

Policy, people, points of view and participation

- Introduction
- Exercise: what is biodiversity all about?
- Public understanding of biodiversity and its implications for biodiversity management
- Public participation: what is it, what are its aims, what are its limitations?
- Evaluation of public participation in the Moray Firth – seal/fisheries conflict



Public understanding of biodiversity

- Importance of public views and attitudes in policy development, implementation and monitoring apparent in policy context
- Especially important in recent EU policy contexts (e.g. implementation of Natura 2000) where local actors are expected to actively manage biodiversity
- BUT understanding of public views of biodiversity is limited, which can lead to doubts over the significance of public opinion...



“Deliberative events in the Cairngorms National Park”

- Research aimed to:
 - Contribute to better understand how the public reasons about biodiversity change and management
 - Shed light of factors that determine public acceptance (or not) of biodiversity policies; and
 - Facilitate the development of suitable ways of communication



Cairngorms National Park

- National Park designation in 2003
- Largest national park in the UK (3,800 km²)
- Largest area of arctic mountain landscape in the British isles



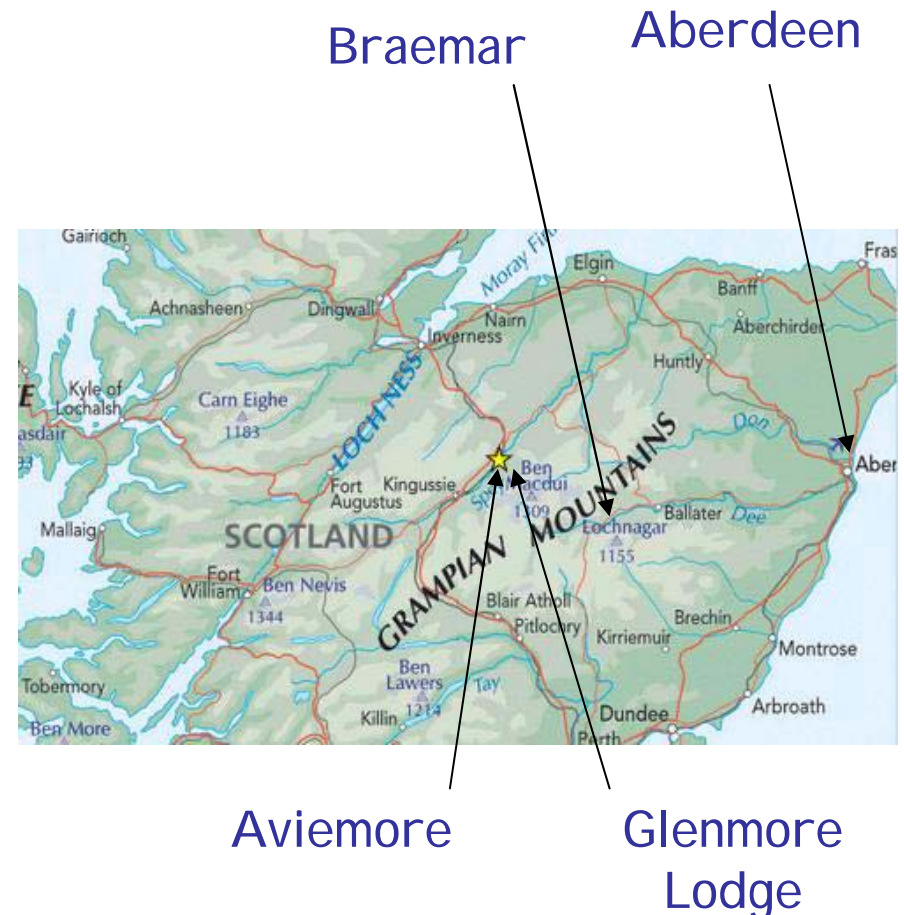
Cairngorms National Park



- Home to 25% of the UK's threatened bird, animal and plant species
- Important habitats include native woodland and heather moorland
- 17,000 inhabitants
- Tourism-related businesses account for about 80% of the economy
- 500,000 visitors in 2001
- Activities include skiing, walking, fishing, shooting and stalking.

Focus group approach

- Qualitative approach: Focus group discussions
- Sampling: 43 individuals:
 - Tourists in Aviemore (n=4). Non-experts/non-users/urban and rural
 - Participants in a mountaineering guide course in Glenmore Lodge (n=6) and mountaineers resident in adjacent area (n=4). Non-experts/ users/ urban.
 - Local park residents in Braemar (n=10). Non-experts/users/rural.
 - SAC students (n=9). Non-experts/non-users/urban
 - Foresters resident in adjacent areas (n=4). Experts/non-users/rural
 - Birdwatchers resident in adjacent areas (n=6). Experts/users/rural and urban



Questionnaire structure

A. Brief introduction on the general context of the discussion

1. What are your personal experiences in the Cairngorms? E.g.: Do you have a favourite plant/animal in the region? How often have you been in this area? What is your general impression of the area? What were your expectations?
2. Have you heard about the Cairngorms National Park?

B. Leading on to biological diversity

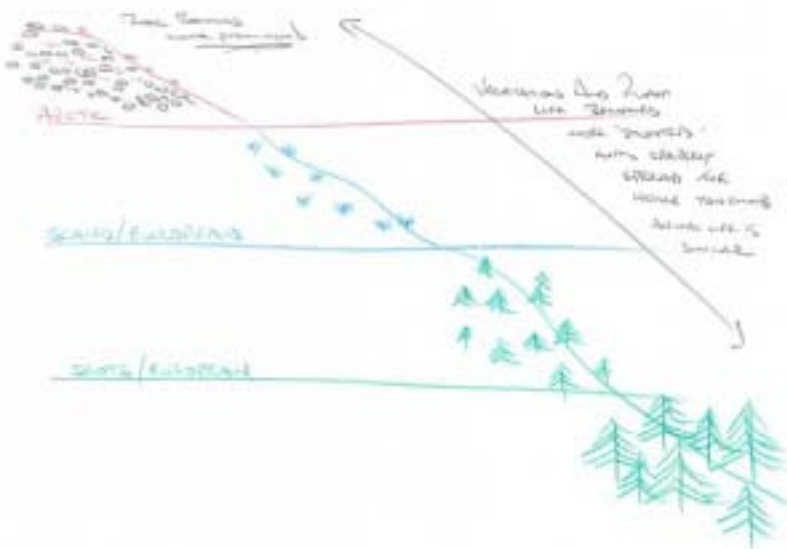
3. Have you ever come across the term biodiversity, or biological diversity?

If not: Short information (taken from the Cairngorms National Park website): "Biodiversity (short for biological diversity) means the variety of life. Biodiversity includes all living things and the environment of which they are part."

4. What does biological diversity mean to you? What first comes to your mind?
5. Please draw a symbol for/a diagram representing your idea of biological diversity
6. How important is biological diversity to human beings? How important is biological diversity for your everyday life?
7. How do you think nature or wildlife could best be maintained or managed?
8. Would you like to add anything?

Associations with the term "biodiversity", perceptions and appreciation

- Reactions to the term "biodiversity": Confusion, definitions and critical comments (professional background in land use)
- Perceptions and appreciation of biodiversity: Aesthetics, uniqueness (iconic elements of the environment), balance



Normative dimensions of biodiversity

- Understandings of biodiversity rooted in other, related concepts, e.g. food chains, balance, dominance of certain species
- States of reference apparent, but how are “right” or “wrong” states or species judged?
- Right= untouched by humans? (native vs. introduced or dominant species)
- Individual perceptions of diversity informed by participants’ beliefs and values (e.g. Bracken / Gorse)



Wild or managed?

- Positive images of biodiversity: wild or undisturbed state of biodiversity – contrast with the discussions
- Anthropogenic influences in 21 drawings (of 33) – mainly idyllic landscapes where nature and humans are in harmony
- While those participants who saw human influence as beneficial reflected this in their drawings, those who felt strongly that humans were a threat to biodiversity omitting these threats in their drawings



Anthropogenic threats to biodiversity

- Perceived threats included recreational activities, hunting, climate change, agricultural intensification etc.
- Effects of threats on humans and other species was unclear (controversial scientific debate over the role of biodiversity in ecosystem functioning?)



Managing biodiversity

- Measures to manage biodiversity included:
 - Controlled tourism
 - Management of animal populations (deer, badger, beaver)
 - Areas fenced off for conservation
 - EU level legislation promoting biodiversity (e.g. incentives for biodiversity conservation)
- Risks of over- managing biodiversity highlighted by foresters and farmers



Stances towards management

- Humans as potential enemies of nature: Protectionist, biodiversity centric stance (mountaineers, birdwatchers). Biodiversity seen as fragile and requiring top-down approach to its conservation.
- Humans as users of nature: Biodiversity as an equal partner to human activities (tourists). Man as potential, but not necessarily, harmful influence.
- Humans as managers of nature: Functional stance of humans acting as the managers of nature (foresters, farmers). Biodiversity seen as dynamic, requiring active management



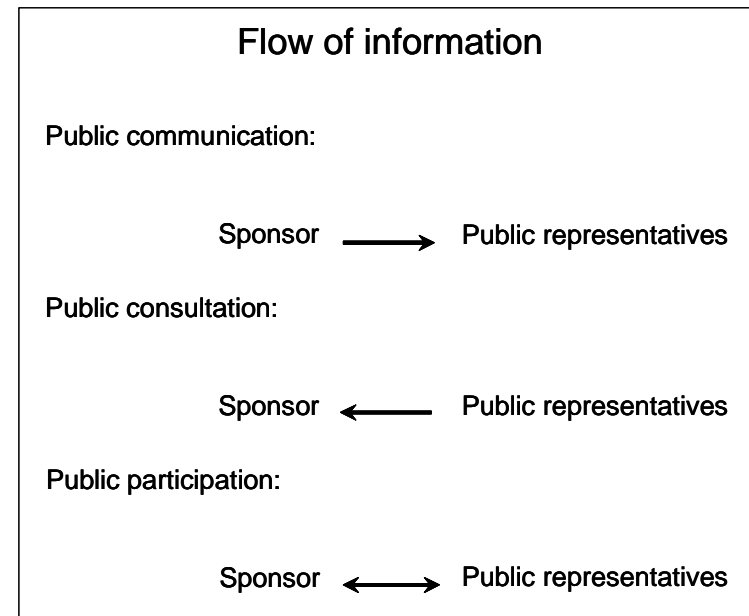
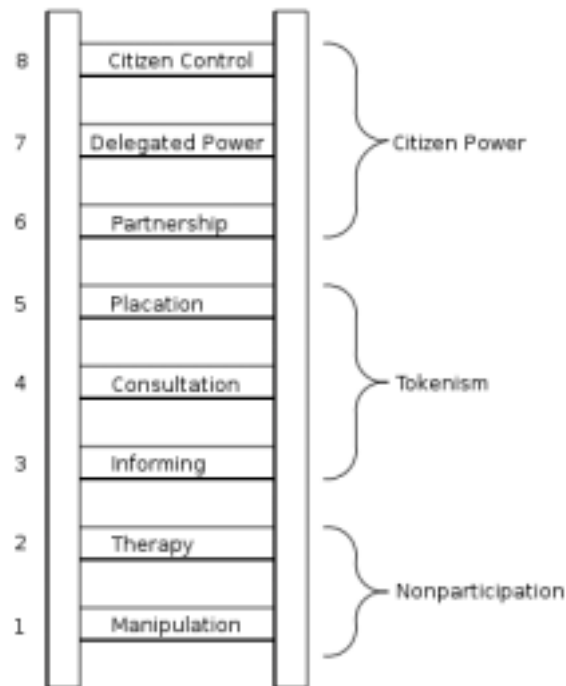
Some conclusions

- Independent from scientific terminology, individuals expressed attitudes towards biodiversity management that were well grounded in complex mental concepts
- Better understanding value judgements and conceptual contexts are essential to improve design and communication of environmental policies
- More research on attitudes towards humankind may be essential in understanding views towards biodiversity management
- Participatory rather than educational programmes needed to improve support for biodiversity management and reduce conflicts

Public participation

- “The practice of *involving* members of the public in the agenda-setting, decision-making, and policy-forming activities of organisations/institutions responsible for policy development” (Rowe & Frewer)
- Definition refined by basing public engagement mechanisms on the *flow of information*
- Why bother? Arguments for and limitations of public participation

Arnstein ladder of participation



Pros and cons of public participation

- Arguments for participation:
 - Normative argument: participation is an integral part of democracy, ensuring stronger democratic processes.
 - Substantive argument: participation should incorporate additional knowledge and values into decision-making
 - Instrumental arguments: participation leading to better quality decision-making processes, providing local legitimacy, increasing trust between citizens and decision-makers, and reducing the intensity of conflicts
- Limitations of participation:
 - No clear definition of participation
 - Who is the public? Distinctions between stakeholders, the wider public, experts – “minority sport”?
 - Consultation fatigue and disenchantment
 - Misuse or poorly carried out exercises
 - Costly in terms of time and resources

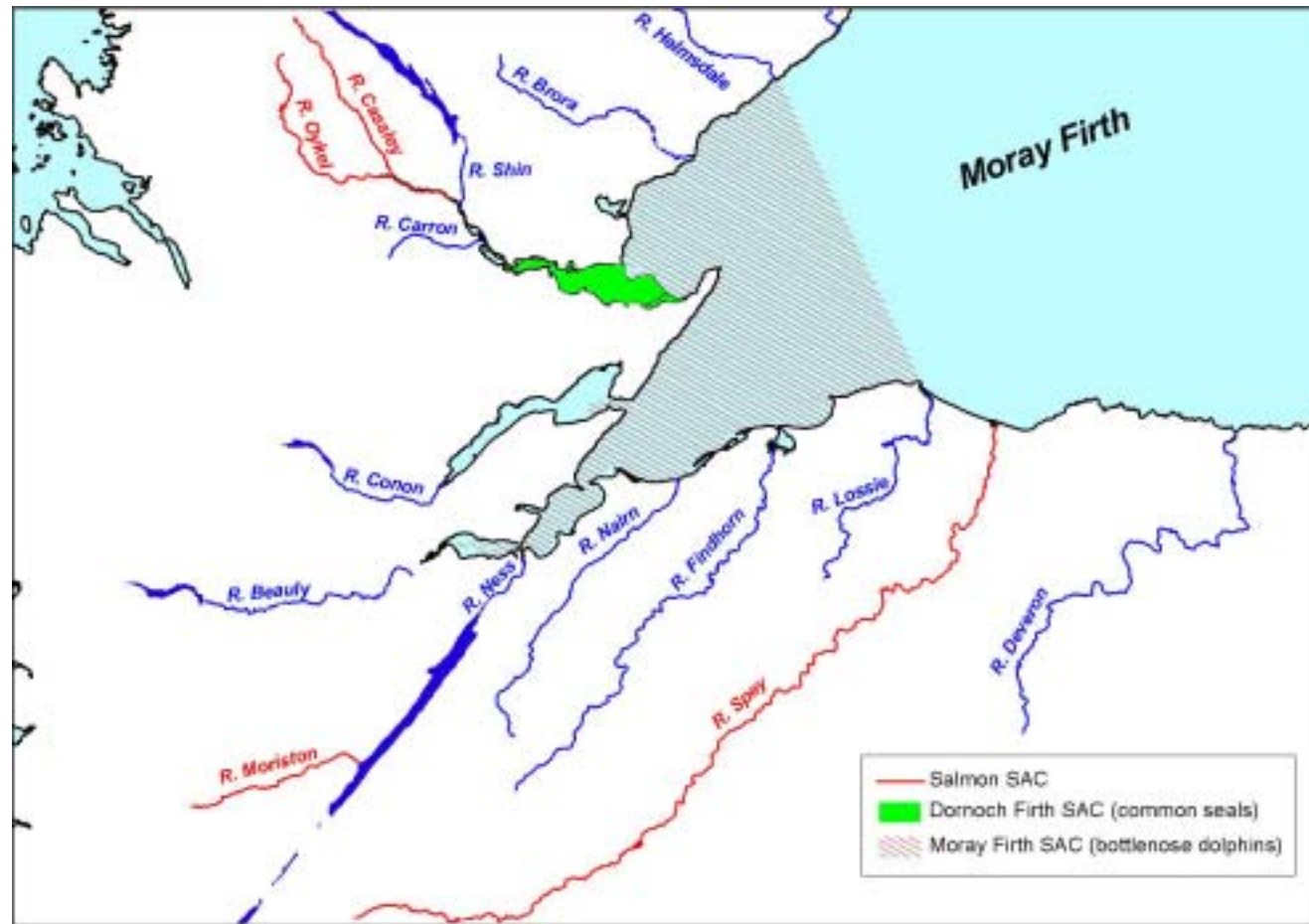
Evaluation of public participation in Natura 2000

- Response to 2010 target of halting biodiversity loss
- 21.7% of the EU's land area designated Natura 2000
- Flagship policy for environmental public participation.



- Is the public involved and if so, how?
- Does involvement contribute to biodiversity goals?

The Moray Firth



Three Special Areas of Conservation (SACs) for predator and prey species: bottlenose dolphins, common seals and Atlantic Salmon

A conflict between seal conservation and fishing interests

Rod fishing & Net fishing:

- Seals eat a lot of salmon and sea trout
- Seals are increasing in number
- Salmon declining
- Lack of trust in science
- Conflict between rod and net fishermen

Government bodies and advisors:

- Seals shot in great numbers – no way of keeping track of how many are shot during open season
- Seals declining: repercussions on SAC & Government
- Lack of trust

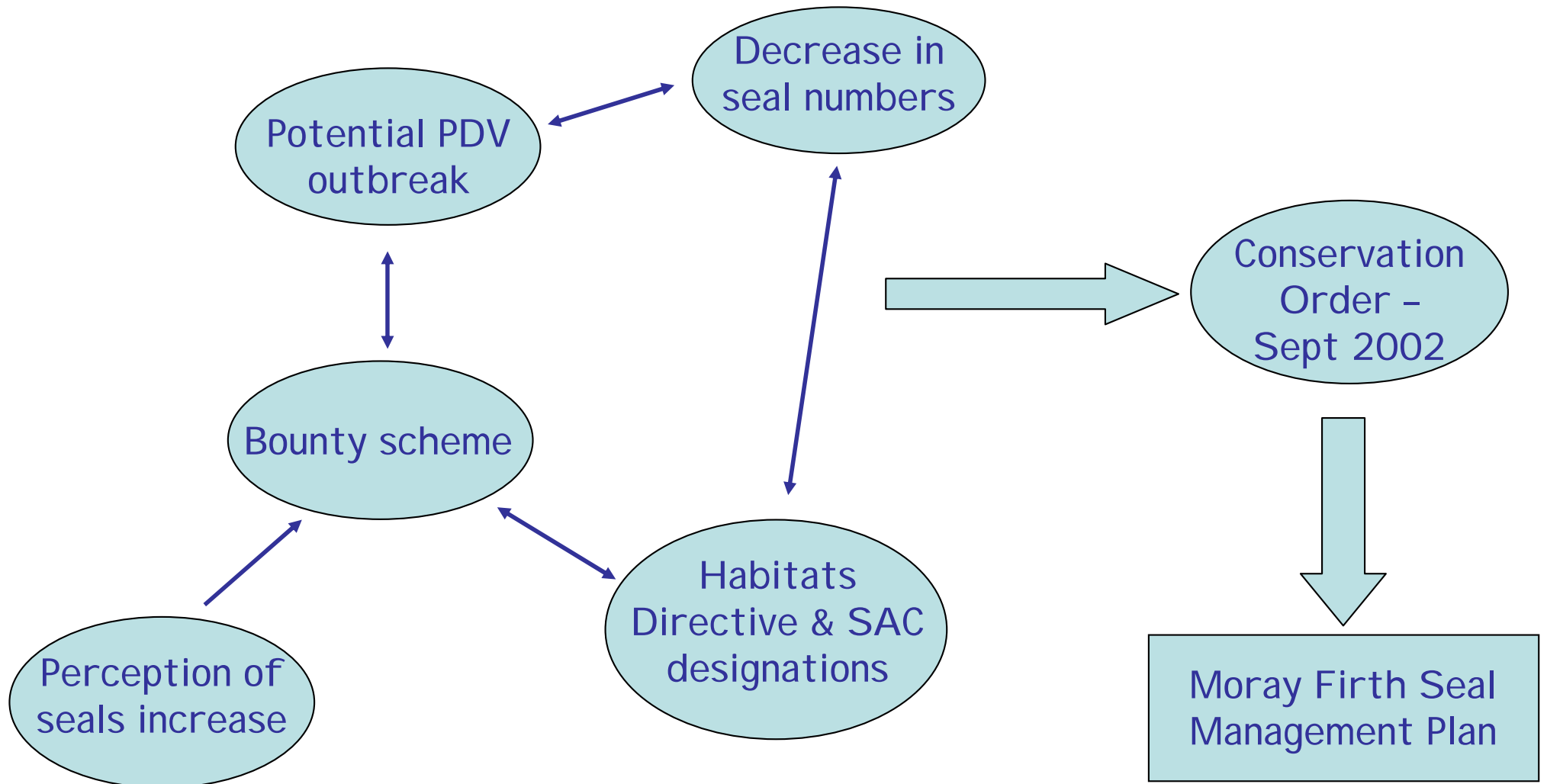
Seal welfare organisation:

- Thousands of seals shot every year
- Seals = scapegoats
- Links between the Scottish Government and fisheries

Perceptions & trust – key issues in conflict situations



Moray Firth Seal Management Plan



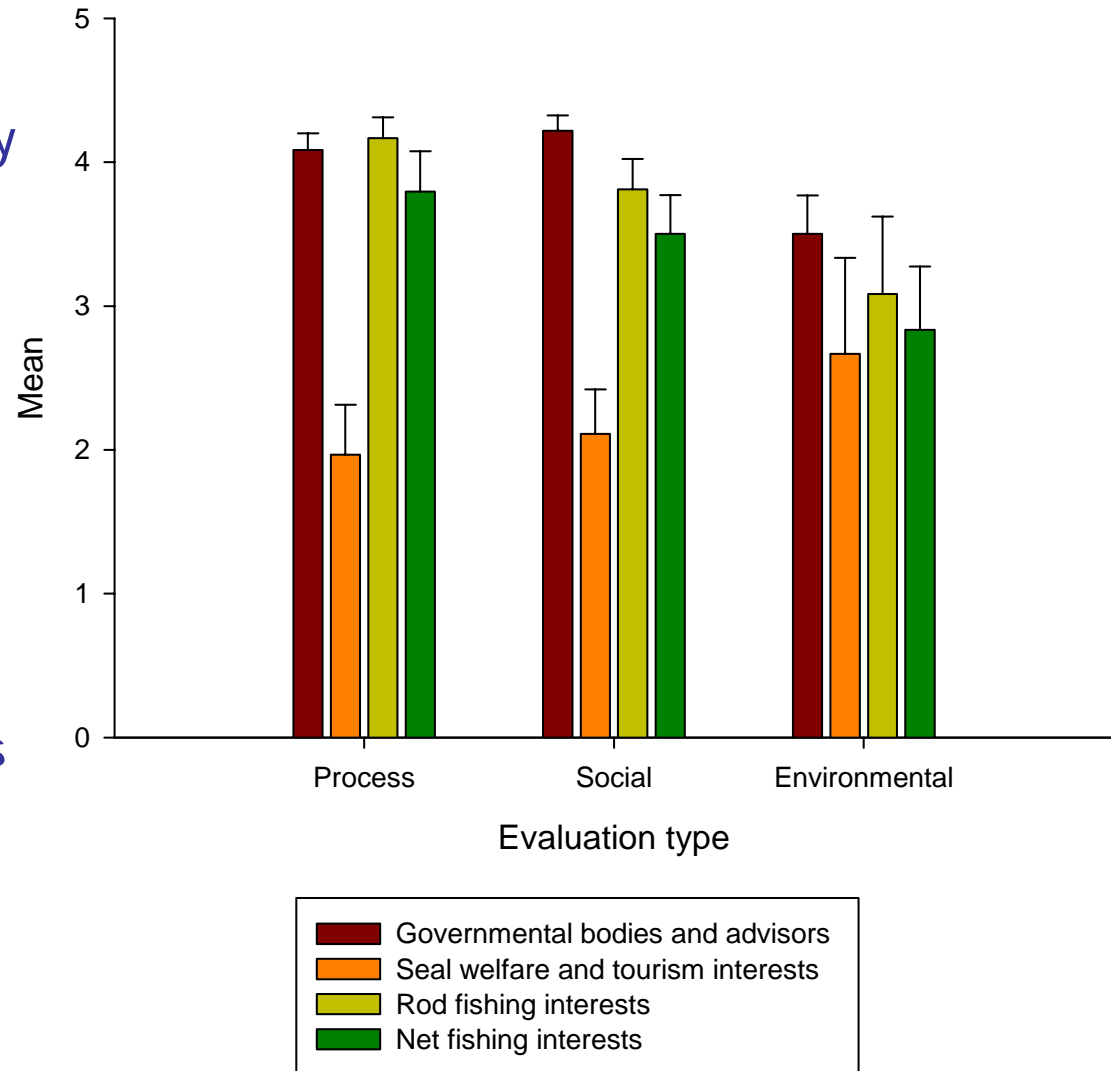
Methods

- Documentary evidence
- Interviews (n=20) with stakeholders – Snowballing: fishery boards, netting industry, science, tourism industry, SNH, animal welfare.
- Interviews incorporating both qualitative and quantitative elements
- Delphi – 6 experts
- Counterfactual analysis: business as usual vs. participatory management plan
- Triangulation

Evaluation focus	
<i>Process evaluation</i>	<i>Outcome evaluation</i>
Representativeness	Decision quality
Independence	Relationships
Transparency	Capacity-building
Influence	Environmental outcomes
Early involvement	
Cost-effectiveness	

A general view of evaluation

- Participation process and outcomes seen most beneficially by governmental bodies and advisors and rod fishing interests
- Seal welfare and tourism interests rate the process and social outcomes negatively, but acknowledged beneficial impact on seals
- Increased participation seems to have limited direct effects on long-term biodiversity benefits



Indirect benefits to biodiversity

- Increased trust between stakeholders: attitudes are changing
- Perceptions are changing also: process of developing targeted research and better communicating scientific findings
- Process led by one person, from the fishing industry: positives and negatives
- Are there causal links between process and outcome? Does a bad process lead to bad outcomes (and vice-versa)? Importance of context?



Summary

- Involvement of local stakeholders did not benefit the long-term conservation of biodiversity directly
- The process of increased involvement may indirectly contribute to improved biodiversity conservation
- Both the process and the outcomes of participation are heavily dependent on context
- Causal links between process and outcomes are not easy to identify but assumption that good participatory process will lead to good outcomes needs to be reviewed

A few take-home messages

- “Biodiversity” can be used by different people to mean different things
- We shouldn’t assume that because people don’t know the term they will not hold strong beliefs over what it means and entails
- Perceptions and trust are key aspects of conflicts