Lifetime Achievement Award

Bjørn Myrseth
Criteria for Lifetime Achievement Award

• Integrity.
• Leadership.
• Significant commercial impact.
• Long-term commitment to efficient and sustainable production.
• Enduring advancement of field.
• Stolt Sea Farm pioneered Atlantic salmon smolt production in Norway in the 1970s and 1980s. The company supplied smolts to more than 100 independent farmers and pioneered the industry by setting standards for how the smolt business was done.

• The company expanded into Atlantic salmon farming in the United States and Canada and was among the first companies to realize the opportunities for salmon farming in this part of the world.

• Stolt Sea Farm was listed on the Oslo Stock Exchange in 1985, the first aquaculture company ever to be listed on a stock exchange.
• Following Stolt Sea Farm, Mr. Myrseth’s became owner of Marine Farms and served as the company’s CEO from 1987 to 2010. The company invested in aquaculture operations in Norway, Scotland, Greece, Spain and Chile, all of which were a success.

• The company lays claim to a number of firsts, including the first use of Polar Circle cages and feeding platforms in Greece and Spain and well boats in Spain, all new developments in the sea bass and sea bream industry.

• Marine Farms was listed on the Oslo Stock Exchange in 2006. When it was acquired by Morpol ASA in 2010, Marine Farms had operations in Scotland (salmon), Spain (sea bass and sea bream), Belize (cobia) and Vietnam (cobia and pompano). In 2012, Morpol was purchased by Marine Harvest ASA.
Bjørn Myrseth, GAA Lifetime Achievement Award
Career Highlights

- Mr. Myrseth was a founding member of European Aquaculture Society in 1976 and president of the organization from 1992 to 1993. In 2011, he received the Federation of European Aquaculture Producers’ annual award for excellence in European aquaculture.
Over the last 10 years, Mr. Myrseth has, in addition to salmon and sea bass and sea bream farming, spent time on tropical fish farming with farms in Belize and Vietnam, transferring proper cage-farming technology and management to the two countries.
Lifetime Achievement Award

Bjørn Myrseth
What I learned about aquaculture in 43 years

• Thanks to all my employees over the years, who have been key to my success
• Without committed and loyal employees, you will not succeed in aquaculture, particularly not as a distant owner
• Train and empower your employees
• Tolerate mistakes
• The importance of:
  • broodfish
  • egg quality
  • juvenile quality (and quantity)
  • smolt sale from 1975 to 2010
The Faroese story:
Atlantic salmon farming in the Faroe Islands

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>47</td>
<td>37</td>
<td>17</td>
<td>12</td>
<td>19</td>
<td>37</td>
<td>47</td>
<td>42</td>
<td>56</td>
</tr>
</tbody>
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- Volume in 1,000 tonnes
- Drop in volume due to ISA
- 27 companies in 2003. Restructured to six and only two avoided bankruptcy
The Faroese story:
What can we do to prevent this from happening?

• Smolt certification
• One year class per site and per fjord
• Fallowing after each harvest
• System for handling mortalities
• Good distance between farms
The Faroese story: Cost of disease prevention

Cost per kg produced
• Before ISA containment: USD $3-4 per kg
• After new regime: USD $2.50 per kg
• This is the model we should use all over the world.
• It will pay for itself by reducing production costs!
Salmon produced in Norway

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
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<tbody>
<tr>
<td>1990</td>
<td>100</td>
</tr>
<tr>
<td>2000</td>
<td>400</td>
</tr>
<tr>
<td>2010</td>
<td>900</td>
</tr>
<tr>
<td>2012</td>
<td>1200</td>
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Norway: Successful salmon farming

Very successful due to:

• Innovation
• Marketing
• Disease prevention
  • Legislation
  • Vaccination
Norway: Innovation

Innovation done by:
• Feed companies
• Universities and research institutes with government support
• Equipment producers
• Farmers
• Financed by 0.35% levy on all salmon exports
Profitability in Norwegian salmon industry
Figure 1: Norwegian salmon feed 1990-2012

% of the diet

- Fishmeal
- Fish oil
- Plant ingredients

Ytrestøyl, Åsgård & Aas, 2013
FIFO for fishmeal, 1990-2012

- Fish meal from byproducts
- FIFO fish meal from forage fisheries

Ytrestøyl, Åsgård & Aas, 2013
FIFO for fish oil, 1990-2012

Ytrestøyl, Åsgård & Aas, 2013
What will be the tropical salmon?

- tuna
- yellowtail
- cobia
The tropical salmon?

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Seriola rivoliana</strong></td>
<td>2kg</td>
<td>15 months</td>
</tr>
<tr>
<td><strong>Cobia</strong></td>
<td>5kg</td>
<td>15 months</td>
</tr>
</tbody>
</table>
Thank you for your attention!

And thank you all for the Lifetime Achievement Award!