



REPUBLIC OF ESTONIA  
MINISTRY OF THE ENVIRONMENT

# Peatlands and nature conservation in Estonia

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# Concepts

- **Peatland** – all areas where peat is or was formed
- **Mire** – peatlands in natural conditions (not drained) still forming peat
- **Fen** – minerotrophic mires
- **Bog** – ombrotrophic mires



# Area of open mires in Estonia

**Open mires ~ 240 000 - 250 000 ha**

**Wet forests ~ 85 000 ha**

**~ 2/3 are bogs, 1/3 fens**



# Peatland protection before EU

- **First protected mire in 1938, to protect golden eagles nests in Ratva bog**
- **30 Mire Conservation Areas in 1981**
- **In April 2004, before submission of Natura 2000 network - 145 000 ha different mire habitats were under nature protection**



# EU law

- **Birds Directive (2009/147/EC)**

  - Annex I species

  - Migratory species

- **Habitats Directive (92/43/EEC)**

  - Annex I habitat types

  - Annex II species



## Natura 2000 Network

- **Special Protection Areas (SPA)**  
for bird's habitats protection
- **Sites of Community Importance (pSCI -> SCI -> SAC)**  
for plant's and animal's habitats and habitat types protection

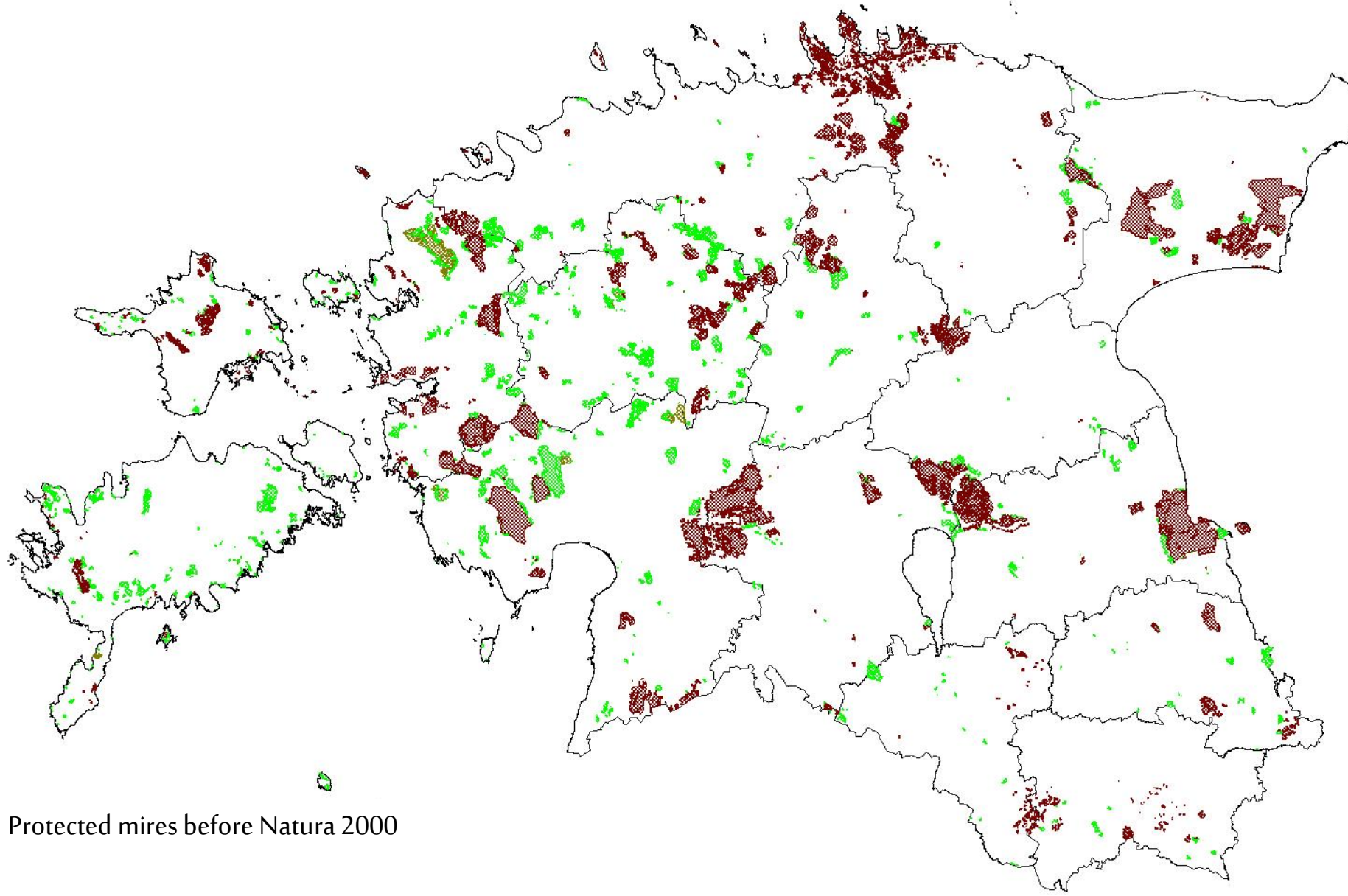
# Mire habitats in Habitats directive

- **7110\*** – active raised bogs
- **7120** – degraded raised bogs still capable of natural regeneration
- **7140** – transition mires and quaking bogs
- **7150** – depressions on peat substrates of the *Rhynchosporion*
- **7160** – mineral-rich springs and springfens
- **7210\*** - calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*
- **7220\***- petrifying springs with tufa formations
- **7230** – alkaline fens
- **9080\*** - deciduous swamp woods
- **91D0\*** - bog woodlands

# Peatland protection within EU

- **About 35 000 ha of protected mires have been added during Natura 2000 process**





Protected mires before Natura 2000

Protected mires, designated during Natura 2000 process



# Status according EU report

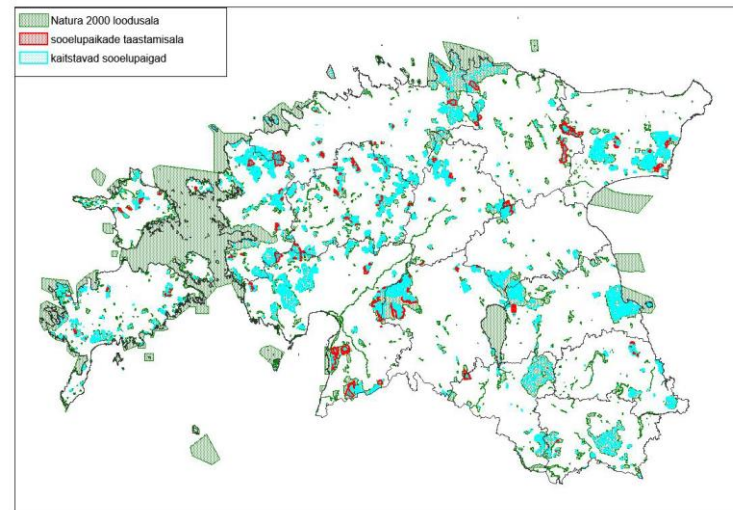
Habitat type	Range	Area	Struc. & Func.	Future	Overall assessm.
<b>7110*</b> – active raised bogs	Favourable	Favourable	Unfavourable- Inadequate+	Favourable	Unfavourable- Inadequate+
<b>7120</b> – degraded raised bogs still capable of natural regeneration	Favourable	Unfavourable- Inadequate+	Unfavourable- Inadequate+	Favourable	Unfavourable- Inadequate+
<b>7140</b> – transition mires and quaking bogs	Favourable	Unfavourable- Inadequate	Unfavourable- Inadequate+	Unfavourable- Inadequate+	Unfavourable- Inadequate+
<b>7150</b> – depressions on peat substrates of the <i>Rhynchosporion</i>	Favourable	Favourable	Favourable	Favourable	Favourable
<b>7160</b> – mineral-rich springs and springfens	Favourable	Favourable	Favourable	Unfavourable- Inadequate	Unfavourable- Inadequate
<b>7210*</b> - calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	Favourable	Favourable	Unfavourable- Inadequate	Unfavourable- Inadequate	Unfavourable- Inadequate
<b>7220*</b> - petrifying springs with tufa formations	Favourable	Unfavourable- Inadequate +	Unfavourable- Inadequate X	Unfavourable- Inadequate X	Unfavourable- Inadequate X
<b>7230</b> – alkaline fens	Favourable	Favourable	Unfavourable- Inadequate -	Unfavourable- Inadequate	Unfavourable- Inadequate -
<b>9080*</b> - deciduous swamp woods	Favourable	Favourable	Unfavourable- Bad	Unfavourable- Inadequate -	Unfavourable- Bad
<b>91D0*</b> - bog woodlands	Favourable	Favourable	Unfavourable- Inadequate -	Unfavourable- Inadequate	Unfavourable- Inadequate -

# Nature Conservation Development Plan

- **At least 10 000 ha of fen and transition mire habitats and raised bog margins (lagg-zones, mixotrophic and ombrotrophic forests, degraded raised bogs still capable of natural regeneration) in protected areas are restored**
- **Degraded ecosystems have been rehabilitated, e.g. 1000 ha degraded peatlands (cut-over peatlands) rehabilitated or restored**

# Action Plan for Protected Mires

- **Aim – conservation and restoration of biodiversity and ecosystem services of mire habitats in protected areas**
- **Status, Threats and Pressures, Objectives, Actions, Timetable and Budget**
- **List of restoration areas**



# Reasons for restoration need

- **More than 50% of Estonian mires are drained**
- **Endangered habitats and species**
- **Drained peatlands are important CO<sub>2</sub> emitter**
- **Degraded mires in protected areas**



# Restoration priorities

- **International importance – Ramsar, Natura 2000**
- **Restoration potential**
- **Cost-effectiveness**
- **Aims in management plans of protected areas**
- **Integration of aims both for habitats and species protection**



# Actions

- **Establishing optimal protection regime**
- **Eliminating harmful side effects of different activities**
- **Planning infrastructure for visitors**
- **Compiling and executing restoration projects**
- **Data corrections and new inventories**
- **Monitoring**
- **Capacity building**
- **Scientific research**



# Financing

**Cohesion Fund - 54 MEUR for nature conservation and biodiversity actions in 2014 – 2020, including 26,7 MEUR for habitats restoration**

## **Activities:**

- **Restoration of threatened habitats and the habitats of threatened species (grasslands, mires, rivers, heaths)**
- **Investments necessary for management of semi-natural grasslands (small bridges, roads)**
- **Reconstruction of infrastructure for visitors in protected areas**

# **LIFE projects**

- **LIFE12 NAT/EE/000860 Springday  
835 224 EUR**
- **LIFE14 NAT/EE/000126 Mires Estonia -  
2 815 576 EUR**
- **Estonian involvement in German LIFE  
project application 2015 Peat-restore,  
(Climate change mitigation „Reduction of  
CO2 emissions by restoring degraded  
peatlands in Northern European Lowland“).**



# Benefits from EU

- **More information about habitats and species**
- **More effective nature protection**
- **More money for nature conservation actions**





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# Thank you!

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