Adaptation and policy targets: The impact of climatic changes on the protection and hunting periods of birds
Sopeutuminen ja poliittiset tavoitteet: Ilmastonmuutoksen vaikutukset lintujen suojeluun ja metsästysaikoihin
(Presentation)
The impact of climatic changes on the protection and hunting periods of birds - results from the Hanko Bird Observatory
Introduction

- Observatory established in 1979
- Owned by the Ornithological Society of Helsinki area (Tringa)
- Situated in the nature conservation area of Uddskatan and Important Bird Area (IBA; SYKE & BirdLife Finland)
- Easily attainable
Activities

1. Counting of visual migration
   (standardized morning counts – 4 hours)
Activities

2. Counts of staging birds (e.g. waterfowls)
Activities

3. Ringing (mainly mist-netting in standardized sites, but also wader traps)
Observation activity

Year | Observations
-----|-------------
1980 | 31.8
1985 | 30.4
1990 | 30.6
1995 | 31.0
2000 | 31.12
2005 | 31.12
Statistics

Digital databases include:

- 30 million observed individuals/300 species
- > 270 000 ringed individuals/190 species
- ca.40 active observers/year
- One head observer: Aatu Vattulainen
- Over 80 publications (pdfs on website)
Monitoring migration phenology and occurrence of species

White Wagtail example
Spring migration and climate change

- Warming winter and spring advances bird migration (1)

Climate and spring migration

- Species specific responses

63. Rainio et al. (2006) Journal of Avian Biology
Effects in food chain
- change in predation risk

Increasing predation risk in long-distance migrants

Decreasing predation risk in short-distance migrants

Median migration of 36 passerines

Lehikoinen, unpublished
Timing of migration matters

• Species that have not advanced their migration in relation to climate change have declining populations

Many long-distance migrants have declined, e.g. wood warbler

Many short-distance migrants have increased their population size, e.g. wood lark

Climate change may be beneficial for resident species by improving winter survival, e.g. black woodpecker.

Autumn migration of waterfowl

- 14 study species
- 5 delayed their migration
- Nearly all had tendency towards later migration
- Delay on average 0.37 day/year = 11 day in 30 years
- Increasing hunting potential in Finland

Lehikoinen & Jaatinen, unpublished
Grey-lag goose, *Anser anser*

Wigeon, *Anas penelope*

Lehikoinen & Jaatinen, unpublished
Summary

- Migration dates are changing
- Spring migration is advancing and may affect breeding results
- Long-distance migrants are declining
- Short-distance migrants and resident species may benefit
- Autumn migration may advance or delay (prolonging waterfowl hunting season)
- Mismatches in foodweb
Thank you for your time!

www.tringa.fi/fi/hangon-lintuasema/hangon-lintuasema/
www.tringa.fi/fi/julkaisuluettelomme.html

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