and around water.

Minister approves Terms of Reference, local working groups meet

By Cathie Brown, Project Manager, Ausable Bayfield Maitland Valley Source Protection Region

DRINKING WATER SOURCE PROTECTION REPORT

he Ontario Minister of the Environment approved the terms of reference for our two source protection areas on June 8, 2009. This was a significant step forward in the protection of municipal drinking water sources in this region.



Cathie Brown, Project Manager. SOURCE PROTECTION

Ausable Bayfield Maitland Valley Source Protection Region

property owners (held in Clinton), and attendance at a First Nations elder and youth gathering.

We hosted source protection committee members from four adjacent regions in Mitchell and organized three meetings, in Palmerston, Harriston and Brussels, for industrial and commercial property owners. The region also held events for municipal representatives and staff and

This work plan outlined timelines, roles and responsibilities for the project, and was

the first major milestone required of the source protection committee.

Approval started the clock ticking on the next major phase of the project, and we switched into high gear to prepare draft proposed assessment reports. Staff and consultants worked in earnest on delineation of vulnerable areas and assessment of potential significant drinking water threats, based on Ontario Ministry of the Environment regulations.

Proposed assessment reports for this region must be completed, reviewed by the public, revised and submitted to the province by June 8, 2010. This meant there was a lot of work to do in 2009.

Staff began site visits with property owners, initiated extensive pre-consultation outreach to property owners who might be affected, and updated maps and technical information.

The Ausable Bayfield Maitland Valley Drinking Water Source Protection Committee (SPC), and the Ausable Bayfield and Maitland Valley source protection authorities, were very busy in 2009.

Protecting Ontario's drinking water at the source was a recommendation of the O'Connor Inquiry, after the water-related tragedy in Walkerton, Ontario. This new, first barrier of protection required a concerted effort to educate the public. The project used direct mail to thousands of property owners in vulnerable areas. Outreach was initiated through television, radio, print, local events for general public and specific audiences, and working group meetings.

Communications included 'Open Well' events in Listowel and Bayfield, for public and property owners in vulnerable areas, a presentation for agricultural had a display at Grand Bend's *Aquafest*.

The committee continued with its unique model of a subcommittee of municipal representatives and six local, multi-stakeholder, community working groups. Fleming College visited here and created a Statement of Recognition certificate for those working group members who chose to complete a formal assessment. Working group members toured local sinkholes and heard a karst topography expert.

The 75 volunteers who completed the learning program culminated their work by creating planning policy recommendations, which they presented to the source protection committee in 2009.

Our committee invited renowned science journalist, author and television and radio personality Bob McDonald to Goderich and 220 people attended.

The Ausable Bayfield and Maitland Valley conservation authorities continued to work in partnership on the delivery of financial assistance through the Ontario Drinking Water Stewardship Program (ODWSP). An announcement, in Atwood, of \$839,140 in new funding in the region for stewardship projects to protect drinking water was announced by the two partnering conservation authorities and Chair Larry Brown attended.

The year 2009 saw exciting steps along the road to safer drinking water and there is a busy year ahead in 2010 as we assess our water sources in the region – which will provide the source protection committee with valuable information it needs to develop plans to further protect our communities' municipal water – using the first barrier, at the source.

ABCA continues to monitor water quality at 18 different stations

By Mari Veliz, ABCA Healthy Watersheds Coordinator

he release of the Watershed Report Card 2007 has provided local communities with summarized forest and water quality conditions

on a watershed basis. Grading the watersheds helps highlight areas we need to protect and areas we need to improve.

Water quality monitoring continued at 18 stations from March to November 2009. Nine stations are a part of the Provincial Water Quality Monitoring Network (PWQMN).



The Ausable Bayfield Conservation Authority collects the samples and the Ontario Ministry of the Environment (MOE) analyzes the samples and both partners share the data.

Samples are also collected from nine additional sites and are analyzed by a laboratory, approved by the MOE, with funding from the ABCA.

The ABCA continues to partner with local benthic organizations such as the Bayfield Ratepayers October Association, Bluewater Shoreline Residents' invertebr Association, the Municipality of Bluewater, insects, the Ontario Ministry of the Environment, the and wor Municipality of Lambton Shores and Pinery Provincial Park to collect water from 39 other locations around the ABCA area. These additional samples were in 2012.



Photo shows bottles used to collect water quality samples for the Provincial Water Quality Monitoring Network.

MONITORING

collected from the Bayfield River, Zurich Drain, Gully Creek, outlets of Ridgeway, Houston Heights, and Wildwood Drains and the Old Ausable Channel in Grand Bend.

To complement the water chemistry monitoring, benthic macro-invertebrates were collected in October 2009 from 17 stations. Benthic macroinvertebrates are 'bottom-living' animals (aquatic insects, crustaceans – crayfish, mollusks – mussels, and worms). These animals provide biologically integrated information about our watersheds that will help us produce the next watershed report cards in 2012.

Property owners make the difference in their efforts to protect water

ural non-point pollution of water originates from many dispersed sources such as individual homes, farms, and construction sites.

Improvements to water quality may therefore be best identified and acted upon by individual property owners.

WATERSHED COMMUNITIES IN ACTION

Linking individual actions to downstream water quality conditions can be achieved through watershed planning.

Some of those efforts are in the following pages:

Communities, landowners protect water through local watershed plans

By Hope Brock, ABCA Healthy Watersheds Technician

Bayfield North Watersheds Management Plan

ince 2007, residents of a 40-square-kilometre area, just north of Bayfield, have been active in developing a management plan for their watersheds.

draft watershed А management plan was created cooperatively bv the community, the Ausable Bayfield Conservation Authority, and government agencies to manage water, land and water interactions, and aquatic resources within this area.

The management plan provided information about

the natural environment and community interests and issues to landowners north of Bayfield and to other local decision makers, as well as local agencies and government departments.

Each issue or interest was then addressed with a management goal and recommended actions.

An advisory committee was also active in hosting

Community advisory committee formed for Ridgeway Drain project Ridgeway Drain (Dashwood)

Water Quality Improvement Project

nother community-based watershed planning project was initiated in the Ridgeway (Kading) Drain watershed, which is a small ravine emptying into Lake Huron, just north of Grand Bend.

The Ridgeway Drain is one of four ravines that the Bluewater Shoreline Residents' Association (BSRA) monitors for water quality, in cooperation with the Ausable Bayfield Conservation Authority.

This ravine was identified by the BSRA as a priority area in which to conduct further studies, with the ultimate goal of creating a watershed planning process to improve water quality.



Hope Brock





Ausable Bayfield Conservation Authority water resources technologist Ross Wilson provides information during watershed bus tour of Bayfield North Watersheds in August, 2009.

beach and gully cleanups, a stewardship guide workshop, an open house forum, a streambank restoration day, and a watershed bus tour.



Several tree planting and erosion control projects took place

this year, and an EcoAction grant application was submitted to help support additional erosion control projects as well as wetland restoration projects.

These stewardship actions will help address one of the main recommendations of the plan which is to enhance the natural environment.

LAKESHORE COMMUNITY ACTION

The main approach to improving water quality within the ravine, and at the lake, will be through the implementation of beneficial management practices (BMPs).

The BSRA, and The Rotary Club of Grand Bend, supported the completion of a background report for the Ridgeway Drain, which documented watershed features and water quality information.

An advisory committee made up of community representatives was formed in autumn, and continues to guide this process, which will also see the initiation of a more comprehensive water quality monitoring program in order to track project success.

Document highlights natural features of Trick's Creek watershed

By Brynn Upsdell, ABCA Water Quality Technician

he Bayfield Ratepayers Association (BRA) collaborated with the Ausable Bayfield Conservation Authority in 2008 to establish a water quality monitoring program in the lower Bayfield watershed, which included two sites within the Trick's Creek watershed.

This program continued in 2009



Brynn Upsdell

and resulted in the recommendation of a community-based watershed planning project to protect and enhance Trick's Creek.

A background document was completed to highlight the natural features of this watershed and summarize existing water quality data.



The Wise Drain is a tributary of Trick's Creek. Photos show downstream and upstream views.

Meanwhile, the BRA and ABCA continue to look for additional funding that would support this project.

Port Franks area residents engaged in biodiversity strategy

esidents of Port Franks and area recognize they live in a unique place and have become actively involved in the development of a biodiversity strategy.

The Port Franks area is located at the northern edge of the Carolinian zone and, as a result, supports a wide variety of flora and fauna,

some of which are designated as species at risk (e.g., Dwarf Hackberry and Karner Blue butterfly).

This community-based biodiversity strategy will provide a comprehensive summary of the background information regarding species at risk and their habitat. It will also document important community issues and interests for this area while providing relevant management recommendations.

A technical committee meeting was held in August of 2009 to initiate the project, while a well-attended public meeting was held in September to introduce the project and garner community feedback.

In addition to providing input into the strategy, an advisory committee, which formed in the autumn, is guiding such initiatives as the planting of a children's native plant garden.

By Kari Jean, ABCA Aquatic Biologist



Kari Jean

PORT FRANKS COMMUNITY BIODIVERSITY STRATEGY



Port Franks community attended a meeting in September.



Stinkpot Turtle (threatened species-atrisk) found in Port Franks area.



Fish seining for species at risk at Mouth Lake (oxbow pond) in Port Franks.



L Lake in Port Franks – a unique Ausable River Oxbow wetland that supports many species at risk.

OAC management strategy leads to activities creating awareness

By Kari Jean, ABCA Aquatic Biologist

Management Strategy Implementation

he Old Ausable Channel (OAC) has been identified as an important ecosystem in the Ausable River Recovery Strategy, as it is home to three species-at-risk fishes, and the oak savanna forest on its shores is internationally significant.

Activities in the Old Ausable River Channel in 2009 have included:

- A study of the rate of natural succession
- A native plant guide and awareness day
- Construction of a small viewing platform in the Origin section of the OAC, in partnership with the Municipality of Lambton Shores.

The OAC is an isolated portion of the Ausable River. This historic channel was cut off from the present Ausable River at the end of the 19th century. No longer part of a flowing river, the channel is characterized by clear water and dense aquatic vegetation. Due to its lack of flow, the old river channel may eventually become less aquatic and more terrestrial over an extended period of time.

As part of the natural succession study, staff worked with:

- The Municipality of Lambton Shores to collect water quality information;
- Fisheries and Oceans Canada to survey the fish, and;
- University of Waterloo to collect sediment cores.

A sediment core revealed that: sedimentation rates increased about two-fold with installation of the dam in Pinery Provincial Park in the 1960s; and algal growth increased mid-1980s, coincident with

development of a nearby neighbourhood. These findings concur with water quality data that showed higher nutrient concentrations in the residential area compared to Pinery Provincial Park. The sediment core also showed a recent decline in algal concentrations, which suggests efforts to reduce nutrient inputs to the OAC have been successful.

University of Waterloo suggested that, at the current rate of infilling at the measured location, it would take around 200 years for the channel to fill in.

OLD AUSABLE CHANNEL LONG-TERM MANAGEMENT PLAN



The Pugnose Shiner (above) is one of three fish species at risk in the Old Ausable River Channel. Below, an endangered Lake Chubsucker from OAC.





Sediment core illustrates sediment deposition in lake bottoms. (Photo courtesy University of Waterloo).



Fisheries and Oceans Canada staff partner with ABCA aquatic biologist to determine the distribution and abundance of species-at-risk fish in the Old Ausable Channel.



A Northern Pike was found in the Old Ausable Channel during a fish survey.

HEALTHY WATERSHEDS



A volunteer assists with seine netting for fish in the Ausable River.



The Ausable River is home to six mussel species at risk, including the Mapleleaf Mussel (*Quadrula quadrula*).



Ausable Bayfield Conservation Authority staff member Brynn Upsdell shows two Mapleleaf mussels – a species at risk that is found in the Ausable River.

Program review suggests nitrate declining, phosphorous still high

By Brynn Upsdell, ABCA Water Quality Technician

Program Evaluation

he Government of Canada's Habitat Stewardship Program (HSP) for Species at Risk (SAR) has contributed funding towards on-the-ground actions to recover aquatic SAR in the Ausable River watershed since 2004.

In 2009, the Ausable Bayfield Conservation Authority evaluated the contribution of HSPfunded stewardship activities to SAR recovery and to identify priority areas in the watershed for future recovery actions.

The ABCA compared data related to water quality, mussels and fish between two time periods: before and after the HSP began funding stewardship projects in the watershed.

Concentrations of nitrate, total phosphorus, and total suspended solids continue to be high at locations in the watershed near SAR, but nitrate has shown a slight declining trend since 2000.

Data that have been collected on the abundance

AUSABLE RIVER RECOVERY STRATEGY

and distribution of mussels and fish in the watershed mainly represent a baseline condition to which future data can be compared.

At the few sites with data over time for mussels and fish, there has not been much change in the abundance of SAR. A site in the Lower Ausable River, however, shows a decline in smaller-sized Snuffbox (a mussel SAR) between 2006 and 2009.

The ABCA has identified four priority areas for future on-the-ground recovery actions, which are located near Ailsa Craig, Grand Bend, Port Franks, and north of Arkona. Enhancing wetlands in headwater areas of the Ausable River has the potential to significantly improve the recovery of SAR in the Ausable River by reducing three threats: nutrients, sediment, and excessive water flow.

HEALTHY WATERSHEDS



Wetlands are nature's reservoir – protecting water quality and limiting flooding.



Technicians from Ontario Ministry of Natural Resources (above) assist at local wetlands site.

Ten wetlands developed in 2009 through Healthy Headwaters

By Angela Van Niekerk, ABCA Wetlands Specialist

Wetland Development in Middlesex and Huron

Counties in 2009

urrently, only two per cent of the Ausable River watershed is in wetlands (areas that are seasonally or permanently wet, with poor draining soils and hydric plants).

A key wetland function is water storage,

which is important for maintaining soil moisture during times of drought to enhance crop production and reducing downstream flooding.

Wetlands also improve water quality by filtering pollutants.

A grant from the Ontario Trillium Foundation for wetland restoration continued in 2009. Partners from the Ausable Bayfield Conservation Authority, Middlesex Stewardship Council, Huron Stewardship Council and Ducks Unlimited Canada have provided technical advice and financial assistance to complete wetland projects.

The process has a mapping component that was completed in 2007 and an ongoing public outreach campaign.



Angela Van Niekerk

HEALTHY HEADWATERS WETLANDS INITIATIVE

In response to public outreach activities, four wetlands were restored and 5,890 trees were planted in the first year – enhancing 20.31 hectares of wetland and riparian areas in 2008.

In 2009, an additional ten wetlands were developed and 50,060 trees were planted – enhancing 48.23 hectares of

wetland and riparian areas.

Thank you to all of the landowners who have worked with us to restore these wetland areas and help make a healthy environment.

We continue to look for interested landowners who have flooding, soil erosion issues or need more streamside vegetation on their properties in Middlesex and Huron Counties.

Contact Angela Van Niekerk, Wetlands Specialist, at the ABCA at **519-235-2610** or phone toll-free **1-888-286-2610** or e-mail **avanniekerk@abca.on.ca** if you are interested in enhancing wet areas on your property.

HEALTHY WATERSHEDS



The Ausable Bayfield Conservation Authority and the Lake Huron - Georgian Bay Watershed Canadian Framework for Community Action hosted the Youth Summit in 2009. The enthusiastic and positive group of young people learned how to think globally and act locally. (Photo courtesy Peter Burtch/LSRCA).

South East Shore Working Group undertakes beach impact study

By Mari Veliz, ABCA Healthy Watersheds Coordinator

Mari Veliz

he Lake Huron shoreline of the counties of Lambton, Huron, and Bruce, from Sarnia in the south to Tobermory in the north, is the location of many public beaches.

The Lake Huron South East Shore Working Group felt it was important to obtain statistically-significant data on the relationship between beach water quality and economic impacts.

The group commissioned an intercept survey in 2009 to:

- Identify characteristics of beach visitors' trips/travel
- Assess levels of satisfaction with beaches
- Estimate direct spending by visitors

The results of the survey will be reviewed by the working group in 2010.

The survey will provide valuable information on what motivates people to come to a beach or not, how their perceptions of water quality issues affect that decision making, economic impacts and more.

The survey will also include recommendations based on this increased knowledge of tourists and



local visitors to the beach.

Lake Huron – Georgian Bay Watershed Canadian Framework for Community Action – Youth Summit

The Ausable Bayfield Conservation Authority helped to host a Youth Summit in September 2009. The purpose of the summit was to introduce high school students from across the Lake Huron Georgian Bay Watershed about the Lake Huron - Georgian Bay Framework for Community Action.

The intent of the Framework is to foster a community-based approach to enhancing and protecting the lands and waters of the Lake Huron-Georgian Bay watershed through education, awareness and community action. Twenty-eight students and their teachers attended the weekend event and are following-up with activities across the basin.

Two lands acquired, expanding natural areas in our watersheds

By Kate Monk, ABCA Supervisor of Stewardship and Conservation Lands

he Ausable Bayfield Conservation Authority is the largest single owner of forests in the watershed.

While the primary purpose of acquisition is to protect valleylands, wetlands and woodlots, these properties have important secondary benefits of wildlife habitat, recreation, education and scientific research.

Two important properties were acquired in 2009.

Ralph and Eleanor Smith of Goderich donated a 16acre parcel adjacent to the Bannockburn Conservation Area in the Municipality of Bluewater.

This property helps the ABCA's mandate of protecting the Bannockburn River which flows into the Bayfield River. The Smiths were very good stewards of the property by planting many trees and allowing other parts of the property to naturally regenerate. In 2010, the ABCA will develop lowimpact hiking trails on the upland portions of the property.

In December, the ABCA acquired a 100-acre parcel at Concession 4, Lot 5, Hay Ward of Bluewater from Stuart Triebner. A portion of the property is a swamp and the remainder is cash crop farm land. The property is within the Hay Swamp Wetland Complex which is an Environmentally Significant Area (ESA) and provincial Area of Natural and Scientific Interest (ANSI). Funding from the Geenlands Challenge Program, Ducks Unlimited, Mildred Creech, Reit and Fred Willert Family, ABCA and Mr. Triebner contributed to the acquisition. Stewardship activities will include tree planting and wetland restoration on the lower parts of the property. The majority of the farmland will be rented and remain in agriculture.

Agreements are in place with three community organizations for the special use of ABCA lands: Strathroy Snow Blizzards, Pineridge Snowmobile Club and the Ausable River Riders Club. In all cases, the groups undertake trail maintenance and the Ausable River Riders Club (ARRC) also provides financial compensation.

The Ausable River Riders Club successfully upgraded 12 kilometres of trail in North Middlesex with the help of funding from the Government of Canada's Economic Action Plan through the National Trails Coalition (NTC). Volunteers from the club and

CONSERVATION LAND MANAGEMENT



A dedication ceremony was held on October 4, 2009 to honour donation of land by Ralph and Eleanor Smith and family, of Goderich. The donation created 6.49 hectares more of natural space at Bannockburn Conservation Area.



Danica Green, granddaughter of the late Bill Linfield, points to Linfield Wildlife Area property while ABCA's Kate Monk speaks to crowd at dedication ceremony.

contractors completed the work to revitalize trails on two ABCA properties near Parkhill and Sylvan. The club invested \$17,300 into the trail project and that amount was matched by the federal grant for a total of \$34,600. Off-road vehicles are prohibited on most ABCA lands but members of the Ausable River Riders Club are permitted to ride on designated ABCA lands in the Parkhill and Arkona areas. ATV and off-road motorcycle riders must be members of the club to use those lands.

Foundation support helps Commemorative Woods expansion

By Kate Monk, ABCA Supervisor of Stewardship and Conservation Lands

he Morrison Dam Commemorative Woods Expansion Project reached another milestone with the development of a parking lot with funding from the Ausable Bayfield Conservation Foundation.

The area will also be used for MacNaughton-Morrison Section of the South Huron Trail hikers and was designed for school bus parking for education programs at Morrison Dam Conservation Area.

The Ausable Bayfield Conservation Authority continues to partner with the Arkona Lions Club for the management of the Arkona Lions Museum and Information Centre at Rock Glen Conservation Area near Arkona.

CONSERVATION AREA DEVELOPMENT

This year, the club moved its annual car show to the conservation area with great success. The show was part of a community day at Rock Glen with entrance fees waived for the day, thanks to a donation from the

club.

Kate Monk

The Clinton Lions Club continues to diligently care for the Clinton Conservation Area. The park on Highway 4 is popular for hiking, fishing and family picnics.



The Linfield Wildlife Area is one of the recent examples of families 'leaving a local legacy' through a donation of land. Above, Linda Linfield and Kate Monk, ABCA Supervisor of Stewardship and Conservation Lands, take a walk through the property. A dedication ceremony took place July 18, 2009.

Gord Strang Memorial Golf tournament continues to support trail

The Gordon Strang Memorial Golf Tournament in 2009 raised \$4,400 towards maintenance of the MacNaughton-Morrison Section of the South Huron Trail in Exeter.

The annual golf tournament, held in the memory of local conservationist Gordon Strang, has raised

\$18,900 to date for the beautiful trail. There were 27 teams take part in the event held at Ironwood Golf Tournament. The Fifth Annual, and final, tournament takes place on Monday, June 7, 2010. For information on the tournament visit **www.** gordstranggolf.com

Thinning of six conifer stands implements recommendation

By Ian Jean, ABCA Forestry and Land Stewardship Specialist

Forest Management on ABCA Lands

he focus of forest management, in 2009, was on thinning of conifer plantations in Hay Swamp.

Thinning of conifer plantations is employed to improve growth in residual trees and hardwood regeneration in order to prevent stagnation in the planted conifers



lan Jean

and accelerate the conversion to native forest.

Conifer stands at five properties were inventoried and silvicultural prescriptions recommended thinning for six stands on four of the properties. For all tracts this was the second thinning operation, with the first row thinning completed in the late 1990s. A total of 80 acres was mechanically thinned beginning July 27 to September 11. Ontario Thinning Specialists was the thinning contractor.

The Ausable Bayfield Conservation Authority received \$15 per cord for pine and spruce sawlogs less than 20 feet in length and \$20 for sawlogs greater than 20 feet in length. A total of 600 cords at less than 20 feet and 54 cords greater than 20 feet were removed. Total revenue for the operation was \$10,080.

Emerald Ash Borer

The Canadian Food Inspection Agency (CFIA) made two announcements affecting the movement of ash in the watershed. A ministerial order regulating the movement of ash material and firewood of all species came into effect for Huron County on July 10, 2009. This followed the discovery of the emerald ash borer at sites near Bayfield in the fall of 2008. The order places restrictions on the movement of ash logs, nursery stock, and firewood of all species out of Huron County. Specific areas within the watershed where ash borer is known to occur may be regulated by strict orders preventing the movement of material off affected properties.



Conifer thinning took place in 2009 to improve growth in residual trees.

FOREST MANAGEMENT ON ABCA LANDS

Also on July 10, the CFIA repealed separate ministerial orders for Lambton, Middlesex, Elgin, Essex and Chatham-Kent and placed these areas under one ministerial order for regulation purposes. This means that ash material and firewood can move across borders within these counties but there are restrictions when moving material out of the area covered by the ministerial order. Specific areas or properties from which the borer is known may be regulated by more strict quarantine.

The Ontario Ministry of Natural Resources released mapping in the fall of 2009 with updated information on the known extent of the emerald ash borer infestation in southern Ontario. The mapping shows affected woodlots along the Ausable River Valley as the northeastern 'front' of the infestation with isolated pockets around Bayfield.

Inventory discovers presence of 19 rare, at-risk terrestrial species

By Ian Jean, ABCA Forestry and Land Stewardship Specialist

Terrestrial Species at Risk on ABCA Lands

S everal provincially and federally identified 'at-risk' species are known from the Ausable River watershed. The Ontario *Endangered Species* Act (2007) assigned broader protection for species at risk and their habitats and also provided funding for stewardship activities. As an owner of significant natural

areas, the Ausable Bayfield Conservation Authority has a responsibility to protect rare species and an opportunity to be a leader in providing examples of land management activities that conserve or restore rare habitats.

From May through August, field inventories were conducted at ABCA-owned properties in two known species-at-risk 'hot spots'; the Ausable River Valley provincial Area of Natural and Scientific Interest and at Port Franks. This was a continuation of a project initiated in September 2008.

Plant species were the primary target of the inventory work. A total of 12 ABCA properties were inventoried in the two study areas. Nineteen rare and at-risk species (three endangered, three threatened, one special concern and 11 'tracked' species) were recorded, many of which are new observations. At-risk species were found at all 12 properties inventoried.

The location, abundance, and natural community in which each species was found was recorded and is stored on an internal database at the Conservation Authority. This information will be used to inform management decisions such as:

- Re-routing existing authorized all-terrain vehicle (ATV) or hiking trails
- Prioritizing the closure of unauthorized trails
- Identifying and prioritizing areas for habitat protection or restoration
- Modification of silvicultural prescriptions to restore conditions required by species
- Locating and marking protected areas prior to



Terrestrial species – Flowering Dogwood – present in area.

timber harvest operations

• Locating skid trails, log landing sites during timber harvest

operations Funding for the work was provided by Carolinian



University of Waterloo student, and ABCA co-op student, Mark Funk inventories Goldenseal (*Hydrastis canadensis*).

Canada and University of Waterloo through their Student Internship and Student Co-op Programs respectively.

The Ontario Ministry of Natural Resources Species at Risk Stewardship Fund, the Ausable Bayfield Conservation Foundation and the Ausable Bayfield Conservation Authority also contributed to the project.



There were 19 rare and at-risk terrestrial species found in a plant inventory. Above: Flowering Dogwood (*Cornus florida*).

WATERSHED STEWARDSHIP



The Ontario Drinking Water Stewardship Program funded an additional \$839,140, in Ausable Bayfield and Maitland Valley watersheds, for voluntary stewardship by landowners near municipal wells and intakes. Partners at announcement (at left) included representatives from the Source Protection Committee, the Province of Ontario, MVCA, ABCA, OSCIA and OFA.

ABCA assists landowners with 76 projects in ten municipalities

By Kate Monk, ABCA Supervisor of Stewardship and Conservation Lands

S tewardship staff work with private landowners to implement on-the-ground projects to protect and improve groundwater and surface water quality.

Important secondary benefits of these projects include soil conservation, increased biodiversity, carbon sequestration, making the watershed more resilient to climate change and improving the longterm economic outlook of farming operations. The Ausable Bayfield Conservation Authority provided on-site technical assistance and accessed funding for 76 projects in 2009.

Federal, provincial and county governments, and foundations, financially helped citizens complete water quality improvement projects. The Canada-Ontario Environmental Farm Plan Program and associated grant programs encouraged many farmers to implement Best Management Practices (BMPs). In many cases, these grants were combined with other funding.

The ABCA thanks the following for contributing funding to stewardship projects in our watersheds:

- Clean Water Project Huron, Middlesex and Perth Counties
- Canada-Ontario Agreement Ministry of Natural Resources Clinton District and Middlesex Stewardship Committee
- Ausable River Recovery Strategy Implementation – Environment Canada Habitat Stewardship Program
- Trees Ontario Foundation
- Ontario Drinking Water Stewardship Program

Programs funded a variety of BMPs depending on specific program goals: clean water diversion, septic system upgrades, wellhead protection and

PRIVATE LAND STEWARDSHIP PROGRAM

decommissioning, watercourse livestock access restriction, erosion control measures, fragile land retirement, buffers and afforestation.

A special note must be made of the \$839,140 in funding from the Ontario Ministry of the Environment Ontario Drinking Water Stewardship Program for projects near municipal wells and intakes in the Ausable Bayfield Maitland Valley Source Protection Region. The majority of the funding was designated for large projects in North Perth but a number of septic systems were upgraded in the Ausable Bayfield watershed. This is one of the largest projects under this program in the province.

Stewardship Projects Receiving Grants through Programs Delivered by ABCA		
Municipality	Number of Projects	
Bluewater	18	
Central Huron	11	
Huron East	11	
South Huron	17	
Lucan Biddulph	6	
Adelaide Metcalfe	2	
Middlesex Centre	3	
North Middlesex	6	
Lambton Shores	1	
Warwick	0	
South Perth	0	
West Perth	1	
Total	76	
NOTE: Totals do not include funding from Environmental Farm Plan Program.		

ABCA, landowners plant tens of thousands of trees in 2009

By Ian Jean, ABCA Forestry and Land Stewardship Specialist

number of available costshare grant programs helped lower costs for landowners and sustain demand for tree planting this year.

For the spring program a total of 49,000 trees were planted by Ausable Bayfield Conservation Authority staff for 38 landowners at 40 separate planting sites. Most of these were new projects with some minor infilling of Ontario Power Generation Afforestation Program sites contributing to the overall total. Planting of large stock began on April 9 with planting of seedlings

beginning on April 14. The planting season wrapped up on May 20.

Landowners were also busy planting trees throughout the watershed. A total of 110 landowners participated in the spring tree 'pick-up' program planting a total of 12,000 trees.

Lorne Teeple posthumously named Conservationist of the Year

he Conservationist of the Year award was presented posthumously to the late Lorne Teeple, of Arkona. Lorne was "a constant advocate for the appreciation and preservation of the gift of nature," who enhanced several properties in Ausable Bayfield watersheds and donated to Arkona Lions Museum and Information Centre at Rock Glen Conservation Area. Presented in Lorne's memory was a numbered print of Patricia Pepin's painting, 'Lily Pond - Ruddy Ducks.' Also presented to the Teeple family was a Certificate of Congratulations, in honour of Lorne's memory and accomplishments, to Ursula Teeple, from Bev Shipley, Member of Parliament for Lambton-Kent-Middlesex. Fifty people attended the awards ceremony which also honoured volunteers, board directors, staff, municipalities and other partners of the ABCA.

The annual recognition evening included a Six Years of Service Award presentation to Chair Lawrence McLachlan and staff recognition awards to Judith Parker, ABCA Corporate Services Co-ordinator (20 Years); and Tracey Boitson, ABCA GIS/CAD



ABCA staff Wayne Ford and Tony Drinkwalter unload trees to fill orders from watershed landowners.

TREE PLANTING PROGRAM

In the autumn the ABCA offers balled and burlap 2' evergreen stock (cedar, spruce and pine), mainly for windbreak planting. Although much smaller in scale than the spring planting program, the fall remains a good time to plant larger stock.

ABCA staff planted five windbreak projects on private land and one wildlife enhancement project totalling 400 trees. Including pick up orders, a total of 1518 balled and burlap evergreens were distributed through the fall program

this year.

The growing season started cool and wet, delaying spring planting at several sites. A cool summer, with adequate moisture, followed – leading to good survival in this year's planting projects.



Lawrence McLachlan, Ausable Bayfield Conservation Authority Chair, presented the Conservationist of the Year Award on March 19 at Ironwood Golf Club near Exeter. The award was presented posthumously to the late Lorne Teeple, of Arkona. The Chair presented the award to Ross Teeple, Donna Teeple, Mark Teeple, Ursula Teeple, Ralph Teeple and nominator Julie Gibson. (Ross and Ursula's other sons - Carl, Glen and Larry were also honoured.)

Information Systems Specialist (Five Years).

Guest speaker Angus Norman, Wetlands Specialist with the Ontario Ministry of Natural Resources (MNR), spoke on recent research underlining the importance of wetlands.

Asset inventory conducted for tangible capital asset reporting

By Brian Horner, ABCA Financial Services Supervisor

FINANCIAL REPORT

he Ausable Bayfield Conservation Authority (ABCA) was, in 2009, required to adopt section 3150 of the *Public Sector Accounting Board Handbook*, which requires government organizations to record and amortize their capital assets on their financial statements.

This form of reporting allows the readers of the financial statements to learn more about ABCA's investments in its tangible capital assets and the changes in those investments over time.

In order to satisfy this requirement, an inventory of ABCA's assets was developed, including the exact location of each asset.

In order to tabulate the capital assets, a *Tangible Capital Asset Policy and Procedures* document was developed to prescribe the thresholds for which each asset is capitalized and each asset's life expectancy. The historic value of each asset was then determined and documented.

ABCA's auditors have reviewed both the asset inventory and the Tangible Capital Assets Policy and Procedures. The auditors agreed that the methods used to determine the tangible capital assets and the values assigned to each were fair.

In the future, an asset that meets ABCA's prescribed criteria will be capitalized on acquisition and will be amortized annually against future accounting periods

according to the policy developed for the respective asset. In 2009 the overall numbers reflect deficit а of approximately \$212,000 which

includes

\$220,000.



imately Brian Horner which amortization of

The annual amortization is an indicator of what should be placed into reserves to maintain existing capital assets based on current policy criteria. Without the change in reporting requirements a surplus of \$8,000 would have been realized. That is very good, considering these challenging economic times.







AUSABLE BAYFIELD CONSERVATION FOUNDATION



George Godbolt and Bob Gehan, of the Conservation Dinner committee, are shown with special guest John A. MacNaughton, and John's wife Gail, and feature artist Bill Nieuwland.



ABCA Conservation Education Technician Denise Iszczuk and participants at Summer Day Camp.

Foundation enables students to attend conservation programs

By Ernie Miatello, Chair, Ausable Bayfield Conservation Foundation

he work of the Ausable Bayfield Conservation Foundation (ABCF) is to raise funds or offer funds for conservation projects within the watershed.

The nine volunteer directors on the Board of Directors are committed to the conservation, preservation and protection of the unique natural landscapes of the Ausable River, Bayfield River and Parkhill Creek watersheds.

In 2009, the ABCF assisted the Ausable Bayfield Conservation Authority and watershed community groups in the following project areas:

Conservation Education

• Subsidization of \$1 for each student attending an education program offered by the ABCA

• Ongoing sponsorship of the Aquatic Species at Risk Bussing Program

• Financial contribution to the education activities at *Aquafest 2009* – an awareness event hosted by Grand Bend Community Foundation's Environment Committee

Accessible Trails and Facilities

• Partnered with the Bayfield River Valley Trail Association to receive donations towards a phased development of a trail system along the Bayfield River, between Bayfield and Clinton

• Accepted donations from the 4th annual Gord Strang Memorial Golf Tournament, in support of enhancements to the MacNaughton Morrison Trail

AUSABLE BAYFIELD CONSERVATION FOUNDATION REPORT

• Received donations for upkeep of the South Huron Trail Mobile

Protection of Wetlands and Natural Heritage

• Funding partner for the Old Ausable Channel Management Project

• Second year of a three-year grant from Ontario Trillium Foundation for \$225,000 in support of the Healthy Headwaters Wetlands Initiative. There have been fourteen wetlands constructed to date.

• Funding partner for the Port Franks Biodiversity Strategy

• Financial contribution to ABCA conservation land natural heritage and species at risk inventory

Commemorative Woods Program

• Funded construction of the new parking lot at Morrison Dam Commemorative Woods

• Co-hosted the Eighth Annual Klopp Commemorative Woods tree dedication service with J.M. McBeath Funeral Home on June 7, 2009 with 115 guests in attendance

• Co-hosted the annual Commemorative Woods dedication service with Haskett Funeral Home on September 20, 2009 with 325 guests in attendance

continued next page

Two properties donated; Conservation Dinner successes continue

By Ernie Miatello, Chair, Ausable Bayfield Conservation Foundation

continued from previous page he Ausable Bayfield Conservation Foundation (ABCF) thanks donors to programs previously mentioned and donors to the following programs:

Leave a Local Legacy

The Leave a Local Legacy campaign saw the Ausable Bayfield Conservation Authority

receive two properties through donations during 2009.

Ralph and Eleanor Smith donated 16 acres of woodlot adjacent to Bannockburn Conservation Area. Nature Conservancy of Canada – Greenlands Challenge, Ausable Bayfield Conservation Foundation, Ducks Unlimited, Fred and Reit Willert, and Mildred Creech donated towards the acquisition of the Triebner 100-acre property within the Hay Swamp Wetland Complex.

The ABCA and ABCF welcome this new direction.

Society is becoming more proactive in ensuring protection of our environmentally significant lands through the *Leave a Local Legacy* campaign.

The ABCA received Minister's Approval in 2009

for the ABCA Long Term Land Securement Plan. In the plan is a provision for a Stewardship Endowment Fund to address the ongoing costs, as a landowner, of these donated lands.

Conservation Dinner

The Foundation's major fundraising event is the annual Conservation Dinner in cooperation with the Exeter Lions Club.

The dinner in 2009 was one of the most successful ever, raising a total of \$46,415 – split between conservation projects of the Foundation and the Lions Club.

This year was the 20th event.

Foundation Board of Directors for 2009

Ernie Miatello, Ilderton – Chairman Roger Lewington, Bayfield – Vice Chairman Peter Darbishire, Exeter Ted Jones, Exeter Norman MacPherson, Arkona Dave McClure, Grand Bend Bob Norris, Staffa Teresa Ondrejicka, Exeter Bob Radtke, Ailsa Craig John Walsh, London

Bev Brown – Treasurer Judith Parker – Secretary Sharon Pavkeje – Assistant Tom Prout – Staff Advisor

The gala charitable event and art auction has raised more than \$550,000 during its history for accessible trails and other conservation.

Canoe Raffle

A raffle for a cedar-strip tandem canoe, donated by Barb Richman, of Grand Bend, and hand-built by Master Builder Skip Izon, was drawn on February 14. The winner was

Ernie Miatello

Doug Prout, Exeter. This fundraiser was a joint project with the Ailsa Craig and District Lions Club and raised \$3,500 towards community and watershed conservation projects of both organizations.

Morrison Dam Fishing Derby

In cooperation with the Exeter Lions Club, the Annual Morrison Dam Fishing Derby was held the first Saturday of May. Thanks to donations from the Lions Club and ABCF, 1,000 rainbow trout are stocked in the Morrison Dam Reservoir prior to the derby for the enjoyment of young anglers or those young at heart.



Junior Conservationist

Jessica Hoffmeyer was the 2009 Junior Conservationist, a summer position with ABCA offered to a student interested in pursuing a career in the environmental field. ABCF funds this position.



Jessica Hoffmeyer

New Director

In October, Bob Radtke from Ailsa Craig was welcomed as a new director on the ABCF, replacing Norman MacPherson from the Arkona area.



Bob Radtke



AUSABLE BAYFIELD CONSERVATION AUTHORITY ABCA, 71108 MORRISON LINE, RR 3 EXETER, ON NOM 1S5 ABCA.ON.CA ' INFO@ABCA.ON.CA ' 519-235-2610 ' 1-888-286-2610

