

Ontario Aquacultural Production in 2002

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#### **INDUSTRY SNAPSHOT 2002**

Major Species Produced - rainbow trout

Minor Species Produced - tilapia, Arctic charr, brook trout, smallmouth and largemouth bass,

cyprinid baitfish

**Total Trout Production** - 4,550 tonnes **Farm-gate Value of Trout** - \$18.2 million **Economic Contribution** - \$60 - 65 million

**Job Creation** - 240 person-years direct and 250 person-years indirect employment

**Projected Production of Trout** - 5,000 – 5,250 tonnes in the year 2003

#### **SUMMARY**

In 2002, the Ontario aquaculture industry produced approximately 4,550 tonnes (10.03 million pounds) of rainbow trout for human consumption, with a farm-gate value of \$18.2 million. Limited quantities of tilapia and Arctic charr were also produced (approximately 180 tonnes) and other species including brook trout, bass and other fish (approximately 25 tonnes). The industry generated approximately 240 person-years of direct employment plus another 250 person-years of indirect employment. The total economic contribution of the industry to Ontario's private sector is estimated at \$60 to \$65 million. Our predictions are that annual production of rainbow trout will be 5,000 tonnes in 2003. Tilapia and Arctic charr production are expected to remain at current levels of approximately 200 tonnes to 300 tonnes next year.

This factsheet summarises data collected through ongoing annual surveys of aquaculture production conducted since 1988<sup>1</sup>. We present data to quantify the production output, economic and employment value of the food-fish sector of the Ontario aquaculture industry. Other important sectors of Ontario's aquaculture industry (e.g. pond stocking, fee-fishing, baitfish farming and the aquaria trade) are not specifically included in our survey.

A total of 189 private-sector fish production facilities were identified from in-house records and surveyed between December 2002 and May 2003. Sixty facilities responded to the questionnaire (31%), although not all were complete. Responses to these surveys were combined with past survey information and information from farm owners and service providers to establish the estimates reported.

#### ANNUAL PRODUCTION

In 2002, we estimate that Ontario fish farms produced 4,550 tonnes (10.03 million pounds) of rainbow trout, primarily for human consumption. This is a 10% increase over the 4,135 tonnes produced in 2001 (Figure 1). Reported production accounted for 3,124 tonnes (69 %). Lake-based cage production of trout in the Georgian Bay area continues to dominate other land-based production systems, accounting for 3,700 tonnes, over 80 % of the total production .

Arctic charr production is limited and production has remained at nominal levels for several years now, with only three farms having any noticeable production. Similarly, tilapia production has not increased and much of this sectors value results from the export of fingerling-sized fish.

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 and bass, however production of these species is believed to be less than 40 tonnes annually.

## **ECONOMIC VALUE**

Twenty-one farms, accounting for 1,730 tonnes (38 %) reported data on price structure. The total farm-gate value of the 4,550 tonnes of rainbow trout produced is estimated to be \$18.2 million, with an average price of \$1.82/lb (\$4.01/kg. The reported farm-gate price of trout less than one pound averaged \$2.10/lb (\$4.63/kg); 1 to 2½ lbs. trout averaged \$1.75/lb (\$3.86/kg); and trout over 2½ lbs. averaged \$1.93/lb (\$4.37./kg).

The sale of tilapia, charr, bass and other fish species is estimated to be an additional \$1.5 million in 2002.

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 annually.

The total annual contribution that aquaculture makes to the Ontario economy is estimated to be \$60 to 65 million, with additional economic value realised via the recreational and aquaria trade.

In 2002, the Ontario aquaculture industry is estimated to have generated a total of 240 person-years of direct, on-farm employment. This consisted of 165 person-years of full-time employment (40 hours per week for 12 months) and 75 person years of part-time employment. Indirect employment is conservatively estimated at 250 person-years.

#### SITUATION OUTLOOK

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# Potential topics could include:

Effects of warm water constraining growth in some cage sites Loss of cages due to ice damage Land claims issues limiting development of new sites Increase in electrical costs Good news on food safety testing Improved understanding of industry by regulatory agencies and GBA

1 Earlier factsheets are available online at: http://www.aps.uoguelph.ca/~aquacentre/aec/publications

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**Figure 1.** Ontario trout production and average farmgate price between 1998 and 2002.

