

The Development of Atlantic Halibut Aquaculture – an International Perspective

Don Douglas
Industrial Technology Advisor
Maritime Region





Stages of development of aquaculture of new species

- 1. Can it be done? (scientific challenge very large risk)
- 2. Can it be done reliably? (technology challenge – substantial risk)
- 3. Can it be done reliably and make a profit?
 (both a business and an optimization of technology challenge more manageable risk)

NRC - CNRC

Aquaculture of Atlantic Halibut

- Until approximately 20-25 years ago total uncertainty of ability to bring halibut into culture
- About 10 years ago evidence of sporadic success but largely unreliable, particularly in terms of juvenile production
- Over the past 5 years, growing evidence of reliable production. The focus is now on the development of the best possible models for successful commercial production

An International Perspective

 There have been rumours that the northern European countries have backed off on investment and activity in aquaculture of Halibut

Wrong!! In fact, there is strong evidence of:

- Development of major strategic international partnerships (incl., for juvenile production)
- Development of sophisticated grow out technologies, incl. both on land tank and sea cage culture

Some of the European companies visited

- Iceland Fiskeldi: hatchery, nursery and growout operations)
- Norway Nordic Seafarms and Marine
 Harvest Rogaland (Nutreco/Skretting): nursery
 and grow out facilities
- Scotland Otter Ferry (juvenile production),
 Kames Halibut Farms (grow out) and Marine Harvest (Nutreco/Skretting): nursery and grow out)

Some examples of commercial-scale growout

- On land tank farms ex-salmon tank farms adapted for later stage (e.g., from 300-1000 g) nurseries. Typically with sunshade covers, shelves, autofeeders and camera systems.
- Sea cage culture modified salmon cages with covers, bottoms, shelves, autofeeders and camera systems. Both:
 - large steel cage arrays
 - independently moored, poly polar circle cages

Summary

Strong evidence in Europe of:

- Major confidence and recent investment in Halibut aquaculture
- Formation of strategic international partnerships
- Widespread adoption of sophisticated culture technologies
- Expansion of on land facilities and sea cage sites, and

SUCCESS!!

Acknowledgements

To the senior management, site managers and staff for allowing site visits and open sharing of information:

- Fiskeldi Group, Iceland
- Kames Halibut Farm, Scotland
- Marine Harvest, Scotland
- Marine Harvest Rogaland (Skretting), Norway
- Nordic Seafarms ASA, Norway
- Otter Ferry, Scotland