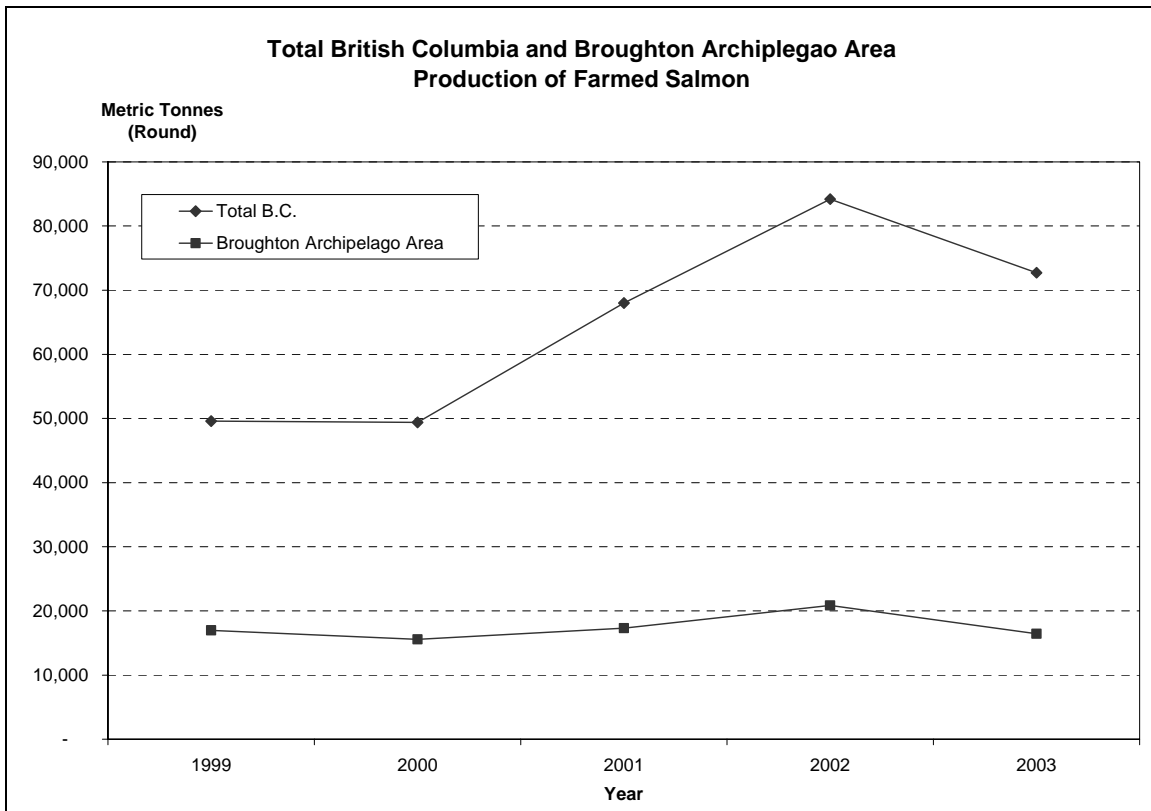


**Fish Production and Falling in the
Broughton Archipelago Area**

There are 27 farms licensed to produce salmon in the Broughton area. Not all of these are in full operation in any one year. Companies may routinely take their farms out of production - sometimes called following - following harvesting. As a result, some farms in the Broughton may be in operation for only a few months during any one year, and out of operation (i.e. fallow) during other months. While the biomass of farmed fish produced in BC has increased over the last few years, the biomass of fish reared on farms in the Broughton area has not changed significantly.



The overall abundance of farmed fish and number of operations were very nearly the same in 2003 and 2004 for the Broughton area as a whole. The total biomass of fish produced in the Broughton area was equivalent in both years. The biomass of fish produced will not be significantly different in 2005.

Table 1: Farm numbers in operation in each year and numbers of farms without fish during the estimated period of smolt out-migration of 2003, 2004 and 2005.

Year	Average number of farms active with fish during year and range	Sites without fish			
		March	April	May	June
2003	13.7 (12 – 16)	12	12	14	14
2004	15.5 (14 – 17)	10	10	12	12
2005	14.9 (13 - 17)	10	10	11	13

Following

In 2003, an effort was made to determine whether leaving farms unoccupied (following) in Tribune channel, one of the major waterways in the Broughton area, would make a difference in lice abundance on juvenile wild fish compared to the other main channels which would have farms in production. It was also suggested that this was a major migration route for juvenile pink salmon. Fisheries and Oceans Canada surveys showed relatively low infection rates on wild salmon throughout all parts of the Broughton area during 2003.

In 2004 when the farms in Tribune Channel were active there was again no difference in lice levels between wild fish found in Tribune Channel and other areas of the Broughton area. However there were differences between lice loads and species of lice found on wild fish between the two years. In addition, there was no evidence that Tribune Channel was more significant as a migration route than other Broughton waterways.

In 2003 there were fewer lice on wild fish and the predominant species of louse present was *Caligus clemensi*; in 2004 there were more lice on wild fish and the predominant species was *Lepeophtheirus salmonis*. This demonstrates significant inter-annual variation in lice load on wild fish. Given the lack of difference in lice levels between different locations in the Broughton area within each year – i.e. the “followed” and “non-followed” routes - no conclusions can be drawn about following as a strategy from the 2003 and 2004 seasons.

Management 2005

The number of farms in operation and biomass of fish produced will be similar to that of 2003 and 2004.

Management of the Broughton Archipelago area fish farms during the smolt out-migration of 2005 will consist of the following:

- 1.** Active monitoring by farm staff on all farm sites with results of sampling reported to the Ministry of Agriculture, Food and Fisheries (MAFF) monthly.
- 2.** MAFF surveillance of 50% of the active farm sites during the second quarter.
- 3.** Action level of 3 mobile lice per fish that results in increased monitoring and treatment or harvest of the farm fish.