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Närings-, trafik- och miljöcentralen
Centre for Economic Development, Transport and the Environment

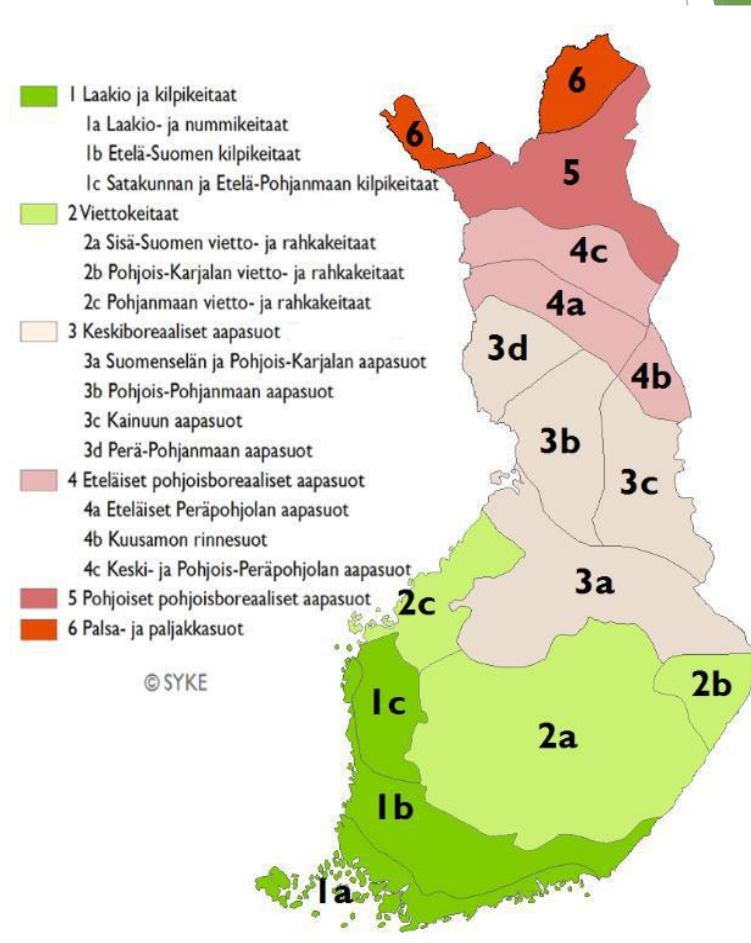
Protection of Wetlands in Finland

Luokkanen Eira

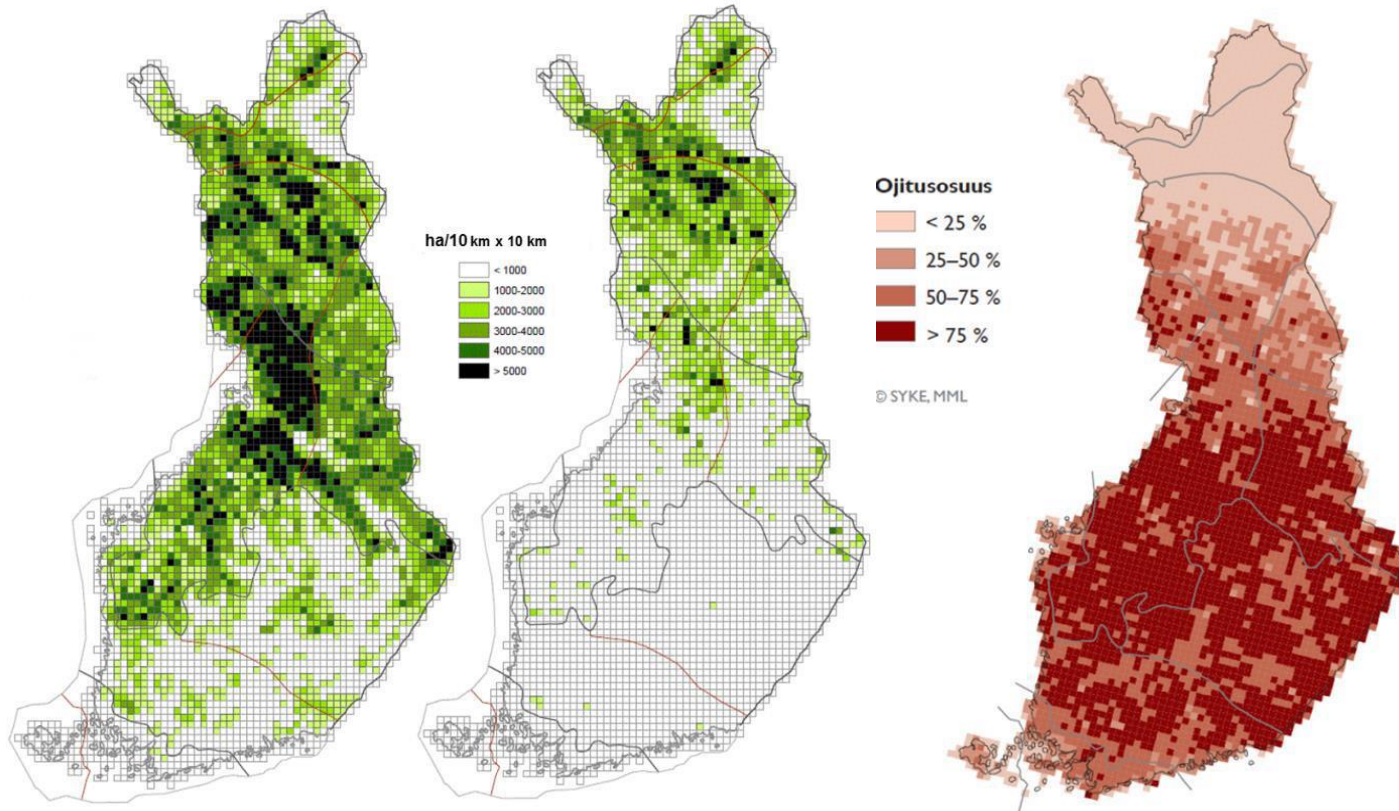
30.9.2019

CLASSIFICATION OF MYRE TYPES

- ▶ Mire types (50)
 - ▶ Mire combination types (19)
 - ▶ Mire systems
 - ▶ Transition series
 - ▶ Mire landscapes
 - ▶ Mire vegetation zones
-
- ▶ Information from various sources



Human impact



Originally appr 10.3 million ha
(Vasander 1998)

Forest inventory 1950's
Forest inventory 2010's
(Ilvessalo 1956, Korhonen & al. 2017)

	Tot peatland	Undrained mires
Forest inventory 1950's	9,7 milj. ha	8,8 milj. ha
Forest inventory 2010's	8,8 milj. ha	4,1 milj. ha

IUCN Red List of Ecosystems into use

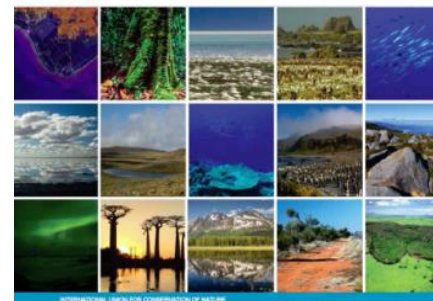
- ▶ From national evaluation system into the international IUCN RLE system
 - ▶ Finland participating in developing the system
 - ▶ Tested since 2013
 - ▶ IUCN accepted into use in 2014
 - ▶ Transparent, repeatable and comparable system
 - ▶ Taken into use in Europe by Finland, Norway and France
- ▶ <https://iucnrle.org/resources/key-documents/>



Guidelines for the Application of IUCN Red List of Ecosystems Categories and Criteria

Edited by L.M. Bland, D.A. Keith, N.J. Murray and J.P. Rodriguez

Version 1.0



INTERNATIONAL UNION FOR CONSERVATION OF NATURE



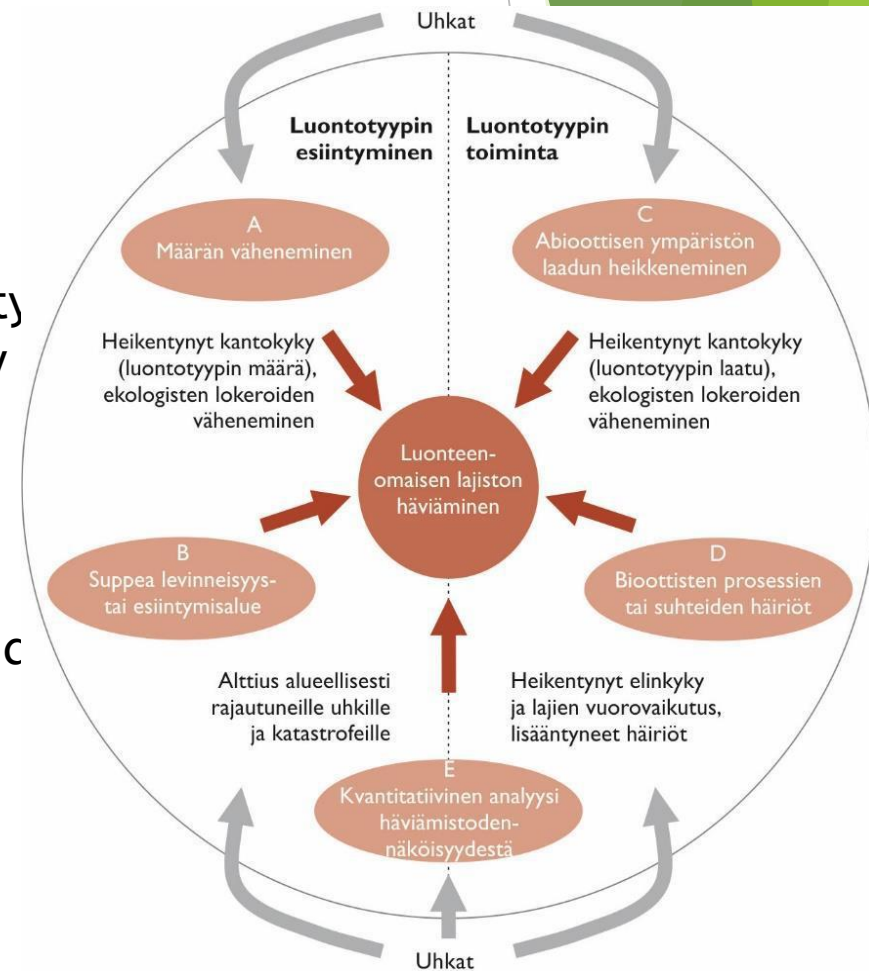
More precise evaluation of the quality of change

- ▶ The goal was to have measurable quality indicators
 - ▶ Conceptual models describing the characteristics of the nature types, processes and the threats
 - ▶ The relative seriousness of the change
 - ▶ Definition of the state of the collapse
 - ▶ Challenges: the sufficiency of the data, also expert judgement used

The status is defined by the criteria according to which the risk for extinction is the highest

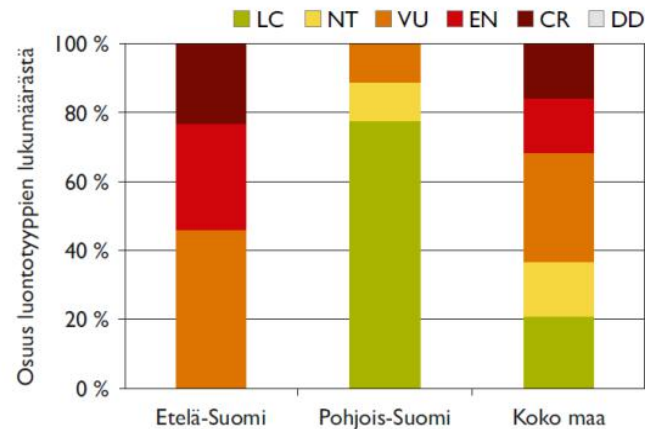
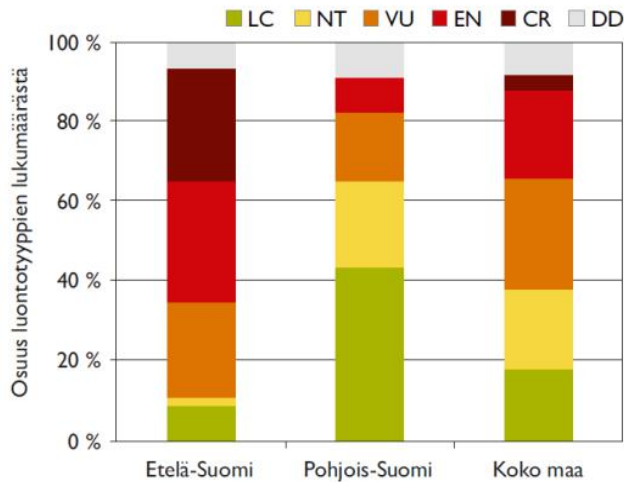
Criteria and time periods

- A = Quantity (lowering)
- B = Rarity (+declining)
- C = The change in the abiotic quality
- D = The change in the biotic quality
- E = Quantitative analysis of the probability of the extinction
- Past 50 years
- Future 50 years
- Period of 50 years including past and future
- Historical change (appr 1750 —)



Threatened mire types

- ▶ 69 mire types evaluated: 57 % threatened
 - ▶ appr 35 -40 % of the undrained area belong to the threatened habitats
 - ▶ Reasons ditching, changing into farmland and forestry methods
 - ▶ Left: mire types, Right: mirecombination types



Action plans ensure biodiversity

- ▶ The Government and the environmental administration have launched extensive nature conservation programmes, based on the Nature Conservation Act and various action plans for safeguarding biodiversity.
- ▶ The most important action program for forest protection is Forest Biodiversity Programme for Southern Finland (METSU)
- ▶ Other action plans:
 - ▶ National action plan for species protection
 - ▶ Action plan for improving the state of threatened habitat types in Finland
 - ▶ Development of recreational use of nature and nature tourism

Nature conservation programmes in Finland

Finland has six national nature conservation programmes that cover the following:

- ▶ Mires
- ▶ Waterfowl habitats
- ▶ Eskers
- ▶ Herb-rich forests
- ▶ Shore areas
- ▶ Old-growth forests

Most of these areas belong to the Natura 2000 network

Nature conservation programmes in Finland

- ▶ The implementation of the programmes takes place under the Finnish Nature Conservation Act
- ▶ The state must negotiate with landowners for the implementation of private lands belonging to the conservation programme areas.
- ▶ Implementation can take place by:
 - ▶ selling the land area to the state
 - ▶ land swap
 - ▶ establishing a private nature conservation area (compensation payments)
- ▶ The law also allows the implementation of conservation programmes without the consent of the landowner, but 99 % of the programme areas have been implemented voluntarily

Financing of nature conservation

- ▶ The Finnish State responsible for financing
- ▶ The Ministry of the Environment and the Ministry of Agriculture and Forestry responsible for co-ordinating and implementing the funding
- ▶ In 2017 funding for the implementation of nature protection programs EUR 18 630 000

Forest Biodiversity Programme for Southern Finland (METSO)

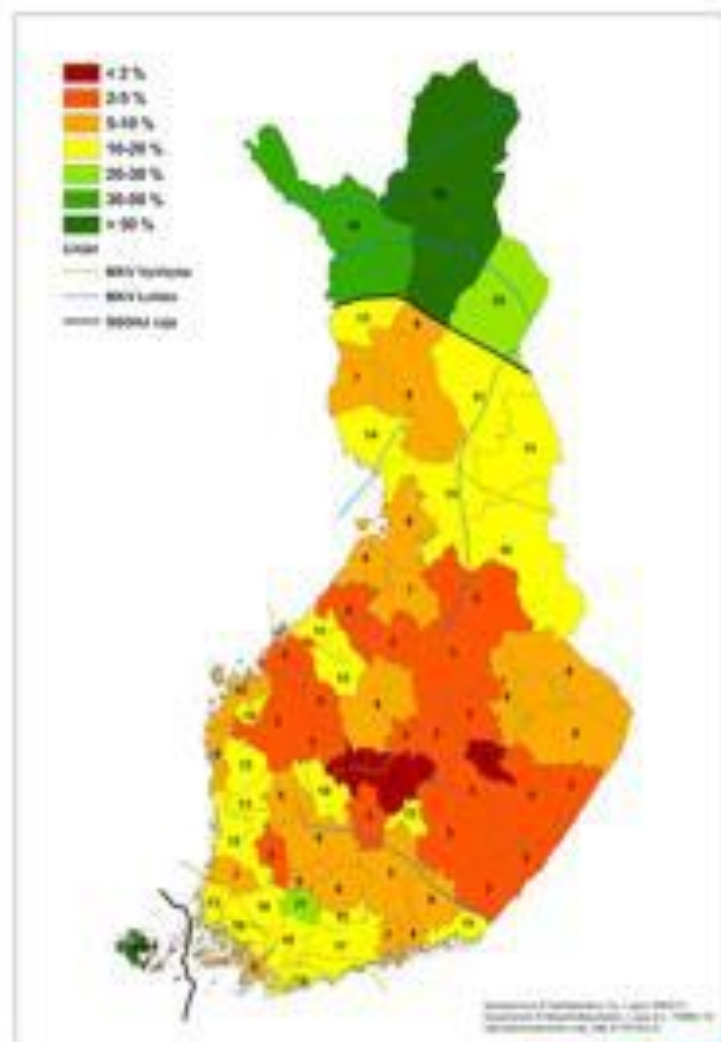
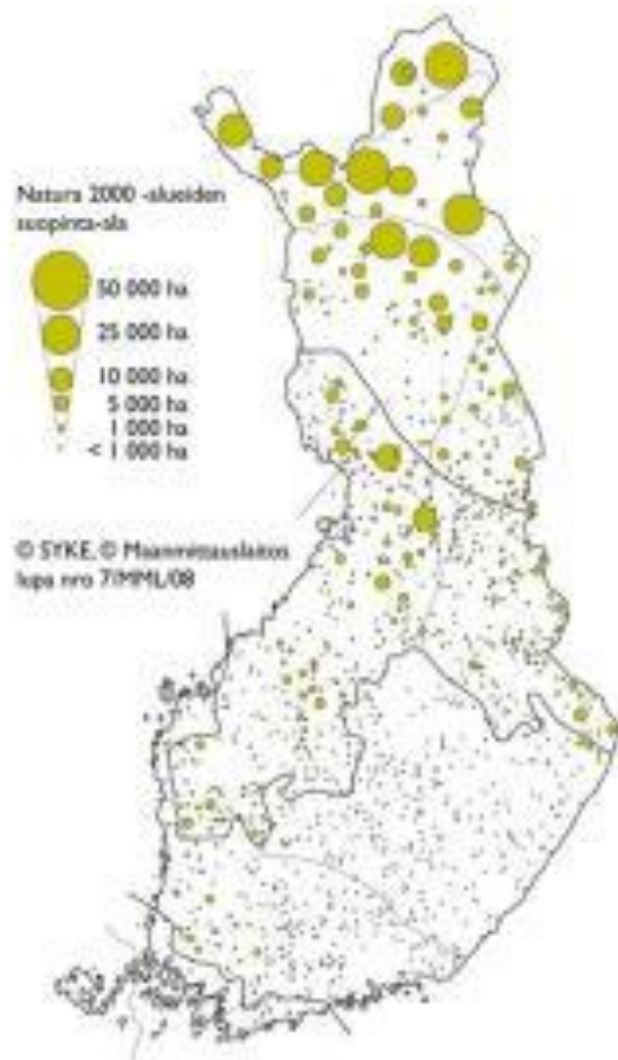
- ▶ The programme aims to activate voluntary-based conservation agreements between forest owners and authorities
- ▶ METSO Programme offers three options for forest owner:
 - Permanent protection
 - Temporary protection
 - Nature management in forest habitats
- ▶ The Finnish government's objective by 2025 is to have sites covering about 96 000 hectares
 - ▶ In Lapland, about 9,000 hectares have been implemented in the Metso program.
 - ▶ One third of the area was implemented in the NATNET Life + project 2012-2017



Governance of the protected areas

- ▶ Metsähallitus administrates State owned land
- ▶ Metsähallitus Natural Heritage Services responsible for the ecological management of protected areas.
- ▶ Metsähallitus Natural Heritage Services also carries out habitat restoration and ecological management work in many privately owned protected areas

The Protection of Finnish mires (13 %)



Further steps planned by the Ministry of the Environment

- ▶ Expert network ;
 - ▶ Developing infosystems (Finnish Ecosystem Observatory FEO-hanke);
 - ▶ Developing nature reporting and certification system
- ▶ Reporting of Nature directive (was in april 2019)
- ▶ The report for Finland's biodiversity strategy and action plan 2019
- ▶ EU's Prioritised Action Framework (PAF) -programme for the financing period 2021-2027
- ▶ Project "Heikentyneiden elinympäristöjen tilan parantaminen"
- ▶ A strategic project of the ME 2019-2020: pilot projects and reports. Pilot projects with new resources for funding and new ways of working + new information for different types of myre and wetland projects • YM: A. Alanen, P. Gummerus-Rautiainen ja E. Hyvärinen; SYKE: koordinaattori
- ▶ The goal is to have a new expanding action plan starting from 2021 (comparable to METSO)

Thank you for information, sources

- ▶ Aulikki Alanen, Ministry of the Environment
- ▶ Jouni Rauhala, Lapland ELY-centre
- ▶ Pauliina Kulmala, Metsähallitus
- ▶ Links to some sources:
 - ▶ Finland - The land of mires
 - ▶ https://helda.helsinki.fi/bitstream/handle/10138/37961/FE_23_2006.pdf?sequence=6&isAllowed=y
 - ▶ Ecological restoration in drained peatlands - Best practices from Finland
 - ▶ <https://julkaisut.metsa.fi/julkaisut/show/1733>