

AEWA - Championing Sustainable Harvest of Waterbirds within the African-Eurasian Region

Jesper Madsen

Professor, Aarhus University, Denmark

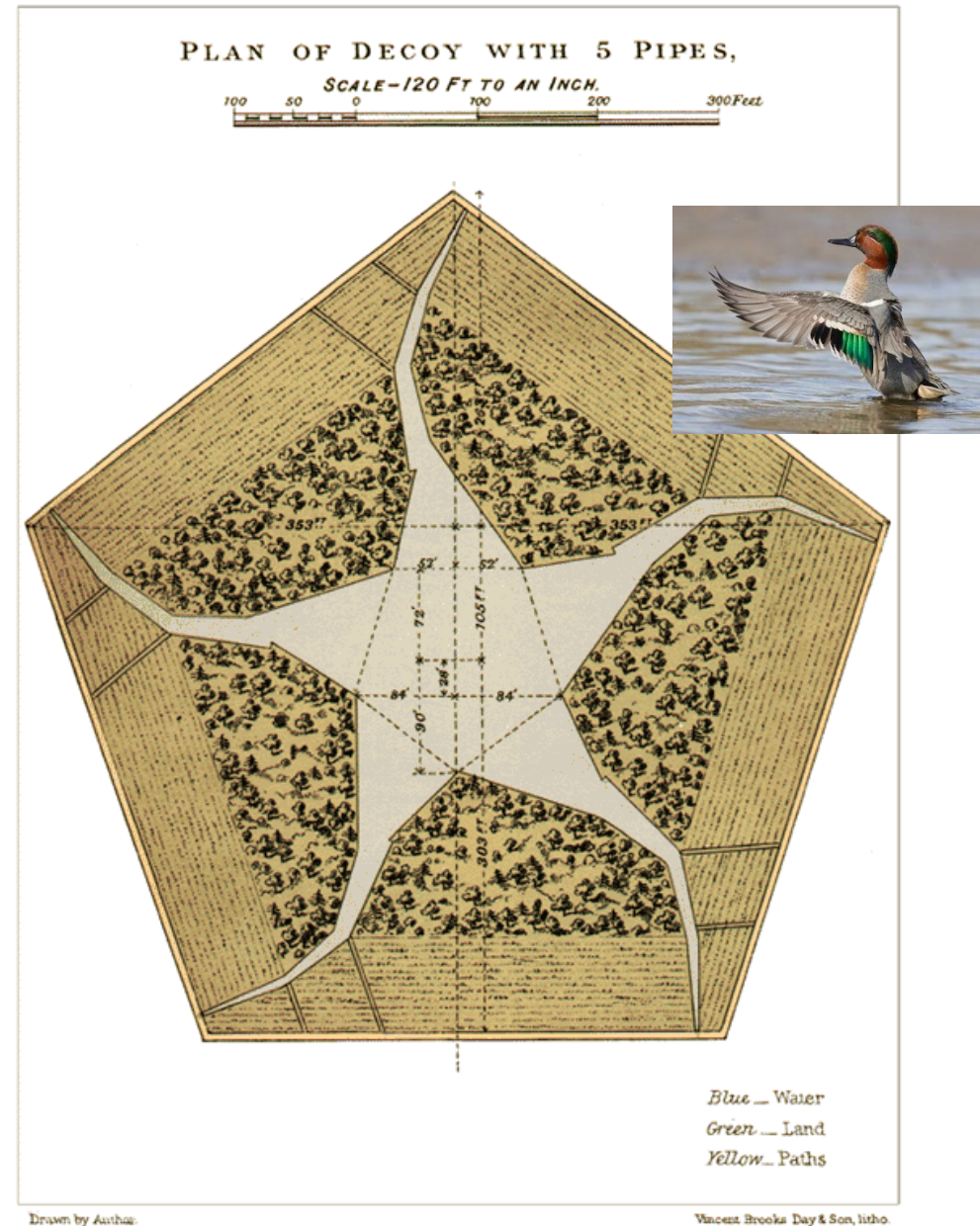
Chairman of the Waterbird Harvest Specialist Group of Wetlands International



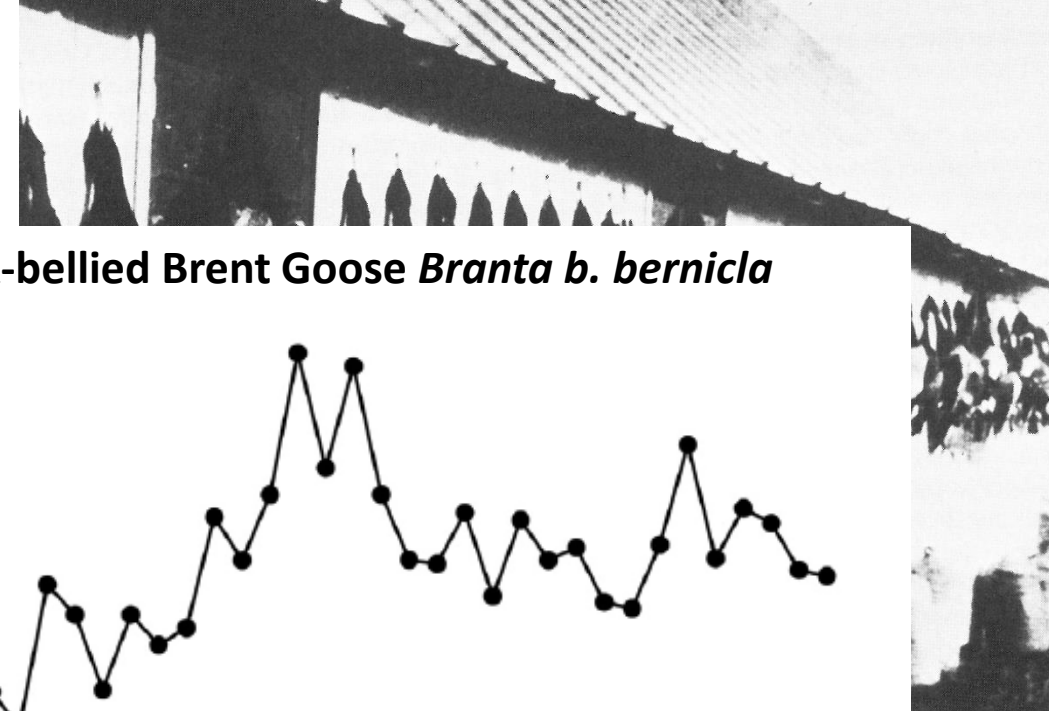


Storå, N. Mass capture of waterfowl in Northern Eurasia.
Åbo Akademi, Åbo (1968)

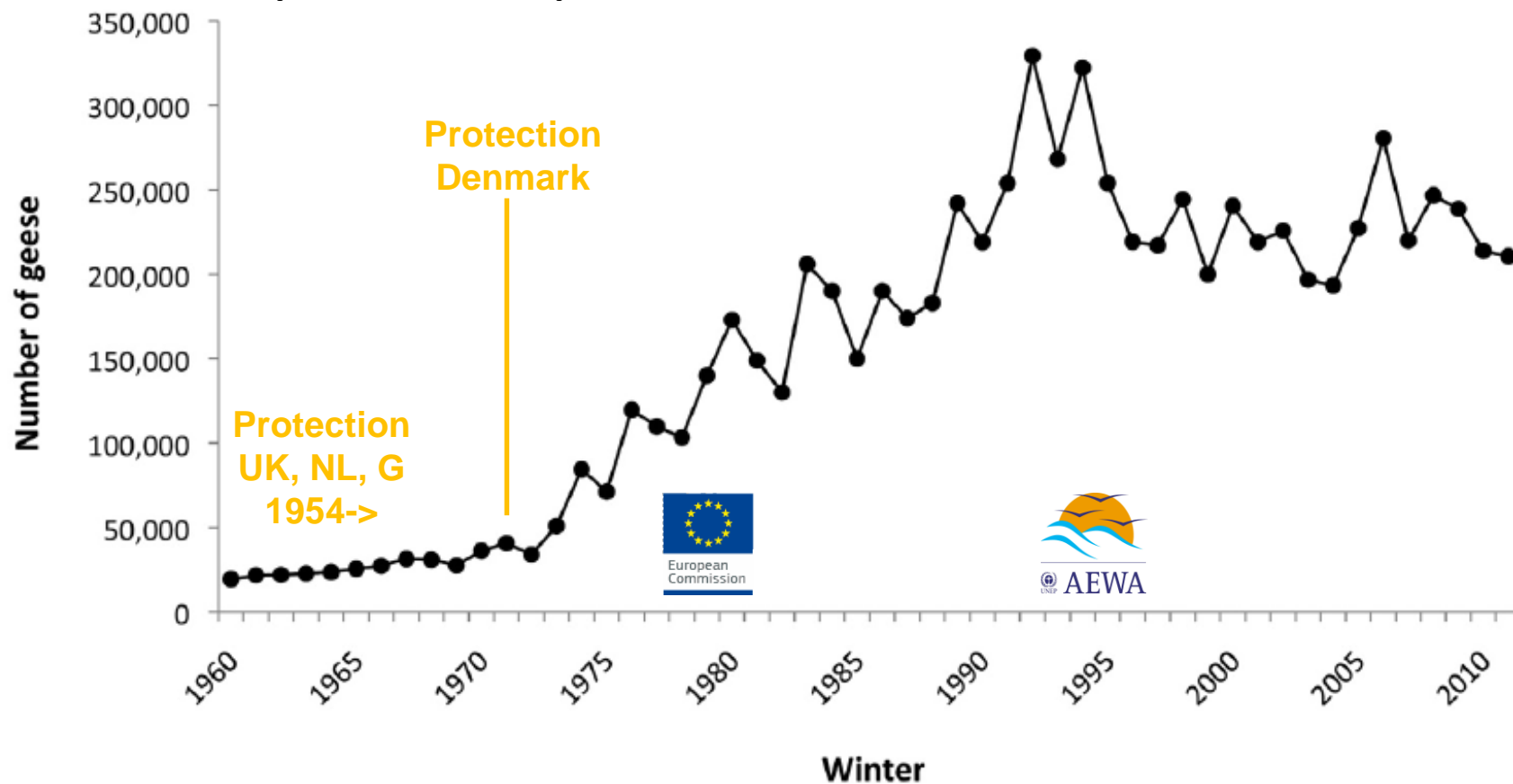
Waterbird harvesting has a long history

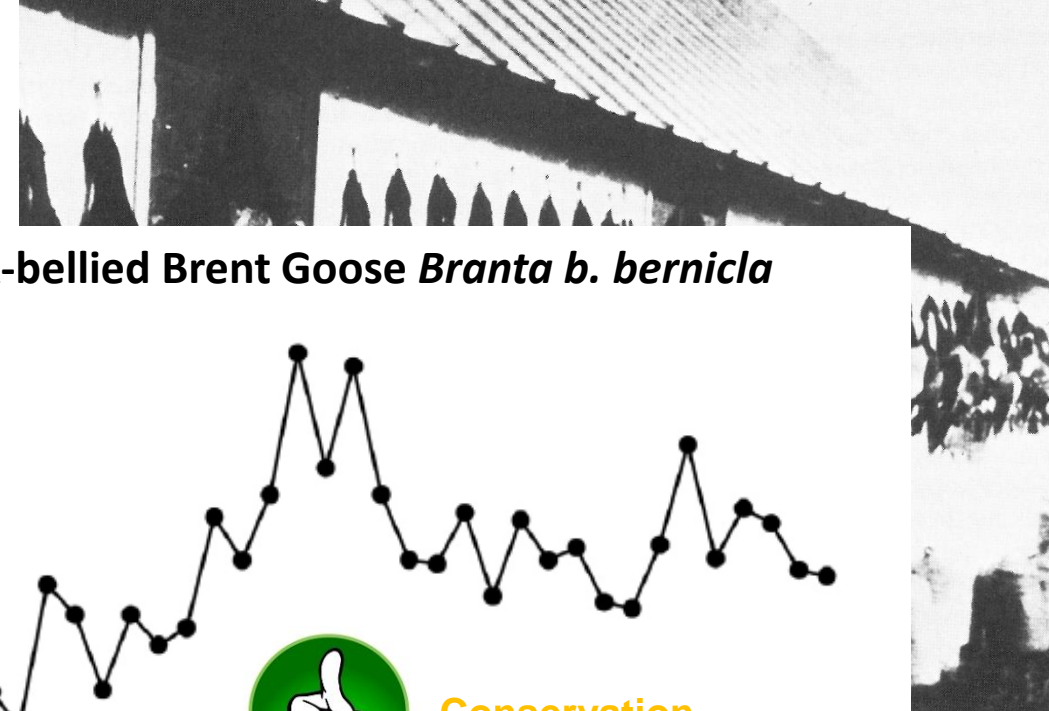


Ralph Payne-Gallwey's Book of Duck Decoys (1886)

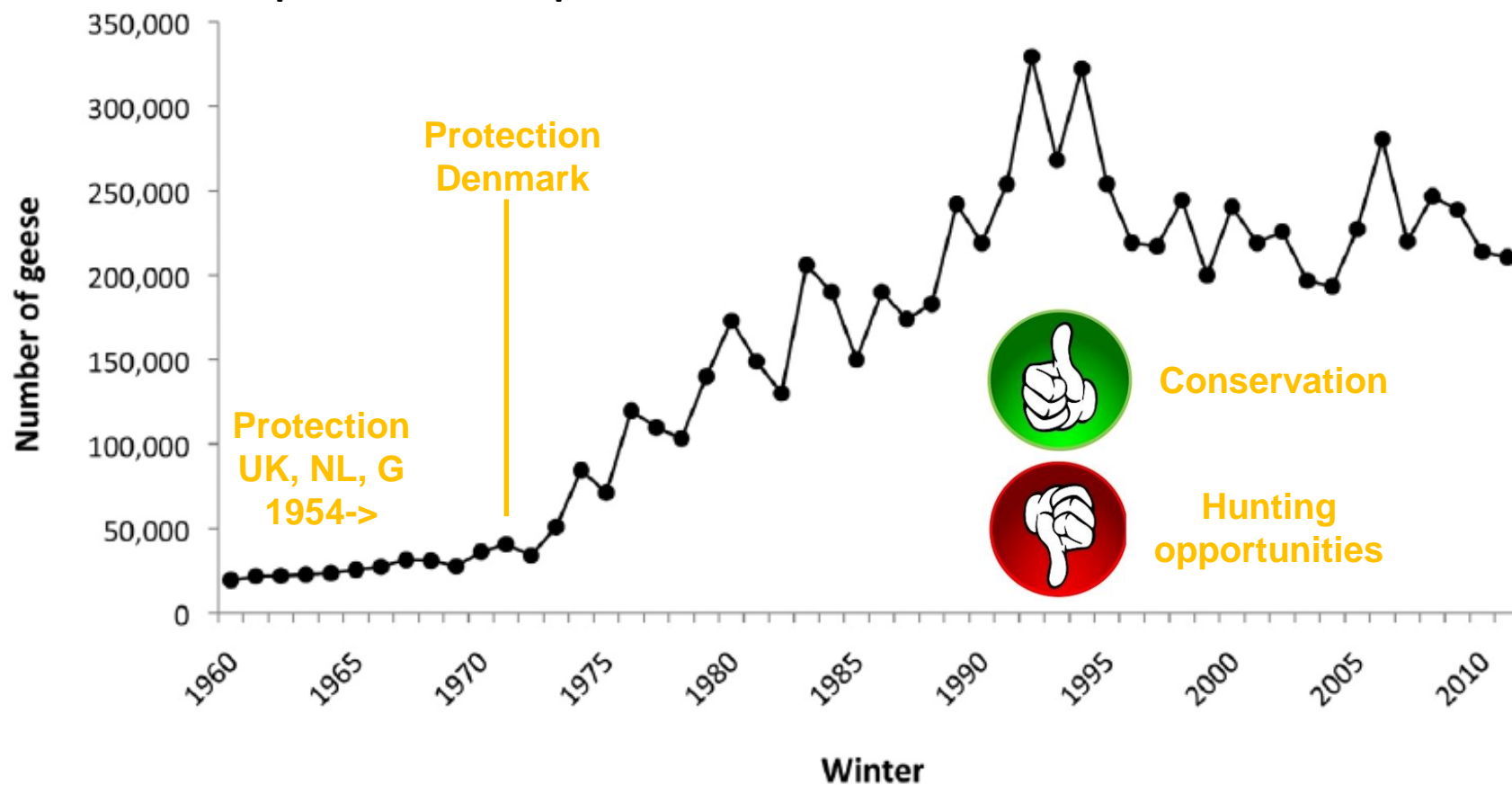


Population development Dark-bellied Brent Goose *Branta b. bernicla*





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AEWA – THE framework to make migratory waterbird harvest management succeed

- THE flyway instrument
- Goes all the way from policy to implementation on the ground
- Is flexible
- Provides guidance and training
- Recognises the importance of monitoring and research
- Recognises the importance of working with partners
- Takes a holistic approach to sustainability
- Recognises the importance of a participatory approach
- BUT: still a long way to go!

Sustainability of harvest

Impacts on populations

- Direct impact
- Disturbance
- Poisoning (lead)

Ecological

Economic

Role of harvesting

- Support of livelihood
- Market sale
- Recreation
- Habitat management
- Management tool
- Economic benefits

Ethical concerns

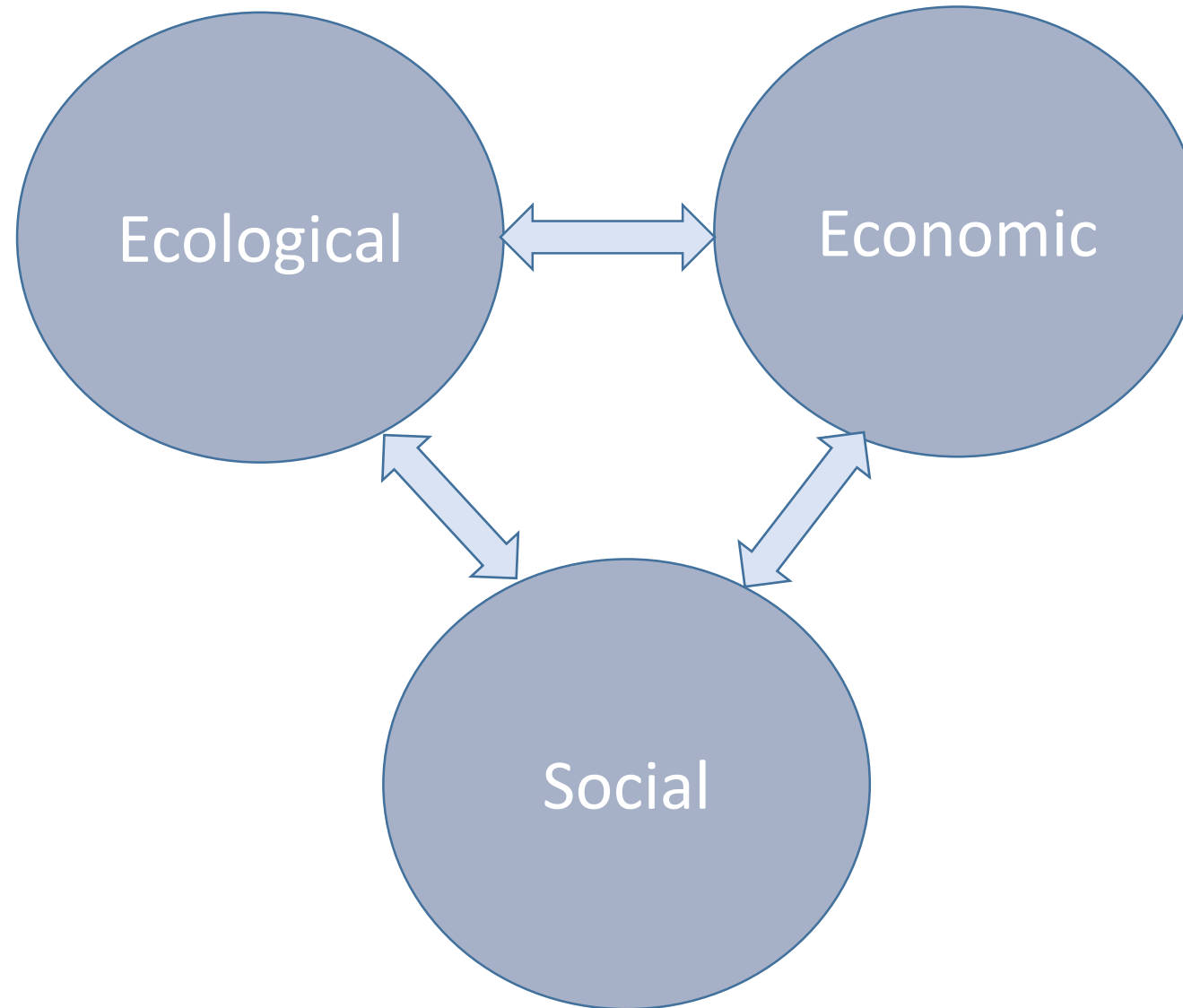
- Avoid suffering by game
- Illegal shooting
- Noise / safety

Social

Cultural values

- Identity
- Transfer of knowledge
- Training

Sustainability of harvest



Understanding modes and motivations for harvesting is essential for achieving sustainability

Varies greatly across the AEWA-region and includes several non-exclusive purposes:

- Subsistence
- Support of livelihood
- Shooting for market sale
- Recreation / sport
- Contribution to management







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Principles of sustainable harvesting (in ecological terms)

Depends on:

- Management objectives that are congruent with the renewal capacity of the resource
- Ability to effectively regulate harvest
- Understanding of the biological system
- Understanding of responses to intrinsic (density dependent) and extrinsic (environment, harvest) factors



Information needs to ensure ecological sustainability of harvest

$$N_{t+1} = N_t + N_t r_{\max} \left[1 - \left(\frac{N_t}{K} \right)^\theta \right] - h_t N_t \quad h_{MSY} = r \frac{\theta}{(\theta + 1)}, \quad H_{MSY} = rK \frac{\theta}{(\theta + 1)^{(\theta + 1)/\theta}}$$

Under circumstances with poor demographic information (counts for the vast majority of populations), minimum data requirement is:

- Delineation of populations (and emigration/immigration rates)
- Population size
- Population growth rate
- Form of density dependence (is harvest additive or compensated?)
- Harvest at flyway level

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Provided by IWC
and research
projects

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Country level
No international data collation

Conclusion: with few exceptions it is not possible to assess the ecological sustainability of harvest in the AEWA region

Risky business:

In the EU, 42% of huntable populations of waterbirds (n=83) are in decline

As long as the sustainability of harvest cannot be evaluated, a prudent approach (precautionary principle) may be to ban hunting

We can do better!

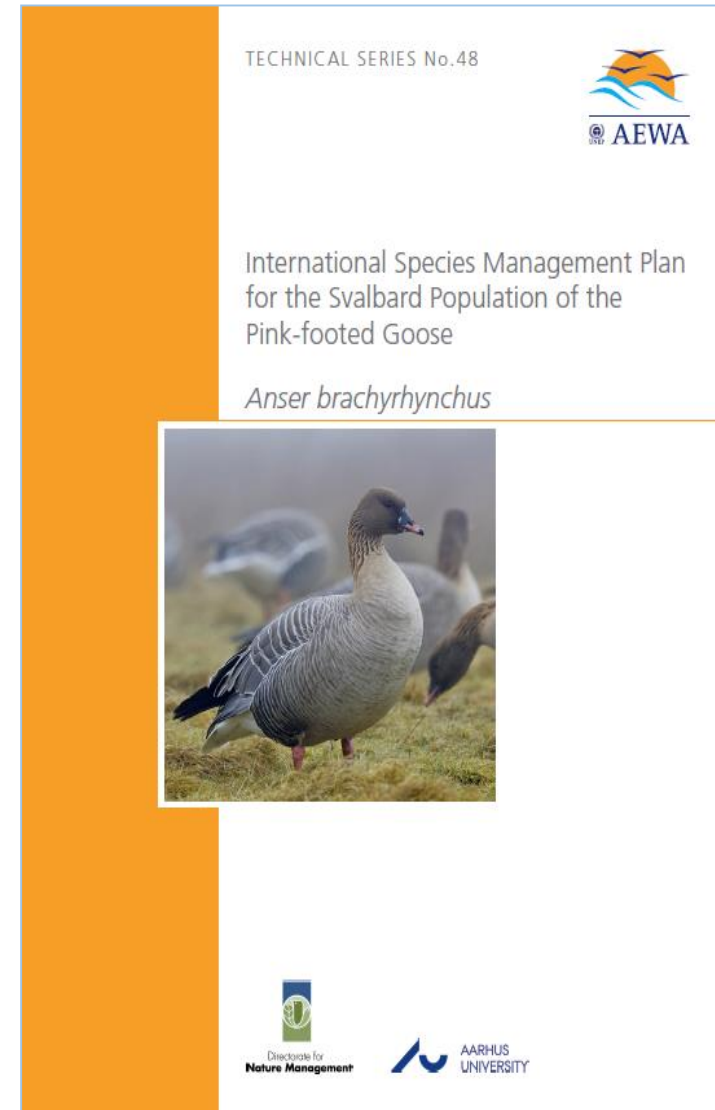
- It's in the interest of conservation
- It's in the interest of the communities harvesting waterbirds



Adaptive management: a structured and proactive way forward for flyway-based harvest management

First AEWA initiative in place (and more in the pipeline)

- Engage stakeholders at all governance levels
- Agreement on clear management objectives
- Internationally agreed actions
- Predicting consequences of actions
- Monitoring, evaluation, adjustment of actions
- Learning while taking action (institutional & social learning)
- Reducing uncertainties and risks
- Building trust
- Securing buy-in



20th Anniversary of AEWA

Making Flyway Conservation Happen

9 November 2015

Bonn, Germany

Congratulations with the first 20 years - Keep up the good work!

Thanks to the following photographers for providing pictures:

Bakary Kone

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