# Aquastats

# **Ontario Aquacultural Production in 2007**

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### **INDUSTRY SNAPSHOT 2007**

**Major Species Produced** 

- rainbow trout

**Minor Species Produced** 

- tilapia, Arctic charr, brook trout, smallmouth and largemouth bass,

cyprinid baitfish

**Total Trout Production** Farm-gate Value of Trout **Economic Contribution** 

- 3,950 tonnes - \$15.8 million - \$55 - 60 million

Job Creation

- 180 person-years direct and 200 person-years indirect employment

Projected Production of Trout - approximately 4,000 tonnes in 2008

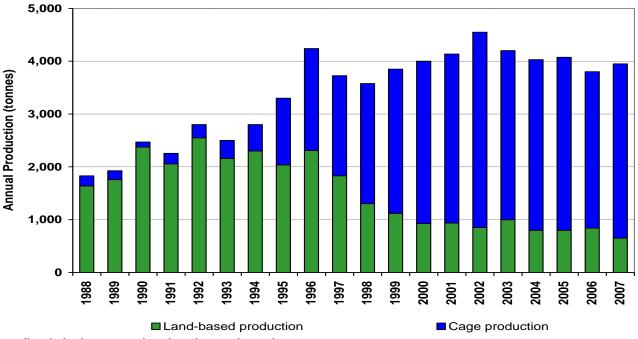
## Overview

In 2007, we estimate that Ontario fish farms produced 3,950 tonnes (8.71 million pounds) of rainbow trout, primarily for human consumption. This is a 4% increase from the 3,800 tonnes produced in 2006. Lake-based cage production of trout in the Georgian Bay area continues to dominate other land-based production systems, accounting for 84 % of the total production (Figure 1). Arctic charr production is very limited and production has remained at nominal levels for several years now. Similarly, tilapia production has not increased. Our records suggest that the combined production was approximately 50 tonnes in 2007. The production of brook trout and bass is primarily geared towards pond stocking and recreational purposes. These operations provide an important diversity to the industry although quantifiable information is scarce. Our records suggest that more than 60 facilities culture brook trout, bass and other species, with a total production of approximately 25 tonnes annually.

The total farm-gate value of the 3,950 tonnes of rainbow trout produced is estimated to be \$15.76 million, with an average price of \$1.81/lb (\$4.00/kg). The sale of tilapia, charr, bass and other fish species is estimated to be an additional \$0.75 million in 2007. More than 60 facilities are involved with pond stocking, typically rainbow trout, brook trout and bass. The value of this aquaculture sector is conservatively estimated to be \$1.5 million

In 2007, the Ontario aquaculture industry is estimated to have generated a total of 180 personyears of direct, on-farm employment. This consisted of 120 person-years of full-time employment (40 hours per week for 12 months) and 60 person years of part-time employment. Indirect employment is conservatively estimated at 200 person-years.

The total annual contribution that aquaculture makes to the Ontario economy is estimated to be \$55 - 60 million, with additional economic value



realised via the recreational and aquaria trade.

Figure 1. Comparison of Ontario land-based and cage aquaculture production between 1988 and 2007.

### **Situation Outlook**

Ontario's aquaculture industry continues to face constraints to its potential growth. The major issue remains the difficulty for cage operators to obtain an Aquaculture Licence. This issue has been many years in the making, and an optimistic view would hold that progress has been made via the "Coordinated Application, Review and Decision Guidelines for Cage Aquaculture Sites in Ontario". This guideline and the accompanying "Decision Support Tool for Cage Aquaculture in Ontario" have been revised and presented for public consultation a second time. However, the complete implementation of the proposed guidelines has been stalled because of concerns from the Ministry of the Environment and the Georgian Bay Association over potential sediment impacts from fish farming. Efforts to address these concerns include a collaborative project involving the Department of Fisheries and Oceans and the Northern Ontario Aquaculture Association studying the impact of cage farming on a small lake ecosystem. Four years of fish culture and the associated monitoring are almost complete and the results will provide valuable scientific input into resolving the concerns of sediment impact from fish farming.

The provision of a secure and suitable source

of rainbow trout eggs for current production and potential expansion has been raised by both industry and regulators. Currently, the Ontario aquaculture industry is heavily dependent upon eggs imported from the US west coast as local hatcheries are unable to provide sufficient supply. This issue is also a national concern, with growing production Saskatchewan trout in Newfoundland. workshop developing "Selection and Breeding Program for rainbow Trout in Canada" was held in February 2009 at which a group of Canadian trout industry stakeholders and several experts in developing national breeding programs discussed the major challenges. Additionally, a major Ontario hatchery has begun a significant expansion of egg production capacity in an effort to reduce the reliance on imported eggs.

Increases in feed ingredient costs have affected both feed manufactures and producers as both groups attempt to improve efficiencies. Ongoing research efforts continue to evaluate the economics of alternative feed ingredients, e.g. substitution of fish oil with vegetable oils, to manage cost and permit sustainable feed supplies.

Ontario's aquaculture remains on standby for yet another year.

Earlier factsheets: http://www.aps.uoguelph.ca/aquacentre/aec/publications

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