



Recreational Fishing on the Trent-Severn Waterway

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Outline

- Ontario Federation of Anglers and Hunters (O.F.A.H.)
- Economic Importance of Recreational Fishing in Ontario
- Importance of the Trent-Severn Waterway (TSW) for Recreational Fishing Opportunities
- Protecting and Enhancing Fisheries on TSW Waters



O.F.A.H.

- Ontario's oldest and largest conservation organization
- Established in 1928
- Represent 81,000 members and 650 local conservation clubs
- Promote hunting and fishing as important heritage activities as well as conduct conservation projects
 - Wild Turkey and Elk Re-introduction
 - Lake Ontario Atlantic Salmon Restoration
 - Invading Species Awareness Program
 - Community Stream Steward Program

The Ontario Federation of Anglers and Hunters (O.F.A.H.) was formed in 1928 and is Ontario's oldest and largest conservation organization. We are a membership-based conservation organization with over 81,000 dues-paying members. Across the province we have 650 affiliated clubs. At the heart of all of our organizations activities is the objective of conserving fish and wildlife populations. We have been lead partners in two very successful reintroductions of wildlife species that had become extinct in Ontario, the wild turkey and the elk. We are currently coordinating a major multi-partner project to restore native Atlantic salmon to Lake Ontario, after they have been extinct for nearly a century.



Ontario's Recreational Fishery

- In 2005, there were 1.4 million anglers in Ontario
 - 919,000 resident
 - 475,000 non-resident (outside Canada)
- In 2001, anglers contributed \$38.9 million in license revenues

**Figures quoted from the 2000 and 2005 Survey of Recreational Fishing in Canada, Oceans and Fisheries Canada*

Based on statistics from the 2005 Survey of Recreational Fishing in Canada produced by DFO, there were 1.4 million anglers in Ontario in 2005. This is three times the number of registered hockey participants in Canada. Of these 65% were Ontario residents and 34% were non-residents from outside of Canada. License fees alone contributed \$38.9 million to Provincial revenues. Walleye are the most popular species to the recreational fishery.



Economic Impact

- **\$1.03 BILLION** in direct expenditures
 - Transportation, lodging, fishing supplies...
- Another **\$1.45 BILLION** in expenditures either wholly or partly attributable to recreational fishing
 - Boating & camping equipment, special vehicles...
- **\$2.48 BILLION Industry in Ontario**
 - Approx. equivalent to the entire hotel/motel industry in Ontario
- Recreational fish supports over 39,000 jobs annually

Recreational angling is an important economic resource. There are over \$1.3 billion in direct expenditures related to angling in the Province of Ontario. Direct expenditures are purchases incurred during the fishing trip such as travel cost, boat gas and lodging. In addition to direct expenditures, it is estimated that an additional \$1.45 billion in purchases related to fishing such as boats and motors or partial cost such as the necessity for 4x4 in a vehicle as a result of angling needs. The expenditures related to angling are approximately equivalent to the entire revenue generated by Ontario's hotel and motel industry. It has been suggested that angling in Ontario directly supports over 39,000 jobs annually.



Local Economic Impacts

- Rice Lake is the 4th most popular fishing destination in Ontario by U.S. anglers, providing a major tourism resource
- The economic value of Rice's Lake's fishery has been valued at over \$50 million.
- Lake Simcoe is the most popular ice fishing destination in Ontario with 200,000 fishing days, roughly 2000 anglers per day
- Lake Simcoe's fishery is estimated to be worth at least \$200 million

These fisheries have a direct impact on local economies. Rice lake is one of the most popular Ontario angling destinations for U.S. anglers. Lake Simcoe also provides the most winter fishing opportunities in the Province. It is the most popular ice fishing destination in the Province with over 200,000 angler days on an average winter, roughly 2000 anglers per day. Comprehensive data, both economic and on angler numbers, is not available to precisely determine the economic benefits of these fisheries but coarse estimations have been made suggesting that the Rice Lake fishery is worth at least \$50 million and Lake Simcoe worth over \$200 million. These two fisheries represent approximately a quarter of all angling generated revenue in the province.



Fisheries Concerns, Examples and Recommendations



MNR Stewardship Rangers
improving spawning habitat
at Lock 19 in Peterborough

The system is very diverse in the angling opportunities present. The system can roughly be categorized in to four distinct fisheries, Severn, Lake Simcoe, Kawartha's and Haliburton. Each of these fisheries is faced with different challenges but there are common threads directly associated with the operation of the TSW. I have attempted to provide a few brief concerns on the most significant species along with some examples of ways resource managers and TSW have attempted to address them. In closing I have provided some general observations on the problems and ways that cooperatively we can work together to maintain these important fisheries.



Species of Special Interest

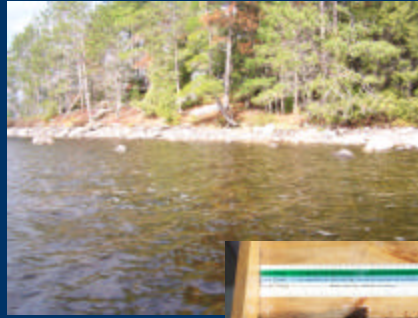
Species	Importance	Concern
Muskellunge	<ul style="list-style-type: none"> -Ontario has the majority of the world's muskellunge waters -Trent-Severn System has a large proportion of Ontario's muskellunge waters 	<ul style="list-style-type: none"> -Canal system is a vector for movement of northern pike -Pike and muskellunge incompatible in small waterbodies -Muskellunge eventually displaced by pike
Lake Trout	<ul style="list-style-type: none"> -Ontario home to significant proportion of global lake trout population -Haliburton home to two special strains of "glacial relics": Haliburton Gold and Kingscote Silvers 	<ul style="list-style-type: none"> -Draw down of headwater lakes in October negatively impacts spawning success (eggs left high and dry)
Walleye	<ul style="list-style-type: none"> -Important recreational species -Declining populations throughout TSW 	<ul style="list-style-type: none"> -Flow conditions during spawning time may prevent access to prime spawning areas -Eventual decline in population

Muskellunge and lake trout aside from being recreationally important there is also concern for the intrinsic value of the species. For both species, Ontario has a significant proportion of the worlds waterbodies these fish reside in and thus there is a responsibility to ensure the sustainability of these populations. Walleye are the most important recreational species nationally and provincially. Throughout Southern Ontario, angling pressure and invasive species among other contributing factors have put stress on fish populations where additional restrictions are now necessary to maintain these important recreational opportunities. TSW and in particular the Kawartha lakes are among the most important walleye fisheries in Southern Ontario. Cooperation with TSW is necessary to manage water levels during spawning periods to ensure the sustainability of these populations.



Haliburton Lake Trout

- Haliburton Lake Trout Enhancement Project is a partner driven project
- One objective is on monitoring spawning activity and determining critical spawning periods and locations
- Concerns that fall water levels hindering successful reproduction
- Waterlevel concerns can only be addressed if biological data is available



The lake trout range within the TSW are confined to the reservoir lakes in the upper reaches, particular in Haliburton. These lakes receive the most draw down of any lakes within the system. Concerns over declining lake trout populations and the discovery of two unique strains of lake trout in the Haliburton area prompted the creation of the Haliburton Lake Trout Enhancement Project in 1997. MNR, OFAH and the Haliburton Highlands Outdoor Association are working together to preserve and enhance the Haliburton Gold and Kingscote Silver strains of lake trout. These 'glacial relics' are a small bodied, planktivorous strain of lake trout are only found in the Haliburton waters. One of the major concerns as a barrier to restoration is low water levels in the fall when lake trout are attempting to spawn. Low levels prior to spawning limit the amount of quality habitat available as much of the quality spawning substrate is exposed and of even greater concern is when water levels drop post-spawn and leaving fertilized eggs exposed, resulting in a complete year-class failure.



Lock 19 Walleye Spawning



- O.F.A.H., MNR and TSW partnership
- Most significant spawning area for Rice Lake walleye
- Identification of key spawning areas and times
- Recommendations for flow management
- Habitat mitigation for drought years

Alterations to the walleye spawning areas below Lock 19 were made in the 1980's. There has been a noticeable decline in the population since the spawning surveys were conducted in 1986 and 1987. Since 2004, OFAH, MNR and TSW staff have been working together to compile data on peak spawning times and critical spawning areas. A series of recommendations of how to best manage flows during these times was developed. Recommendations regarding which gates to utilize during peak flow have been adopted. Some habitat alterations were also done to mitigate some concerns in extreme low water conditions. Minor adjustments to operating procedures have shown to improve spawning success. These adjustments do not alter the amount of water being put down the system rather, how the water is distributed between the gates.



Concerns

- Primary concerns to the fisheries is water management during spawning periods
- Loss of fine scale operation that historically would have mitigated fisheries concerns
- Concerns often dealt with on a case by case basis at a very local scale
- There has been inconsistent communication between TSW and MNR on fisheries issues on the system
- Recently, communications have improved and a better understanding of the biological needs and operating constraints are being discussed

The primary concern for fisheries on the TSW is waterlevels and flows during the spawning seasons (lake trout in the fall, walleye in the spring). Critical areas need to be identified and appropriate water management concerns addressed at these sites. In the past, individual lock masters managed flows with awareness of biological concerns and had the experience to recognize spawning periods and how to best adjust flow conditions to meet the needs of the fish. The ability to manage on a fine scale is lost as staff retire or as more dams are automated. TSW staff and MNR need to work more closely together to develop management strategies to address the biological concerns. Some site specific concerns have been addressed and there has recently been improved communication with TSW and MNR District staff. In some instances the onus must be put on MNR to identify critical spawning areas and times in order to provide adequate recommendations to TSW staff.



Thank You

Thank you to the Trent-Severn Panel for the opportunity to present today

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