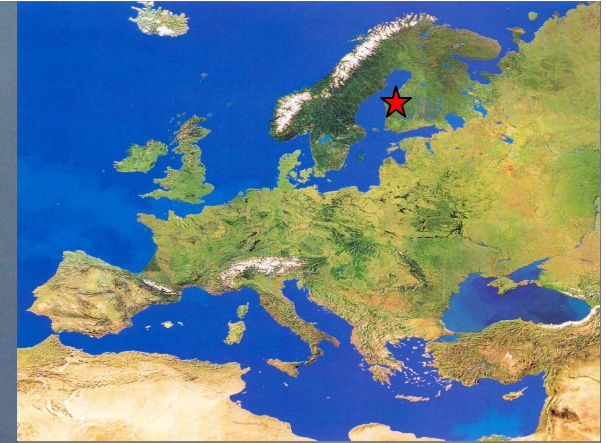


*Why arrange a sealing conference
in Vaasa, Finland ?
- some thoughts after the
international*

*“Seals and society” conference in
Vaasa, Finland 16-18 October 2007*



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Why arrange a conference ?

Rationale:

- *Evaluation of the state of seal stocks in the Baltic and North Atlantic*
(Ecosystem effects of seal stocks) 
- *Is there possibilities to enhance conflicts between exploitation and conservation of seal stocks in the Baltic and North Atlantic ?*
(Exploitation and conservation versus fisheries and sustainable use) 
- *Evaluation the importance of sealing for the economy and culture of local communities in the Baltic Sea and North Atlantic*
(Seals as valuable natural resource) 
- *What are the possibilities to develop biologically sustainable, economically profitable and socially acceptable exploitation of seals stock in the Baltic and North Atlantic ?*
(Conservation and management of seal stocks - sealing the future)

Aim:

- To exchange experiences and constraints encountered so far in the Baltic Sea and North Atlantic*
- To identify strategies and best practices to facilitate further implementation of seal stocks management and conservation*
- To boost and generate solutions towards implementing sustainable management strategies of seal stocks*

Multi-disciplinary conference provided a venue for:

- scientists*
- managers*
- policy-makers*
- stakeholders*

A forum to discuss recent advances and new ideas and share experiences

To develop new avenues and create networks for sustainable development of seal stocks

Conference organizers

- *Nordic Council of Ministers*
- *Ministry of Agriculture and Forestry (Finland)*
- *Finnish Game and Fisheries Research Institute (Finland)*
- *Ministry of Fisheries and Coastal Affairs (Norway)*
- *Swedish Environmental Protection Agency (Sweden)*
- *Swedish Board of Fisheries (Sweden)*
- *North Atlantic Marine Mammal Commission (NAMMCO)*
- *Helsinki Commission (HELCOM)*
- *World Wide Fund for Nature (WWF)*
- *The Kvarken Council (Finland)*

Conference program:



Theme session 1:
STATUS AND ECOSYSTEM EFFECTS OF SEAL STOCKS

Theme session 2:
CONSERVATION, FISHERIES AND SUSTAINABLE USE

Theme session 3:
SEALS AS VALUABLE NATURAL RESOURCE

Theme session 4:
CONSERVATION AND MANAGEMENT

Theme session 5:
SEALING THE FUTURE (A panel discussion)

Conference in figures:

<i>Participation:</i>	125 persons
<i>Participants from:</i>	19 countries
<i>Presentations:</i>	26 key-notes
<i>Time allocated:</i>	16 hours

1. STATUS AND ECOSYSTEM EFFECTS OF SEAL STOCKS

1. How many are they?

- ❖ Most of the seal stocks in the Baltic and North Atlantic are increasing or stable and above minimum acceptable stock size levels, few exceptions need closer follow-up

2. Competition of food resources increasing

- ❖ Seals consume substantial quantities of commercial fish and fish consumption of seals in some areas is greater than fishery

3. Conflicts between seal stocks, fisheries and aquaculture increasing in coastal areas

- ❖ Mitigation measures necessary
- ❖ Actions: Gear development, seal scaring, removal of seals, fishery closure, protected areas

4. How many seals nature/society can support?

- ❖ Carrying capacity of seal stocks not known precisely, a proper analysis need 20-30 years of survey data to get sufficient power
- ❖ Historical data useful as background information



2. CONSERVATION, FISHERIES AND SUSTAINABLE USE

1. “Public opinion” favours conservation and population growth of seals

- ❖ Very variable results from questionnaire surveys on seal hunt, conservation and exploitation (DFO versus IFAW surveys)
- ❖ In some countries, discussion on conflicts between marine mammals and fisheries is a taboo
- ❖ Opposition to hunt from some countries and NGOs
- ❖ Clear conflict between conservation and exploitation targets




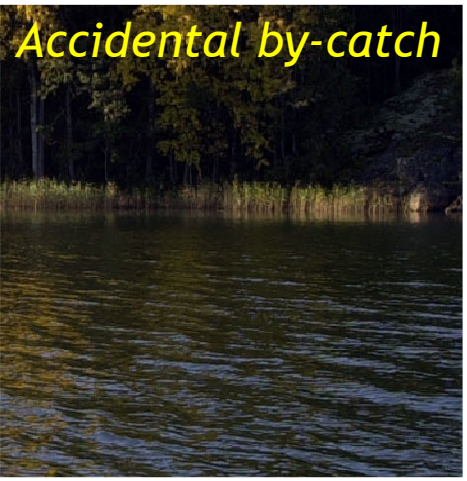
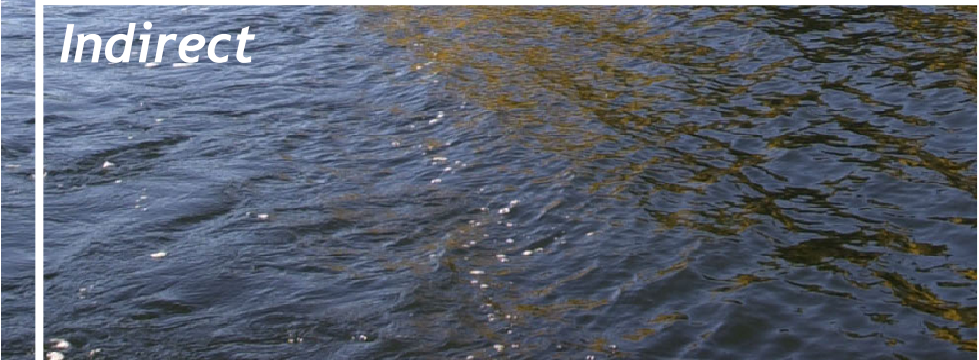
2. Seals a severe problem for coastal gill net and trap net fisheries in many areas

- ❖ Losses of 30 to 50% in gill net fishery due to fish damage

3. Seal exclusion zones proposed to reduce interactions between aquaculture and seals

- ❖ May be effective in specific situations
- ❖ Expensive, require constant maintenance, labour hungry, not effective over long term

2. CONSERVATION, FISHERIES AND SUSTAINABLE USE

<i>Interaction</i>		<i>Fishery > Seals</i>	<i>Seals > Fishery</i>
<p><i>Direct</i></p> 	<p><i>Ecosystem level</i></p> 	<p><i>Depletion of food resources through intensive exploitation/ over-fishing</i></p>	<p><i>Increased competition for resources</i></p> <p><i>Impact on fish reproduction</i></p>
	<p><i>Individual level</i></p> 	<p><i>Accidental by-catch</i></p> 	<p><i>Re-distribution of fish resources</i></p> <p><i>Damages to catch and gear</i></p> <p><i>Loss of fishing areas</i></p>
<p><i>Indirect</i></p> 	<p><i>Disturbances in sensitive areas</i></p> <p><i>Noise</i></p>	<p><i>Increased prevalence of parasites</i></p> <p><i>Inaccessible protected areas</i></p>	

2. CONSERVATION, FISHERIES AND SUSTAINABLE USE

4. Sustainable use

- ❖ *Continuation of sustainable harvest of marine mammals is expected*
- ❖ *Sustainable use of wild populations has been accepted by many international authorities and organizations including IUCN*
- ❖ *Sustainability is based on scientific advice, precautionary approach principles*
- ❖ *Ecosystem approach is implemented*

3. SEALS AS VALUABLE NATURAL RESOURCE

1. *Sealing is culturally and economically important for many small remote communities in North Atlantic and in the Baltic*

- ❖ *Hunting seals is a vital component in the everyday life and culture*
- ❖ *Sealing ban which was imposed in 1980's was disastrous for many areas*
- ❖ *Today there is renewed movement to ban import and marketing of seal products, which is not based on facts (inconvenient to politicians)*

2. *Traditional and new seal products producing programs introduced - from skin to oil*

- ❖ *A high number of traditional products available (oil, meat, pelt, bone, fancy goods)*
- ❖ *A set of new products including clothing and other skin products, new seal meat products, oil as paint and for medicine and bones for jewelry*

4. CONSERVATION AND MANAGEMENT

1. Conservation and management go hand in hand

- ❖ Overall principles for management of seals should include:
 - ❖ a definition of the management unit(s)
 - ❖ clearly spelled out and prioritized management objectives
 - ❖ a set of defined strategies to achieve the management objectives
 - ❖ a program to monitor if the management objectives are met
 - ❖ a feedback mechanism to improve the management strategies based on new data from the monitoring programs or from other data sources
- ❖ Development of management objectives should involve all stakeholders
- ❖ Seal management should be an integrated part of marine-spatial plans that should also acknowledge other activities and uses of the marine areas

4. CONSERVATION AND MANAGEMENT

2. Any management that cannot ensure conservation of a renewable resource, a population or a species, has failed.

- ❖ Role of science is to provide advice to managers*
- ❖ Scientist should not decide whether to harvest or not*

3. There are three separate but complimentary systems for management of seal populations in the North Atlantic Ocean—US/Canada, ICES and IUCN.

- ❖ The US system is strongly oriented towards population recovery and conservation.*
- ❖ Mandates under the Canadian Fisheries Act and Species-At-Risk Act are similar, but include commercial harvesting*
- ❖ The ICES/NAFO provides advice to member states on sustainable harvests/management of seal stocks*

4. CONSERVATION AND MANAGEMENT

4. In the European Union, measures are in place related to conservation, sustainable use and trade

- ❖ *The objective is to ensure that trade only takes place if it does not threaten the survival of species of wild fauna and flora*
- ❖ *Public concern is gauged through action of European Parliament, who represent the people of Europe*
- ❖ *Identification of the key ecological and socio-economic factors*
- ❖ *A systematic identification and description of the facts, values and interests of various stakeholder groups*



4. CONSERVATION AND MANAGEMENT

5. *The EU is under pressure from animal rights groups and legislators at the European Parliament to take action over the seal hunt, which they say is cruel and inhumane.*

❖ *The activists have called for a total hunting ban that would affect Canada along with Russia, Namibia and Greenland and EU members Finland and Sweden*

❖ *The EU's environment commissioner proposed a partial ban (23. July 2008), which would prohibit the sale of products from seals the EU determines have been killed inhumanely, or culled in hunts that it considers not sustainable*

Proposal include two exemptions from the ban

❖ *For aboriginal communities, such as those in Canada and Greenland, where the hunts are a vital part of the local economy*

❖ *Any country that meets a certain list of criteria can apply for an exemption, or derogation. A list include adequate legislation outlining rules on animal welfare, the use of appropriate hunting tools, and proper training of hunters*

5. SEALING THE FUTURE (Conclusions)

SCIENTIFIC ISSUES:

How the scientific/research information is used?

- ❖ *To justify exploitation (increased stock sizes, valuable resource, sustainability)*
- ❖ *To justify conservation and protection (increased stock sizes still a small fraction of pristine size- vulnerable to extinction)*

Questions:

- ❖ *Is harvesting a surplus the only definition of a sustainable use?*
- ❖ *How certain do we need to be to manage seals in relation to their role in the ecosystem, in particular in relation to interactions with fisheries?*

5. SEALING THE FUTURE (Conclusions)

SCIENTIFIC ISSUES:

The main problems in science:

The complexity of systems and interactions in the ecosystems create estimation problems and increase uncertainty

Ecosystem analysis:

As complexity rises, precise statements lose meaning and meaningful statements lose precision

Modeling ecosystem interactions:

So far as the formulation of models refer to reality, they are not certain and so far as they are certain, they do not refer to reality





5. SEALING THE FUTURE (Conclusions)

Conservation and management issues

- ❖ *Should scale and type of utilization (large/small, subsistence/commercial) define approaches to conservation and management?*
- ❖ *Humane killing of seals - can/should we define a common international standard?*
- ❖ *How can we ensure the best possible international cooperation on seal conservation and management?*

5. SEALING THE FUTURE (Conclusions)

Socio-economics and product development:

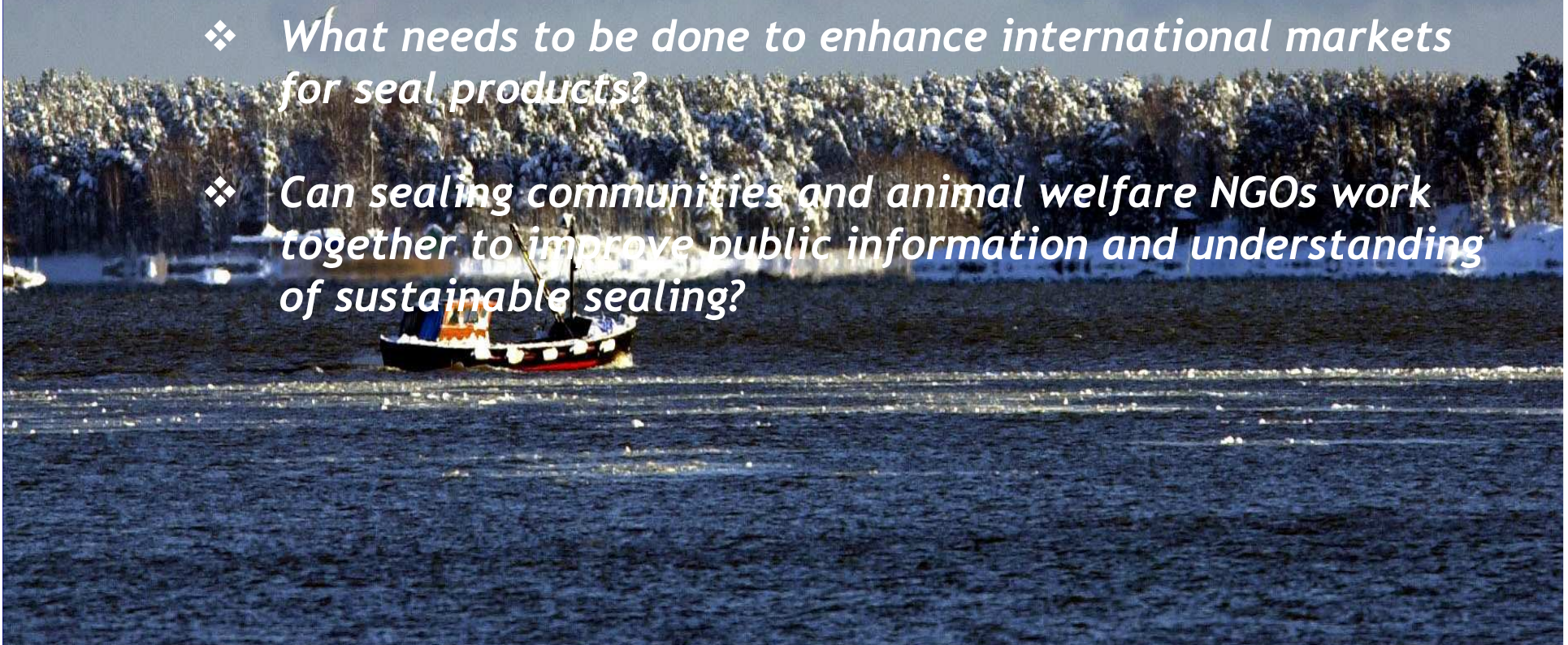
- ❖ *Stakeholders - who are they and how should they be involved in seal management?*
- ❖ *What are the main impediments to better economic utilisation and development of seal products ?*
- ❖ *Are domestic markets in sealing countries being fully exploited?*



5. SEALING THE FUTURE (Conclusions)

International trade and public perceptions

- ❖ *To what extent should trade measures be used as a management tool for seals?*
- ❖ *What needs to be done to enhance international markets for seal products?*
- ❖ *Can sealing communities and animal welfare NGOs work together to improve public information and understanding of sustainable sealing?*



Issues for discussion:

- ❖ *Ownership of the resource ?*
- ❖ *Who are the stakeholders ?*
- ❖ *Ethics and moral, who's ?*
- ❖ *Ecological policy or political ecology, which way to go ?*
- ❖ *Population dynamics is no longer a problem ?*
- ❖ *Is it just a question about management, control and attendance ?*
- ❖ *The time of bearded ecologists is passed ?*

