ANNUAL PRODUCTION

In 2003, we estimate that Ontario fish farms produced 4,200 tonnes (9.25 million pounds) of rainbow trout, primarily for human consumption. This is a 350 tonne decrease (7.7%) from the 4,550 tonnes produced in 2002. Lake-based cage production of trout in the Georgian Bay area continues to dominate other land-based production systems, accounting for over 75% of the total production (Figure 1).

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 sector's value results from the export of fingerling-sized fish. Our records suggest that the combined production is approximately 150 tonnes annually.

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 25 tonnes annually.

ECONOMIC VALUE

The total farm-gate value of the 4,200 tonnes of rainbow trout produced is estimated to be $17.0 million, with an average price of $1.83/lb ($4.04/kg). The reported farm-gate price of trout less than one pound averaged $2.19/lb ($4.82/kg); 1 to 2½ lbs. trout averaged $1.78/lb ($3.93/kg); and trout over 2½ lbs. averaged $1.81/lb ($3.99/kg). The sale of tilapia, charr, bass and other fish species is estimated to be an additional $0.9 million in 2003.

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.

In 2003, the Ontario aquaculture industry is estimated to have generated a total of 210 person-years of direct, on-farm employment. This consisted of 130 person-years of full-time employment (40 hours per week for 12 months) and 80 person years of part-time employment. Indirect employment is conservatively estimated at 250 person-years.

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.
SITUATION OUTLOOK

Production in 2004 is not expected to exceed current levels and may even decline slightly. The main factor appears to be a lack of market sales rather than constraints to actual fish production. Many farms are holding stock from the market place as they are unable to sell their product at fair market prices.

Other factors constraining growth of the industry include: the increased value of the Canadian dollar reducing the export demand for trout, expanded production at some facilities, and decreased consumption as a result of health concerns over possible contaminants in fish, primarily salmon, which have dominated the popular press in the last several months.

Other issues affecting Ontario include the continued restriction of new cage culture licences, Ontario’s Nutrient Management Act and continued uncertainty concerning the application of emerging food safety legislation.

For the next few years, increased profitability will only come from improved efficiency at existing production facilities, and innovations in the processing sector. Several new technologies are being developed and tested. These include: improved feed manufacturing (e.g. formulation and pellet quality); feeding methods (e.g. feed fines removal and video monitoring of feeding response); fish health (especially improved husbandry during the warmer summer months); and the development of improved breeding programs at the hatcheries.

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

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