SUMMARY

In 1998, the Ontario food-aquaculture industry produced approximately 3,580 tonnes (7.89 million pounds) of rainbow trout for human consumption, with a farm-gate value of $14.2 million. Limited quantities of tilapia and Arctic charr were also produced. This sector of the aquaculture industry generated approximately 230 person-years of direct employment, plus another 250 person-years of indirect employment.

The total economic contribution of the aquaculture industry to Ontario's private sector is estimated at $50 to $60 million. Our predictions are that annual production of rainbow trout should exceed 4,000 tonnes in 1999 and reach 4,500 tonnes by the year 2000. Tilapia and Arctic charr production are expected to rise from current levels of approximately 100 tonnes, reaching over 500 tonnes in the year 2000. Most of the increase will be due to expansion in the tilapia farming sector.

INTRODUCTION

This factsheet summarizes information collected through ongoing annual surveys of aquaculture production conducted since 1988. We present data to quantify the production volumes, economic value and employment generation in the food-fish sector of the Ontario aquaculture industry. Other important components of Ontario's aquaculture industry such as the baitfish farming, pond stocking, fee-fishing and the aquaria sectors were not included in our survey, and therefore, no related data are reported here.

ANNUAL PRODUCTION

A total of 187 private-sector fish production facilities were identified from in-house records, as well as from licence lists from the Ontario Ministry of Natural Resources. These facilities were surveyed between February and August 1999. Seventy facilities returned their questionnaires, although not all were fully complete. Responses to these surveys were combined with verbal information gathered from farm owners and service providers to establish the estimates reported herein.

In 1998, Ontario fish farms produced approximately 3,580 tonnes (7.89 million pounds) of rainbow trout, primarily for the human consumption marketplace (Figure 1). This represents a 4% decline over the 3,725 tonnes produced in 1997. The cage farms in the Manitoulin-Georgian Bay region continue to dominate the industry as far as production volume is concerned, accounting for approximately 60% of the total provincial output of farmed trout. The trend in provincial production being dominated by fewer and larger facilities continues as described in our previous factsheet (Figure 2, see also Moccia and Bevan, Aquastats 1997). This trend has accounted for the majority of growth in the industry over the last five to six years. Nine facilities reported anticipated increases in production for 1999, totalling 670 tonnes. Tilapia production is expected to peak at around 500 tonnes within the next two years. Arctic charr production is growing slowly, with few farms involved, and no signs of significant increases in production in the upcoming few years.
ECONOMIC VALUE

Thirty-eight farms, accounting for 1,770 tonnes (49%) reported complete data on product and price structure. Subsequently, the total farm-gate value of the 3,580 tonnes produced in 1998 is estimated to be $14.21 million. The reported farm-gate price of whole trout weighing less than one pound averaged $2.32/lb ($5.11/kg), while fish sized 1 to 2½ lbs. averaged $1.73/lb ($3.81/kg), and trout over 2½ lbs. averaged $1.69/lb ($3.73/kg).

In 1998, the Ontario aquaculture industry is estimated to have generated a total of 230 person-years of direct, on-farm employment. This consisted of 170 person-years of full-time employment (40 hours per week for 12 months) and 60 person years of part-time employment in the primary production sector. Indirect employment is conservatively estimated at an additional 250 person-years.

In conclusion, Ontario’s aquacultural production showed a nominal growth in 1998, with minor declines in trout production being partially offset by increased tilapia and charr production. Farmed-trout production is expected to exceed 4,500 tonnes by the year 2000, with an additional 500 tonnes of domestically-produced tilapia and Arctic charr expected to be available in the marketplace. Our previous projections for provincial production were more optimistic, based largely on the anticipated development, or expansion, of a few large-capacity facilities, which did not occur within the expected timeframe.

In Part 2 of this factsheet, in preparation, we present a more complete analysis of provincial aquacultural production between 1988 and 1998, including the trends in the costs of the major contributors to production such as feed, electricity and labour. In part 2, we also present a situation outlook for Ontario’s aquaculture industry for the next ten years.

REFERENCES