Natura 2000 Seminar for the Boreal Region

9-12 October 2023

Helsinki, Finland

Background Document 4th Boreal Biogeographical seminar

Contents

1. Developing more effective conservation and research - the case of the Siberian flying squirrel

Webpage: https://helda.helsinki.fi/items/9c4686c0-149d-4cb1-a615-d8520425d8f2

Contact: Jokinen Maarit, maarit.jokinen@syke.fi

Based on thesis: Developing more effective conservation and research: the case of the Siberian flying squirrel

Funding: Maj and Tor Nessling Foundation

Summary

How (not) to protect and monitor the Siberian flying squirrel

We have studied the effects and side-effects of legal protection of the Siberian flying squirrel *Pteromys volans* in Finland, and re-evaluated the methods and results of the monitoring scheme for the species. The poster gives an interdisciplinary synthesis of four different studies showing that we should rethink the way the species is protected and how its status is evaluated in Finland.

Our results indicate that i) only 3% of all the potential breeding sites and resting places that would have been located on forest logging areas could have been recognized, ii) the narrow definition of the prohibition to 'deteriorate or destruct' the sites does not safeguard the ecological functionality of nest sites, iii) results of the national population monitoring scheme are likely misleading and iv) protection of the species is politicized in Finland and about half of the area occupied by the species could be owned by persons who say they would prefer not to have it on their lands.

2. Europe Freshwater Prioritization Tool (TEFOP)

Webpage: https://www.confluvio.com/project/prioritization-tool

Contact: Julia Boverhoff, julia.boverhoff@tnc.org, , Andras Krolopp, akrolopp@tnc.org, , Max Ricker, max.ricker@tnc.org

Funding: the Enterprise Rent-A-Car Foundation funding

Summary

The TNC Europe Freshwater Outcomes Prioritization tool (TEFOP) was designed by TNC to help identify priority areas for freshwater conservation and restoration. The tool was developed with two core functions in mind: 1) allow users to better understand the spatial nature of freshwater-related data and indicators through a user-friendly mapping interface, and 2) to

allow users to run custom analyses to identify geographic priorities where conservation interventions could be applied to address various threats to water security and biodiversity loss. The tool has widespread applications and is intended to serve the broader European conservation community in guiding freshwater conservation. The tool's mapping interface serves as a powerful communication tool by visually displaying the 'hotspots' of freshwater biodiversity, threats to water security, and Europe's last remaining 'wild' freshwater systems. Beyond this general application, the highly customizable nature of the tool also serves user-specific needs. For example, a user looking to plan freshwater restoration interventions which both halt biodiversity loss and improve resilience to flooding for a local community can design a prioritization analysis to identify areas with the highest potential for this type of intervention.

The TEFOP tool is currently only available as a beta version and can be used by agreement with TNC. However, by early 2024 TNC expects to release a fully public-facing, free-for-use version of the tool. TNC is happy to help users understand the tool better and to collaborate with partners to improve the tool to better meet user needs. For any questions or for a detailed demo of the tool, please contact Max Ricker (max.ricker@tnc.org).

3. Conny Jacobson, swedishepa.se

4. Helmi Habitats Programme Restores the Waterfowl Lakes in Finland

Webpage: https://ym.fi/en/helmi-habitats-programme/restoring-aquatic-bird-habitats-and-wetlands

Project name and number: Lintuvedet, VN/3498/2023

Contact: Laura Härkönen, laura.harkonen@syke.fi

Funding: Ministry of the Environment

Summary

Half of the aquatic bird species breeding in Finnish inland waters have become endangered in the 2000s. Waterfowl populations have suffered from e.g. deterioration of breeding habitats with declining populations especially on eutrophic lakes. To tackle further decline in waterfowl populations, a unique Helmi Habitats Programme carries out extensive restoration efforts during 2021-2030. Within the programme, 200 Finnish Natura 2000 Special Protected Area (SPA) -sites will be restored to reverse the unfavorable trend in their waterfowl populations. Restoration measures cover both established methods and also some innovative measures for waterfowl habitats.

5. Implementation of the national pollinator strategy is advancing in Finland

Webpage: www.polyttajat.fi

Contact: Janne Heliölä, janne.heliola@syke.fi

Funding: the Finnish Ministry of Environment

Summary

Following the EU Pollinators Initiative, national pollinator strategy was approved for Finland in 2022. The strategy sets tasks on conserving pollinators for various stakeholders on both public and private sector. Implementing these is supported by a two-year PÖLYKOORDI project run by Finnish Environment Institute. The project provides a national "help desk" on conservation of pollinators, providing expert assistance, communication services and materials for anyone needing them.

6. Citizen science is essential in monitoring pollinators in Finland

Webpage: www.polyttajat.fi

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Funding: the Finnish Ministry of Environment

Summary

Finland has a long tradition in using citizen science for monitoring moths and butterflies. These monitoring programmes have been running since the 1990s and provide the backbone for assessing developments in the status of pollinators in Finland. Also monitoring of bumblebees was started in 2019.

7. Finnish national pollinator monitoring scheme

Webpage: https://www.syke.fi/fi-FI/Tutkimus__kehittaminen/Tutkimus_ja_kehittamishankkeet/Hankkeet/Kansallisen_polyttajaseurannan_kaynnistaminen_POLYSEURA

Contact: Mikko Kuussaari, mikko.kuussaari@syke.fi, Finnish Environment Institute

Funding: the Finnish Ministry of Environment

Summary

A national pollinator monitoring scheme was launched in Finland in summer 2002. It focuses on the most important pollinator groups, bumblebees, solitary bees, hoverflies and butterflies following the proposal for an EU pollinator monitoring scheme by Potts et al. (2021) and the Finnish national pollinator strategy (2022). The scheme is funded by the Finnish Ministry of Environment (via PÖLYSEURA-project 2022-2024) and coordinated by the Finnish Environment Institute.

During the first year, pollinators were sampled in 134 sites around the country. The study sites represented the main habitat types for pollinators in Finland: semi-natural grasslands, commercial forests, protected forests, forest road verges, arable field margins and alpine fells. Two 250 meters transect routes and four standard pan traps with blue, white and yellow bowls were placed in each site with some exceptions. Transect counts were made four times and the pan traps were emptied three times during the two-month sampling period in June and July.

8. Precautionary principle on protection of primary and old-growth forests has not been implemented in Finland

Webpage: https://koneensaatio.fi/metsan-puolella-english

Contact: Mari Pantsar, mari.pantsar@koneensaatio.fi, Lauri Alaviitala, lauri.alaviitala@koneensaatio.fi

Funding: Kone Foundation funding for Old-growth forest working group “Luonnonmetsä” for mapping of primary and old-growth forests in Finland

Kone Foundation has funded a vast field work targeted to state-owned lands to map primary and old-growth forests in Finland. Kone Foundation presented the mapping results to a group of scientists in a workshop on 5.9.2023 led by Panu Halme, Senior Lecturer of conservation biology, University of Jyväskylä. Scientists signed an open letter to advance the protection of primary and old-growth forests in Finland. Kone Foundation wants to share this information on these mapped sites and the thoughts of the scientists to contribute to the work for national criteria for primary and old-growth forests. Kone Foundation has launched a wide-scale funding programme on forests called “Metsän puolella”. This initiative aims at diversifying discussions around forests by bringing together researchers, artists, journalists and activists working with forests.