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AQUASTATS - 1989 Ontario Aquacultural Trout Production in 1989

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SUMMARY

In 1989, the Ontario trout industry consisted of 130 farms producing 1,925 tonnes of trout for human consumption. The total value of the industry is estimated to have exceeded \$30 million. The farm-gate value alone of this product was \$9.04 million and generated a minimum of 198 person-years of employment. The average wholesale price of trout was \$4.59 per kilogram, a decrease of 0.47¢ compared to 1988. Nevertheless, the industry expects to expand annual production to 2,440 tonnes in 1990.

INTRODUCTION

This report summarizes data collected through an on-going survey conducted by the Aquaculture Extension Centre at the University of Guelph, in consultation with federal and provincial regulatory agencies and representatives of the Ontario trout industry ⁽¹⁾. The information compliments our 1988 report "AQUASTATS -Ontario Aquacultural Trout Production in 1988 with an Historical Perspective of the Industry's Development ⁽²⁾. This report focuses on farms producing five or more tonnes per year (11,000 pounds per year) since these account for the major portion of the province's total production.

A total of 188 fish farms were identified from the Ontario Ministry of Natural Resources records as well as in-house data files. These farms consisted of 130 trout farms (including 28 farms under development), 56 fee-fishing preserves and two exclusive bait-fish farms. Several fish farms in Ontario specialize in producing eggs, fry and fingerlings. Although these farms produce only a small tonnage, their product is crucial for many farms and they provide an important contribution to the total value of the industry.

ANNUAL PRODUCTION AND FARM SIZE

In 1989, Ontario fish farms produced 1,925 tonnes (4.24 million pounds) of trout for human consumption (Figure 1). This value was determined from a mail survey conducted between November, 1989 and February, 1990 of the 130 known trout farms. Production data was reported by 69 farms (53%) accounting for 1,208 tonnes (63%). Estimates of production were made for the remaining 61 farms, accounting for 585 tonnes. After including an additional correction factor of 5 - 10% for missing data and under reporting, the total 1989 production of trout is estimated to have been 1,925 tonnes.

The total production in 1989 was 390 tonnes less than that predicted in our 1988 survey. Approximately 240 tonnes of the discrepancy resulted from smaller than predicted expansion by several farms. In part, this was due to declining fish prices in 1989, and consequently

Figure 1. Ontario Farmed-Trout Production.



holding back fish rather than sending them to market became a viable short-term strategy. (The questionnaire did not ask for information about stock-on-hand.)

Figure 2 shows the breakdown of total production by farm size. Most Ontario farms are small to mediumsized operations. Of the 61 farms producing five or more tonnes per year in 1989, 42 farms produced between 5 and 25 tonnes. Nevertheless, these farms accounted for nearly one third (587 tonnes) of the total annual production in Ontario. A further one third of production came from farms that produced between 26 and 75 tonnes in 1989. Thirty percent of the total Provincial production is grown at the three Ontario farms whose individual annual production exceeded one hundred tonnes. "Hobby" farms - those producing less than five tonnes per year - accounted for less than three percent of the total annual production, although numerically they represent 40% of the 102 production farms. In 1989, there were 28 farms under development with no current production. The impact of these farms on the industry is difficult to determine. However, judging from the survey, many of them will only produce small quantities of trout in the immediate future.

An annual production of 40 to 50 tonnes (approximately 100,000 pounds) per year is regarded as a minimum to derive a full-time family income from fish farming, assuming that the production is sold at the average wholesale price for fish in the round. Smaller unit sizes have been successful when either vertically integrated with the marketing of "value added" products (eg. fillets) or producing a special product (eg. eggs, fry and fingerlings). In addition, farm sizes of less than 40 to 50 tonnes have been successfully combined with other crops eg. tobacco, tomatoes etc. The integration of aquaculture with other forms of agriculture is important for the economic viability of many "family farms".

PRICE AND ECONOMIC VALUE

The average wholesale price of Ontario trout declined by approximately 9% from 1988 to 1989. In 1989, the average wholesale price was \$4.59 per kg (range \$3.31 - \$7.05 per kg) and the average retail price was \$6.77 per kg (range \$4.96 - \$11.02 per kg), compared to \$5.06 per kg and \$7.55 per kg in 1988, respectively. The total farm-gate value of the 1,925 tonnes produced in 1989 is estimated at \$9.04 million.

In 1989, the industry generated a total of 198 person-years of employment at the farm-gate level⁽³⁾. This consisted of 135.5 person-years of full-time employment (40 hours and over per week for 12 months of the year) and 62.2 person-years of part-time employment (all other employment schedules). The additional indirect employment by the industry is conservatively estimated at 200 person-years. This

Figure 2. Distribution of Trout Production and Number of Farms in Ontario by Farm Size.



includes persons employed in the equipment, feed, processing and marketing sectors linked to aquaculture. Ontario's annual production is projected to be 2,440 tonnes in 1990, rising to 3,630 tonnes by 1995. The average wholesale price is expected to stabilize at the pre-'89 level of approximately \$5 per kg.

CURRENT AND FUTURE CONCERNS

In 1989, Ontario continued to be the major Canadian producer of rainbow trout for human consumption. A restructuring of the North American salmon industry, especially on the west coast, pressure from US trout producers, and an over supply of fish from other regions (eg. Europe and South America) has forced down the price of Ontario trout. This price reduction has prompted the Ontario industry to look more carefully at its marketing strategies. The quantities of trout produced by some Ontario farms is sufficient to warrant independent rather than collective marketing. In response to this trend, several farms have moved into processing their own product as well as soliciting new areas of sales, or niche markets.

The medium to long-term outlook for Ontario aquaculture remains optimistic. Per capita fish consumption continues to increase, while landings from the capture fisheries remain under pressure and show indications of future decline. However, a more aggressive marketing strategy and a wider perspective on the industry by the producers and legislators would hasten the industry's development.

³⁾ The additional employment by farms producing less than 5 tonnes per year or those under development are not included due to a lack of data.



¹⁾ Department of Fisheries and Oceans, Ontario Ministry of Agriculture and Food, Ontario Ministry of the Environment, Ontario Ministry of Natural Resources, Ontario Aquaculture Research & Services Co-ordinating Committee, Ontario Trout Farmers' Association, Ontario Trout Producers Co-operative Ltd.

²⁾ Ontario Ministry of Agriculture and Food Factsheet. Order No. 89-113.