Developments in Adaptive Harvest Management in Europe

5th meeting of the Group of Experts on Conservation of Birds, 12-13 Oct 2015

FACE - Federation of Associations for Hunting and Conservation of the EU

WHSG

- Waterbird Harvest Specialist Group of Wetlands International (WHSG)
- Re-established at Brussels IUGB congress in September 2013
- Chaired by Prof. Jesper Madsen, Aarhus University, Denmark
- Aim: To bring about a knowledge-driven process for the sustainable harvest of waterbirds that is applied and tuned to local needs; balances conservation, wildlife management and recreational needs while taking account of conservation

Guiding principles

IUCN Policy Statement on Sustainable Use of Wild Living Resources (IUCN 2000)

- Use of wild living resources, if sustainable, is an important conservation tool because the social and economic benefits derived from such use provide incentives for people to conserve them
- When using wild living resources, people should seek to minimize losses of biological diversity
- Enhancing the sustainability of uses of wild living resources involves an ongoing process of improved management of those resources
- **Such management should be adaptive, incorporating monitoring and the ability to modify management to take account of risk and uncertainty**

WHSG

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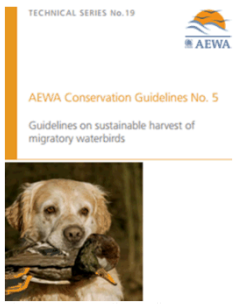
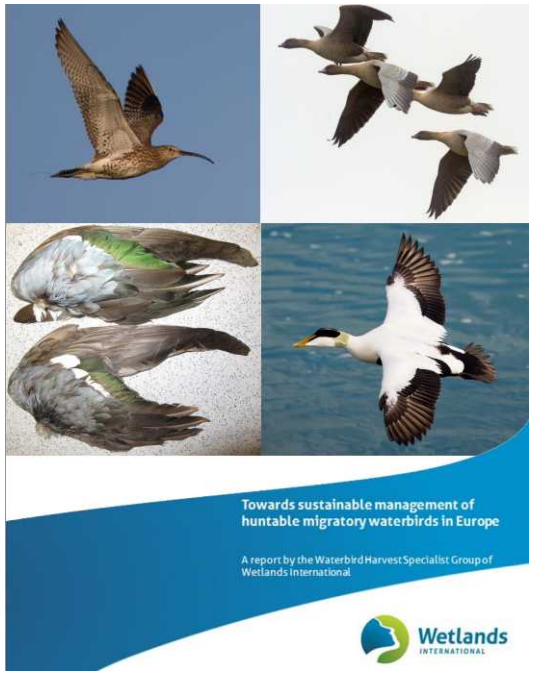
Progress so far..

- AEWA International Species Management Plan for Svalbard Pink-footed Goose – the 1st test case for adaptive harvest flyway management
- AEWA ISSAP for Taiga Bean Goose
- Publication -"*Towards sustainable management of huntable waterbirds in Europe*"
- Revision of AEWA Guidelines on Sustainable Harvest of Migratory Waterbirds

- To be adopted at AEWA MOP6..





How is sustainability assured..

- In Europe protection is afforded by Birds Directive, International Conventions, and national legislation – providing a safety net to avoid overexploitation.
- Hunting structures provide additional governance – informal adaptive management is used for sedentary species
- But declines trends are being observed for around half of huntable waterbirds in Europe – regardless of cause greater international efforts are needed to ensure hunting is sustainable
- Hunting is viewed as a variable easy to adjust, but should be fair for hunters and based on credible decision making not subjective opinion

North American Waterfowl Management Would it work in Europe?

- Adaptive harvest management (AHM) has been in place in North America since 1990's, but…

- North America – 3 countries and two languages
  - Not all EUR countries would need to be involved – non-participating countries can be considered as components of variation. Much variation in NA too
- Europe much variation in hunting regulation and systems
  - AHM does not require uniform regulations

- In Europe waterfowl monitoring not as advanced as NA
  - Precise estimates of popn size and demographic not required
- The AEWA Svalbard Pink-footed Goose ISMP shows it is possible..

How does AHM work?

- Remember that ‘adaptive management’ is only part of the process of sustainable harvest management process

- Setting allowable harvest rates does not require detailed demographic information. Essential to the process are rates of either the observed growth rate from a monitoring program ot the grow rate expected under ideal conditions – based on empirical data or on allometric models

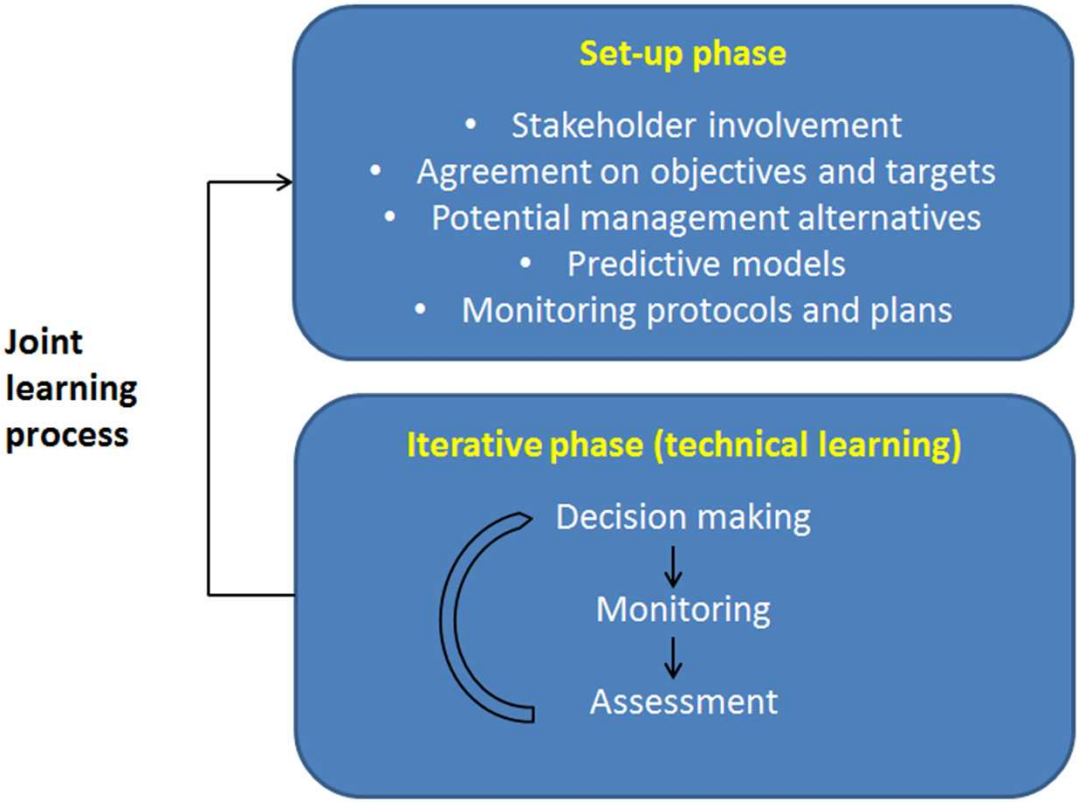
Information needs for Sustainable Harvest Management

- Biological information needs
  - Flyway definitions
  - Population delineation
  - Population estimates
  - Population growth rates and demographic rates
- Knowledge of critical life cycle phases
  - Reproductive period
  - Pre-nuptial migration
  - Vulnerable conditions e.g. moulting, extreme weather
- Harvest data
  - Bag size
  - Hunter effort
  - Age / sex composition of bag
  - Crippling rates

Decision-making & organisational framework

- Decision making framework
- Understanding the socio-ecological system of harvest
  - Links human interests to status and ecology of species
- Organisational Structure
- Information management
- Adaptive management

Decision-making & organisational framework



Process of adaptive management (from Williams et al. 2007)

Decision-making & organisational framework

- What governance structure would be needed for adaptive harvest management in Europe..
  - Regulatory instruments – Birds Directive, AEWA
  - International Working Group? – policy & technical
  - Flyway Coordination Unit? – technical support of IWG
  - National Working Groups? – this should not be a top-down process

Conclusions

- There is no technical reason why adaptive harvest management could be not applied in the Europe or even AEWA region
- Setting harvests levels does not require detailed demographic information.
- Essential to the process, however, are estimates of either the observed growth rate, or the growth rate expected under ideal conditions.
- Periodic estimates of population size are needed, as well as either empirical information or reasonable assumptions about the form of density dependence
- Annual reporting on harvest levels of waterbird populations should be gradually introduced, but some progress is underway
- Structures for implementing AHM for waterbirds could be set up under AEWA following framework of species action plannning

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