

Aquastats

2001

Ontario Aquacultural Production in 2001
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INDUSTRY SNAPSHOT 2001

Major Species Produced	- rainbow trout
Minor Species Produced	- tilapia, Arctic charr, brook trout, smallmouth and largemouth bass, cyprinid baitfish
Total Trout Production	- 4,135 tonnes
Farm-gate Value of Trout	- \$16.1 million Cdn.
Economic Contribution	- \$60 - 65 million Cdn.
Job Creation	- 220 person-years of direct and 250 person-years of indirect employment
Projected Production of Trout	- 4,500 - 4,800 tonnes in the year 2002

SUMMARY

In 2001, the Ontario aquaculture industry produced approximately 4,135 tonnes (9.11 million pounds) of rainbow trout primarily for human consumption, with a farm-gate value of \$16.1 million. Limited quantities of tilapia and Arctic charr were also produced (approximately 225 tonnes) and other species including brook trout, bass and other fish were grown primarily for pond-stocking and recreational fishing purposes (approximately 40 tonnes). The industry generated approximately 220 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 output of rainbow trout will increase to 4,500 – 4,800 tonnes in 2002. Tilapia and Arctic charr production are expected to remain at current levels of approximately 200 to 300 tonnes next year.

This factsheet summarises data collected through ongoing annual surveys of aquaculture production in Ontario conducted since 1988¹. 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, like the pond stocking, fee-fishing, baitfish farming and the aquaria trade, are not specifically included in our survey.

A total of 170 private-sector fish production facilities were identified from in-house records. Sixty-six facilities were surveyed between March and September 2002. These facilities were selected to include those believed to produce more than either 5,000 kg or \$10,000 of sales per year. Twenty-four facilities returned their questionnaires, although not all

were complete. Responses to these surveys were combined with past survey information and information from other farm owners and service providers, to help establish the estimates reported.

ANNUAL PRODUCTION

In 2001, we estimate that Ontario fish farms produced 4,135 tonnes of rainbow trout, primarily for human consumption. This is a 3.4% increase over the 4,000 tonnes produced in 2000 (Figure 1). Lake-based cage culture of trout in the Georgian Bay area continues to dominate other land-based production systems, accounting for 3,200 tonnes, nearly 80% of the total production (2,280 tonnes of trout 1-2½ lbs and 920 tonnes of trout over 2½ lbs).

Initial indications are that the 2002 growing season was favourable for several of the larger cage producers; primarily because of a mild winter and moderate summer temperatures. The production of trout is expected to increase by 500 to 700 tonnes in 2002 since several existing farms will reach their full capacity. Significant expansion by First Nations groups is a major factor in this growth.

Arctic charr production is limited to less than 20 farms and production has remained at nominal levels for several years now, with fewer than six farms having any noticeable increases in production. Similarly, tilapia production has not increased and much of this sector's value results from the export of fingerling-sized fish.

The production of brook trout and bass is primarily geared towards pond stocking and recreational fishing purposes. These operations provide an important diversity to the industry although quantifiable information on the actual size

or economic value of this sector is scarce. Our records indicate that more than 70 facilities culture brook trout and bass, however production of these species is believed to be less than 40 tonnes annually.

ECONOMIC VALUE

Eighteen farms, accounting for 2,870 tonnes (69 %) reported data on price structure. The total farm-gate value of the 4,135 tonnes of rainbow trout produced is estimated to be \$16.1 million. The reported farm-gate price of trout less than one pound averaged \$2.41/lb (\$5.31/kg); 1 to 2½ lbs. trout averaged \$1.75/lb (\$3.86/kg); and trout over 2½ lbs. averaged \$1.76/lb (\$3.88/kg).

The sale of tilapia, charr, bass and other fish species is estimated to be an additional \$1.3 – 1.8 million in 2001.

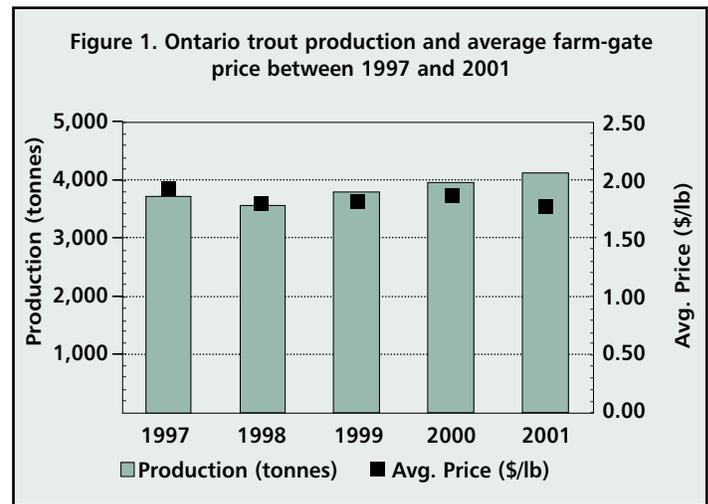
More than 60 facilities are involved with stocking ponds with fish, typically rainbow trout, brook trout and bass. The value of this aquaculture sector is conservatively estimated to be between \$1 – 1.5 million annually.

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

Finally, in 2001, the Ontario aquaculture industry generated a total of 220 person-years of direct, on-farm employment. This consisted of 160 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 forecast at 250 person-years.

SITUATION OUTLOOK

The Ontario aquaculture industry continues to maintain its position as a provider of high quality rainbow trout to the domestic market, as well as to the export sectors of North-eastern US and Canada. Although well positioned to exploit much larger market opportunities that are readily available, Ontario's farmed-fish production has remained relatively static in recent years. This has been a result of a multitude of factors. Foremost among these has been the growing negativity of the investment climate in Ontario, which impacts both new farm starts as well as farm expansions. Increasing cost and complexity of the regulatory structures which govern the industry, have significantly prolonged the permit application and licensing process for both new and existing farms. There have also been growing conflicts between the industry and various environmental and other public groups which has also slowed expansion. However,



this is a common challenge across Canada. In spite of considerable efforts on the part of the private sector and numerous inter-agency government committees dedicated to improving the efficiency of the regulatory review process, there has been little actual progress made in this area. As well, there has been the emergence of several 'new' pieces of legislation dealing with such issues as nutrient management, food safety, veterinary drug use, worker safety and environmental impact. While beneficial, they have acted in concert to severely constrain Ontario's ability to react more quickly to expanding market opportunities.

In addition, there has been much uncertainty about the future price of feed and energy, the two primary contributors to variable production costs in the trout industry. Combined with a relatively stable wholesale price structure over the last several years, the profit margin in growing trout has been under downward pressure, which obviously impacts investment.

In spite of all these challenges however, Ontario still possesses all the tools and resources to grow a significantly larger industry than currently exists – easily 2 to 3 times its present production output. Whether Ontario can realize this growth potential depends on how it weathers the current storm of challenges which it faces. We remain hopeful that Ontario will become a more significant contributor to the growing Canadian aquaculture sector, and will flourish as a sustainable agriculture business in this province.



1 Moccia, R.D. and D.J. Bevan. Aquastats-1988 (FS89-113); Aquastats-1989 (FS91-007); Aquastats-1990 (FS91-050); Aquastats-1991 (FS92-150); Aquastats-1992 (FS94-001); Aquastats-1993 (FS95-001); Aquastats-1995 (FS96-001); Aquastats-1996 (FS97-006); Aquastats-1997 (FS98-025); Aquastats-1998 (FS99-002); Aquastats-1999 (FS01-001); Aquastats-2000 (FS01-002).

All available online at:

<http://www.aps.uoguelph.ca/~aquacentre/aec/publications>

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