INDUSTRY SNAPSHOT 2014

Major Species Produced: rainbow trout
Minor Species Produced: Arctic charr, brook trout, smallmouth and largemouth bass, cyprinid baitfish and tilapia
Total Rainbow Trout Production: 4,000 tonnes
Total Other Fish Production: 210 tonnes
Farm-gate Value of Rainbow Trout: $20.5 million
Farm-gate Value of Other Fish: $1.3 million
Economic Contribution: $70 million
Job Creation: 185 person-years direct employment and 150 person-years indirect employment
Projected Production of Rainbow Trout: approximately 4,600 tonnes in 2015

Overview

In 2014, we estimate that Ontario fish farms produced 4,000 tonnes (8.82 million pounds) of rainbow trout, primarily for human consumption (Figure 1). This is an 11.7% increase over the 3,580 tonnes produced in 2013. Survey questionnaires were received from 41% of the 194 commercial facilities surveyed, accounting for 96% of the total production. Estimates for significant, non-reporting facilities were based on prior survey data and personal knowledge of the authors.

Lake-based, cage production of rainbow trout in the North Channel of Lake Huron, and eastern Georgian Bay area, continues to dominate output from land-based production systems, accounting for 86% of the total production. Land-based production of Arctic char and tilapia is limited to a few facilities in southern Ontario. The production of brook trout, bass and other species is primarily directed towards pond stocking and recreational purposes. These operations provide important diversification to the industry although quantifiable production information is difficult to obtain. Our records indicate that approximately 65 facilities culture Arctic char, tilapia, brook trout, bass, walleye and other species, with an estimated total production of 210 tonnes in 2014.

The total farm-gate value of the 4,000 tonnes of rainbow trout produced is estimated to be $20.5 million, with an average price of $5.13/kg ($2.33/lb). The sale of Arctic char, tilapia, brook trout, bass and other fish species is estimated to have a value of an additional $1.3 million. More than 40 other facilities are involved with recreational pond stocking, typically with rainbow trout, brook trout or bass. The value of this aquaculture sector is conservatively estimated to be $1.5 million annually.
In 2014, the Ontario aquaculture industry is estimated to have generated a total of 185 person-years of direct, on-farm employment. This consisted of 122 person-years of full-time employment (40 hours per week for 12 months) and 63 person years of part-time employment. Indirect employment is conservatively estimated at 150 person-years.

The total annual contribution that aquaculture makes to the Ontario economy is estimated to exceed $70 million, with additional economic value realised via the recreational and aquaria trade.

**Situation Outlook**

Ontario’s aquaculture production has been relatively stagnant for the past 15 years with annual production averaging 4,000 tonnes (minimum 3,380 tonnes, maximum 4,550 tonnes). The lack of overall production expansion can be largely attributed to the limited development of new cage sites since 2004. Expansion of established cage farms has resulted in some additional production replacing a collateral decline from land-based farms over this period. The constraining factors to enabling growth in the sector are varied, and include such things as a continued lack of capital investment funds, ongoing inflexibility and lack of needed reform in the regulatory and policy environment, a generally soft economy in Ontario, and competitive pressures from foreign producers. Having said that, there has been some novel, albeit small-scale development in land-based production of shrimp, and there is growing interest in aquaponics technologies, though these are dedicated more to non-fish food products.

Moving forward into 2015-16, we anticipate that total production will increase as a result of several cage farms reorganising and increasing their feed quota, along with the establishment of additional commercial scale tilapia production, and potentially several commercial scale aquaponics ventures.

Figure 1. Comparison of Ontario land-based and cage aquaculture trout production between 1988 and 2014.