FISH COMMUNITY







The Old Ausable Channel is home to several Species at Risk, such as the Lake Chubsucker, Pugnose Shiner and the Grass Pickerel.
(Photos courtesy Fisheries and Oceans Canada)

Habitat and Fish Community

The Old Ausable Channel (OAC) is a warm water, pond-like ecosystem that is fed by surface runoff, precipitation and groundwater inputs. It is characterized by still, clear water and dense aquatic vegetation. Its substrate is made up of fine sand, silt and organics.

The diverse fish community is made up of nearly 50 species in total, and mainly consists of minnows and sunfishes. It contains a warm water fishery with top predators such as northern pike, largemouth bass, black crappie, smallmouth bass, yellow perch and various sunfish species.

Species at Risk Fishes

Three fish species found in the OAC have been listed as 'Species at Risk' (SAR) by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). These include the Pugnose Shiner (endangered), the Lake Chubsucker (threatened), and the Grass Pickerel (special concern).

These three SAR fishes are not known to occur elsewhere in the Ausable River watershed. The Old Ausable River Channel provides the only suitable habitat remaining for these species, consisting of heavily, vegetated, still clear waters. Therefore, the OAC has been identified as an important ecosystem in the Recovery Strategy for Species at Risk for the Ausable River.



Critical Habitat

Critical habitat is defined by Canada's Species at Risk Act (SARA) as: "... the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species' critical habitat in a recovery strategy or in an action plan for the species."

The habitat may be an identified breeding site, nursery area or feeding ground. For Species at Risk, these habitats are of crucial importance, and must be identified for their protection. Fisheries and Oceans Canada and the Ausable Bayfield Conservation Authority are currently working together with the Ausable River Recovery Team to identify critical habitat for the Lake Chubsucker and Pugnose Shiner within the OAC to ensure these unique habitats receive protection under SARA.

Efforts to protect and enhance the habitat for these species in the OAC are being pursued to ensure the continued survival of these important populations.



The common Creek Chub minnow is present in the Old Ausable River Channel ecosystem.



FISH COMMUNITY



One of the most common species in the Old Ausable Channel is the Longear Sunfish.



Another common species in the Old Ausable River Channel is the Pumpkinseed Sunfish.

What is affecting the fish community?

Sedimentation and Contamination

Sediment input sources (due to lack of riparian vegetation, construction) and potential contamination (septic, lawn fertilizers, road salt) may impact the aquatic community and be especially detrimental to sensitive Species at Risk (SAR) fishes and common species as well.

What can you do to help?

- 1. Don't mow your lawn right down to the bank. Leaving a naturally-vegetated border along the waterway can help prevent harmful contamination getting into the Old Ausable River Channel by acting as a buffer. This can also prevent erosion, as the vegetation helps to keep the bank intact, which in turn will keep the water clearer. A minimum of a five-metre buffer is suggested however keeping your entire lot in a natural state is very beneficial to the ecosystem as a whole, in terms of providing good habitat for lots of living things including birds, butterflies and the forest community.
- 2. Cut down on winter use of road salt on your neighborhood roads and driveways.
- 3. Make sure your septic system is the appropriate size for your needs and is in good repair.

- 4. Find alternatives to lawn fertilizers and other chemicals. For example, clippings left on your lawn act as nutrients reducing the need for chemical fertilizers by one third (Friends of the Bayfield River). For more information on this subject visit http://fobr.huronstewardship.on.ca.
- 5. Don't throw your leaf litter or any other garbage into the Old Ausable Channel (OAC). Decomposing leaf litter deprives the waters of the OAC of oxygen, which is required by fish and other organisms to breathe. The litter accumulates over time, filling the river channel up with organic matter and also covering up the river bed surface which fishes may be using for spawning purposes.



The Bluntnose minnow is a common native fish species in the OAC.



HON-NATIVE FISH





Non-native fish species threaten to displace native aquatic species in the Old Ausable Channel. These species include Goldfish and Koi. Residents can prevent the proliferation of these species by not releasing them into the OAC.

(Photo of Goldfish courtesy Fisheries and Oceans Canada)

Non-native Fish Species

Baitfish

There is potential for non-native species to be released into the OAC. The use of baitfish is currently banned in Pinery Provinical Park, however this ban should be extended into the northern portion of the channel outside of the park.

Anglers using the OAC that dump their baitfish could be releasing undesirable species. This could be detrimental to the existing fish community, specifically the pugnose shiner and lake chubsucker. Released baitfish which are not native to the OAC could out-compete the native minnows for food and habitat, if they became established. Anglers should be familiar with, and observe all fishing regulations.

Please check the "Recreational Fishing Regulations Summary" for fishing regulations in the OAC at http://www.mnr.gov.on.ca/MNR/fishing/ or pick up this booklet most anywhere a fishing license can be purchased.

Release of Pet Fish

Studies and personal sightings indicate evidence of people releasing exotics, like goldfish and koi into the OAC's unique ecosystem. The release of such pet fish is harmful to the existing natural community as they may displace native species and cause habitat disruptions.

Koi

These ornamental fish are directly related to the common carp. Koi are selectively-bred carp from a natural anomaly first discovered and developed in Japan. Koi typically eat nearly anything, and they like to eat a lot of it – they can consume up to two per cent of their body weight per day. Koi can live to be 30 years old and they can reach lengths in excess of one metre and weigh up to 12 kg.

Goldfish

Releasing your goldfish into nature is not a good idea, as they are not a native species and they upset the natural balance. Goldfish are bottom feeders, so they stir up bottom sediments and can turn clear waters cloudy. Goldfish, much like Koi, can cause habitat disruptions that impact native species, and can introduce new diseases.

We would like to thank our funding partners:

Grand Bend Community Foundation Government of Canada Habitat Stewardship Program Ausable Bayfield Conservation Foundation Ausable Bayfield Conservation Authority

... and our other generous community partners ...



INVASIVE SPECIES





Several invasive species such as the Round Goby and the Common Carp threaten the Old Ausable River Channel.

(Courtesy Fisheries and Oceans Canada)

Non-Native Invaders

Round Goby

This invasive, non-native fish is illegal to use as bait. It has not yet been captured in the Old Ausable Channel (OAC) during recent surveys. However, this species could enter the OAC from Lake Huron or the Ausable River (where it is now present) to the areas downstream of the Pinery Dam.

Care must be taken to ensure that the Round Goby is not introduced into the OAC upstream of the dam, as bait or by any other means.

The Round Goby is an aggressive fish that can spawn several times each season. These characteristics, combined with its abundance and relatively large size, mean that the Round Goby has impacted native fish species in some waters by causing their decline through competition for food and habitat. Round Gobies have also been observed feeding on the eggs and fry of sportfish, and may impact on these populations.

Common Carp

Common carp, which currently occur in the Old Ausable River Channel in relatively low numbers, are known to uproot aquatic vegetation, stir up bottom sediments and destroy habitat. This could be a problem for OAC fish habitat and specifically Species at Risk (SAR) fishes that are quite sensitive to turbidity and also require dense aquatic vegetation.

The feasibility of controlling carp numbers in the OAC is being investigated.

What can you do?

- 1. Don't move or release exotic or non-native fishes of any kind into natural water bodies where they don't belong. This is detrimental to the natural ecosystem.
- 2. Donate exotic fishes to a school or pet store, or contact the Invading Species Hotline at 1-800-563-7711 to find a home for unwanted exotic fishes.
- 3. Don't release baitfish into the OAC or anywhere else buy only what you need and return unwanted baitfish to the place of purchase.

Sources of More Information

Canadian Association of Aquarium Clubs - Fish Rescue,
 Being a Responsible Pet Owner – Information & Alternatives
 to not releasing your pet fish into natural spaces

http://www.caoac.on.ca

- Invasive Species Information & Identification
 http://www.invadingspecies.ca
- Species at Risk Information & Identification http://www.cosewic.gc.ca
- Department of Fisheries and Oceans Canada Fact Sheet "The Species at Risk Act and Critical Habitat for Aquatic Species'
 - ABCA & Partners 'Fish Species found in the OAC'
- Contact the ABCA Kari Killins, Aquatic Biologist (kkillins@abca.on.ca) or call 519-235-2610 or toll-free 1-888-286-2610

For more information please contact:

Ausable Bayfield Conservation Authority

71108 Morrison Line, RR 3 Exeter, ON N0M 1S5 519-235-2610, 1-888-286-2610

www.abca.on.ca info@abca.on.ca www.oldausablechannel.ca

Plan coordinator: Kari Killins, kkillins@abca.on.ca

