Inland Fisheries Hatchery Stocking Programs

The Province has administered a hatchery program since 1982, when a federal-provincial agreement delegated responsibility for the production and distribution of trout in Nova Scotia. Stocking initiatives are probably the most visible and popular of Inland Fisheries' management activities.

Approximately 200 lakes are stocked each spring as part of our urban stocking program. Nova Scotia's most popular salmonids, Brook trout and Rainbow trout are made available for this program. Trout are generally catchable size and in addition to providing angling opportunity may reduce pressure on more vulnerable wild stocks. More than 45 derbies receive trout from our Fraser's Mills and McGowan Lake hatcheries. These social events are cherished by many organizers and communities as a means of introducing youngsters to the enjoyment and comradery that angling can provide. An additional 200 lakes are stocked in the fall, usually after the angling season closes as part of our fall enhancement program. Brook trout account

for most of this effort but Brown trout and Landlocked salmon populations are also enhanced at this time of year. In recent years the hatcheries have been able to provide additional Rainbow trout to sites with winter seasons as the Department continues to expand winter angling opportunities.

Some of the Provinces more popular stocked lakes are:

RFA-1 #20 Dam Pond (Cape Breton Co.), McIntyre Lake (Inverness Co.) RFA-2 Cameron Lake (Antigonish Co.), Gairloch Lake (Pictou Co.), RFA-3 Albro Lake (Halifax Co.), Sucker Lake (Lunenburg Co.) RFA-4 Everitts Lake (Digby Co.), Christopher Lakes (Queens Co.) RFA-5 Silver Lake (Kings Co.) Meadow Pond (Hants Co.), RFA-6 Angevine Lake (Cumberland Co.), Little Dyke Lake (Colchester Co.).

For a complete list of lakes stocked in Nova Scotia visit our web site at: http://www.gov.ns.ca/nsaf/sportfishing







Fraser's Mills Hatchery

Built in 1928 as part of the Government of Canada's hatchery system, Fraser's Mills has essentially been rebuilt since the Province of Nova Scotia assumed responsibility for its operation. The site has outdoor raceways and circular ponds as well as a hatchery building and broodstock development facility. Four species of salmonids are reared at this hatchery; Speckled (Brook) trout, Brown trout, Rainbow trout and Landlocked salmon. It is the only trout broodstock (adult parent fish) facility in the province, with several thousand broodstock maintained on this site. This hatchery distributes approximately 500,000 - 700,000 fish annually.



McGowan Lake Hatchery

The McGowan Lake Hatchery, built in 1987, has helped to ensure the future of trout fishing in western Nova Scotia, a region with many acid-stressed lakes and streams. This hatchery utilizes a unique water treatment facility and an oxygen generation and injection system to rear 1 million speckled trout which are released annually as fry, fall fingerlings and yearlings.

Both hatcheries have visitor interpretation centres which provide an opportunity to learn more about the hatchery and other aspects of recreational angling in Nova Scotia. Visitors can view photographs, posters, artifacts and displays on a variety of subjects.

You may contact our hatcheries at the addresses below or visit our website at http://www.gov.ns.ca/nsaf/sportfishing

Fraser's Mills Fish Hatchery RR #3, St. Andrews, Antigonish County, NS B0H 1X0 (902) 783-2926 McGowan Lake Fish Hatchery Box 141, Caledonia, Queens County, NS B0T 1B0 (902) 682-2576

Inland Fisheries Division Activities Nova Scotia Department of Agriculture and Fisheries

Some of the major field projects



Janet Sanford, summer student, samples brook trout on Fourth Lake, TGWA

Tangier Grand Wilderness Area & Wooden's River Trout Study

Preliminary data collected on four trout populations comprising two study lakes in TGWA & two study lakes in Wooden's River watershed indicates:

- trout population density and trout production is low in many mainland lakes
- trout production is greater in lakes with few competitors
- lakes with low trout populations could be sensitive to the impacts of angling

Sea-run brook trout assessment study

Initial data collected on three sea-run brook trout populations (River Denys, Coldbrook and Lake O'Law Brook) through a mark and recapture method suggests:

- sea-run brook trout grow fast compared to resident freshwater populations
- population estimates were determined for all three brook trout systems
- approximately 5% or 166 trout of the 3,270 trout measured were longer than 30 cm (12"), and most larger trout were 3 and 4 years old

Electrofishing Project

Electrofishing was conducted on 100 of the 312 stream sites that were previously assessed through the temperature monitoring project indicating:

- There were 35 cool water sites (<16.5°C), 29 intermediate (16.4-19°C) and 36 warm (19°C)
- The highest brook trout densities were in the cool water sites
- Brook trout population density was strongly related to water temperature



A fisheries technician sets a fyke net in River Denys to assess sea-run speckled trout

Paleolimnology Project

This project studies a lake's history using information archived in lake sediments.

- This cooperative initiative with Queen's University is designed to investigate water quality in Nova Scotia using biological indicator species (diatoms and chironomids).
- This research method allows us to see what long-term (150 years) changes have occurred in trout habitat in each lake.
- Approximately 65 lakes have been sampled using this technique throughout Nova Scotia.



Researcher core samples lake sediments

Smallmouth Bass Projects

Current smallmouth bass research focuses on monitoring this species current distribution in the province, collecting data to assess special management regulations through tournament monitoring, and spawning and juvenile assessment.



Nova Scotia smallmouth bass

Ongoing projects will include:

- monitor the illegal introduction of smallmouth bass into Lake Ainslie, Inverness County where bass continue to be present in low numbers but have not yet become established
- conduct a nesting project to determine if year class strength is influenced by spawning success, habitat or the presence of competitive species such as chain pickerel.

Nova Scotia Salmon Association Acid Rain Mitigation Project

The Acid Rain Mitigation Committee initiated a ten year pilot liming project on the West River Sheet Harbour. Inland Fisheries conduct annual assessment activities which consist of monitoring fish and invertebrate populations, water chemistry, flow rates, and temperature

Sportfish Extension

Nova Scotia's Annual Sportfishing Weekend Fish Friends Sportfish Habitat Fund Projects Nova Scotia Sportfish RegistryBOW (Becoming an Outdoors Woman) Program Barrier-Free Access River Watch Kids Camps/School Presentations



Young angler enjoying Nova Scotia Sportfishing Weekend

For further information on our research projects or to view a written report, visit our website:

http://www.gov.ns.ca/nsaf/sportfishing

We would like to thank all the volunteers who were involved in the research projects conducted by our staff and hope that their valuable support continues in the future.

General Regulations

GUIDES

Non-residents do not need a guide to fish in Nova Scotia. For a list of guides, visit our website: www.gov.ns.ca/nsaf/sportfishing

FISHING METHODS AND EQUIPMENT

No one is allowed to:

- possess fish that were caught by any person while fishing for recreational purposes or sport purposes and that have been skinned, cut, packed or otherwise dealt with in such a manner that (1) the species cannot be readily determined; (b) the number of fish cannot be readily determined; (c) where weight is used to determine catch limits, the weight of the fish cannot be readily determined; and (d) where size limits are applicable, the size of the fish cannot be readily determined.
- use an artificial light or flame of any kind (including light emitting lures), for fishing in non-tidal waters, or while fishing for salmon in tidal waters
- use a set-line or trawl for fishing in non-tidal waters
- fish in non-tidal waters by jigging, snaring, spearing, or using a bow and arrow, or assist in landing any fish caught by such means

- use dynamite or any other explosive for fishing or destroying fish, or use anything that might cause unnecessary destruction of fish
- use a gaff of any kind to land a sportfish caught by angling
- angle for Atlantic salmon except with artificial fly
- angle in non-tidal waters with more than 1 fishing line or with a fishing line having more than 3 separate hooks
- angle in tidal waters for sportfish with more than 1 fishing line or with a fishing line to which more than 3 hooks are attached
- angle in tidal waters for non-sportfish with more than 5 fishing lines or with a fishing line to which more than 6 hooks are attached
- keep any sportfish if it is hooked in any part of the body other than the mouth. The fish shall immediately be returned alive to the water from which it was taken
- angle in non-tidal waters unless an open season for sportfish is in effect in those waters
- angle for sportfish during that part of the day beginning 2 hours after sunset and ending 2 hours before sunrise. This does not apply when angling for smallmouth bass or brown trout during any of the





Is Sustainable Forest Management Important to You?



The Sustainable Forestry Initiative (SFI) Program is a bold approach to forest management in Nova Scotia. Part of the program is implementing the (SFI) Certification Program, which enshrines strict and comprehensive requirements for forestry management that include:

- > Broadening of sustainable forestry
- Ensuring increased forest productivity
- Protecting water quality
- > Enhancing wildlife habitat and biodiversity
- > Minimizing visual impact of harvesting
- Protecting special sites
- > Landowner outreach and public education

Program participants volunteer to comply with these standards when managing their woodlands.

This is where you come in. If you have any concerns regarding harvesting practices that are inconsistent with sustainable forest management please call us toll-free at:

1-800-631-3657

A program member will investigate your concerns.

night fishing seasons listed for each Recreational Fishing Area

- fish with an artificial fly that has more than 2 hooks
- fish for, kill, or retain any spent or slink salmon or salmon fry, parr, or smolt (see drawings page 62)
- fish in any watercourse while swimming or skin diving
- fish within 23 m (26 yds) downstream of any fish ladder.

TRESPASSING

As a resident of the province you have the right to go on foot along the banks of any

river, stream or lake and upon and across any uncultivated lands and Crown lands to lawfully fish with rod and line in these rivers, streams or lakes; you also have the right to use a boat or canoe on or across any river, stream or lake. (*The Angling Act*)

SPECIAL NOTES

No one is allowed to fish within the posted boundaries of a licensed aquaculture site or a privately owned fish pond without permission of the owner. Angling is not permitted in many municipal watersheds or water supply areas. Please check with your local municipal authority before venturing into these areas.





MISCELLANEOUS

- Any fish taken by recreational fishing is for domestic use only and may not be sold or bartered.
- No person who is fishing for personal use or fishing for recreational or sport purposes may waste any fish that is suitable for human consumption.

ENFORCEMENT AND MANAGEMENT

The management of sea going (anadromous) Atlantic salmon, striped bass, eel, shad, sturgeon, gaspereau, and smelt (in both tidal and non-tidal waters) is the responsibility of the Department of Fisheries and Oceans. The Nova Scotia Department of Agriculture and Fisheries manages all other freshwater fish species. Enforcement of sportfishing and salmon fishing regulations falls under the jurisdiction of the Department of Fisheries and Oceans and the Nova Scotia Department of Natural Resources (*see page 26*).

