



REPUBLIC OF ESTONIA
MINISTRY OF THE ENVIRONMENT



Mainstreaming Biodiversity in Agricultural Landscapes: the case of Estonian grasslands

Kadri Möller, Merit Otsus

Ministry of the Environment

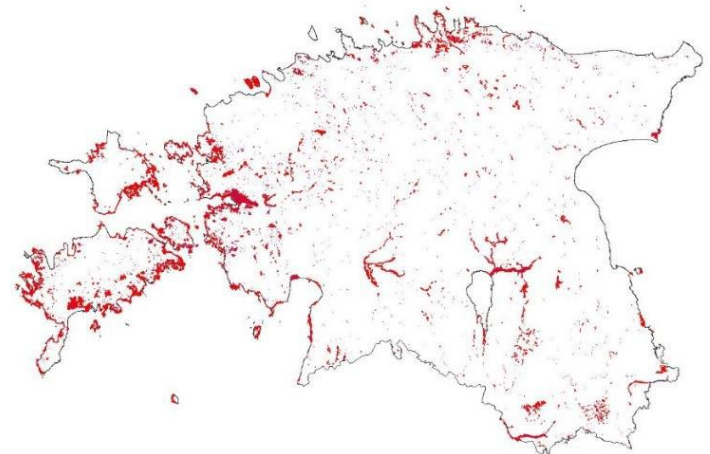
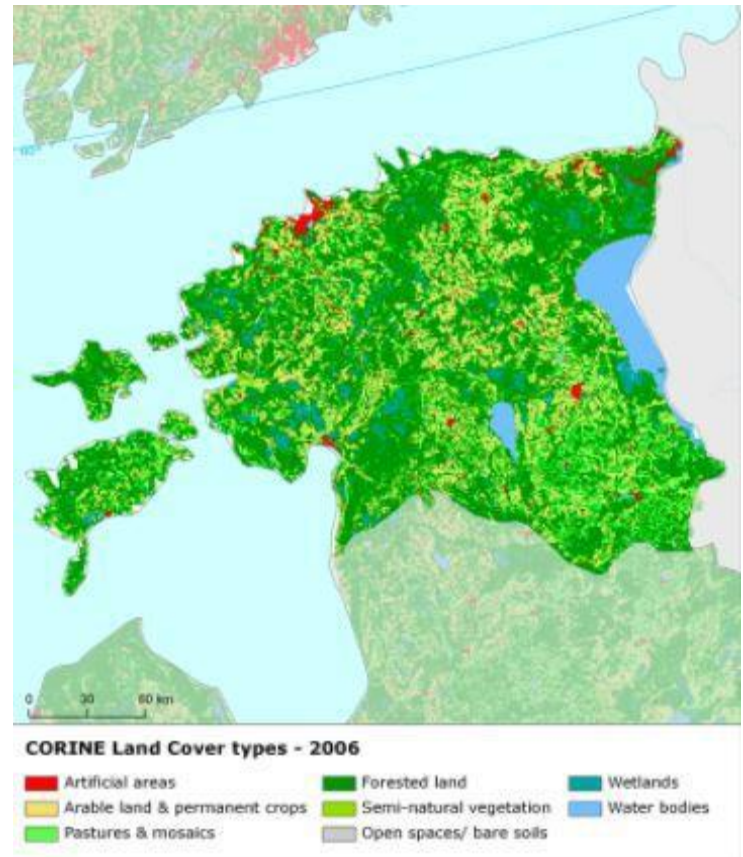
Annely Holm

Environmental Board

12 July 2018



- **Estonian territory – 45 000 km²**
- **Agricultural land – 10 000 km²**
- **Arable land – 6900 km²**
- **Semi-natural grasslands in protected areas – 600 km²**
- **Target area of managed grasslands in NBSAP by 2020 – 450 km²**



Estonian grasslands

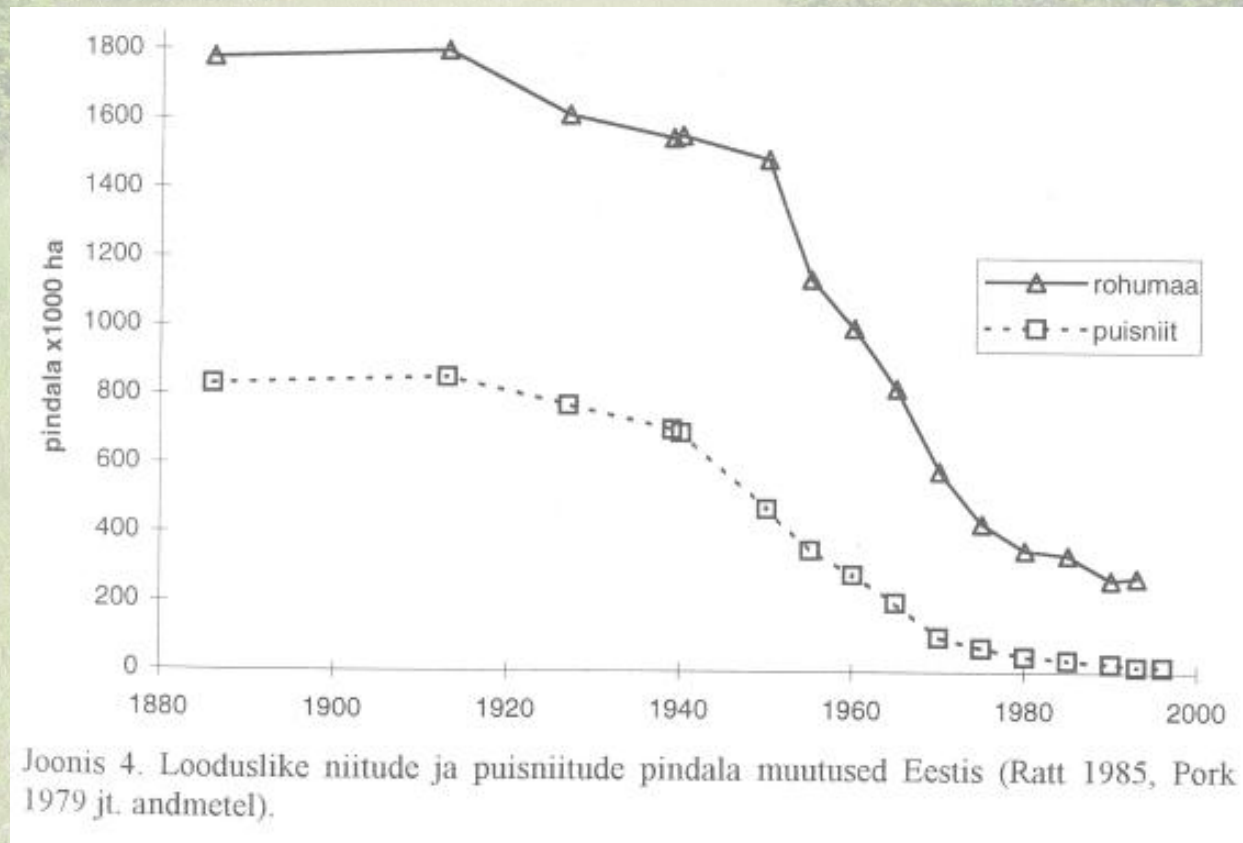
- **hold particular and extremely high biodiversity**
- **belong to Estonian traditional cultural landscape**
- **are maintained by regular extensive management: mowing and grazing by domestic animals**
- **are not fertilized, no chemicals used, no ploughing**



Diversity of habitat types, natural conditions, management



Changes of semi-natural grasslands areas



Reasons of loss and degradation since 1950s

- **abandonment and overgrowth with shrub and trees**
- **transforming to arable field**
- **amelioration**
- **fertilization and cultivation (sowing of seeds)**
- **changed land use, building**
- **afforestation**

Practices of traditional management: (manual) mowing, grazing and collecting hay for winter fodder and bedding for livestock

Beginning of 20th century and earlier



1970s-1980s



2010s



Process of incorporation of the target policies/projects into the NBSAP

1999 - 2001	Countrywide baseline inventory and GIS database of grasslands
2001-	Valuable grasslands designated as protected areas (NATURA 2000 Network - 2004)
2001 - 2006	Subsidies for maintenance and restoration from state budget
2007 -	<p>Scheme of subsidies: EU funds (EAFRD, CF, LIFE) and national fund of revenues from environmental charges</p> <ul style="list-style-type: none">- subsidies for maintenance (mowing, grazing), Rural Development Plan- subsidies for restoration- subsidies for infrastructure (livestock, specific mowing equipment, fences,

National Action Plan for Semi-natural Grasslands (2013):

- 1. Overview of current status**
- 2. Pressures and threats**
- 3. Targets:**
 - 3.1. stable management**
 - 3.2. better quality of maintenance**
 - 3.3. increase the managed areas up to 45 000 ha taking into account the typological diversity**
 - 3.4. increased awareness**
 - 3.5. improved database**
- 4. Measures to achieve the targets**
 - 4.1. maintenance and restoration**
 - 4.2. higher quality of maintenance**
 - 4.3. investments**
 - 4.4. sustainable production**
 - 4.5. monitoring, research, inventories**
- 5. Timetable and budget 2014-2020**



Success factors

Involvement of stakeholders

Training and communication

Countrywide approach: inventory, database, action plan, priorities, budget

Integration of different funds, no double funding – EU funds, national fund of revenues of environmental charges

Research; active NGO

EU-wide agri-environmental policy

Challenges

Low awareness and interest in agricultural sector

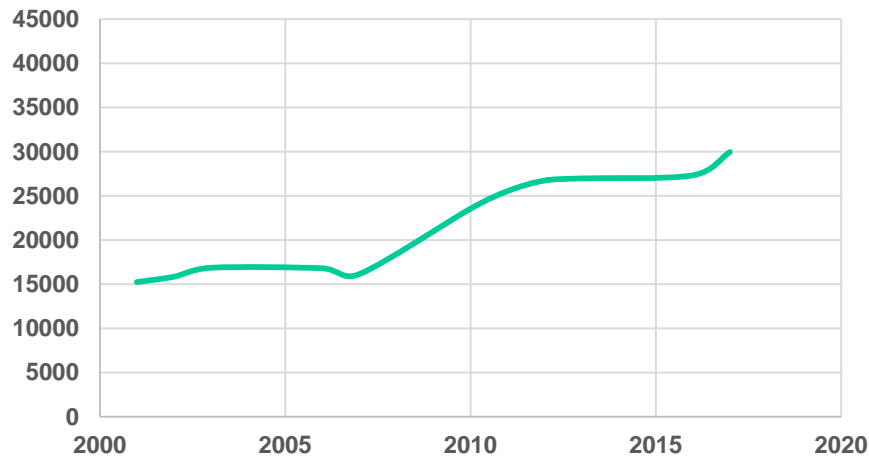
Increased costs and workload of staff

Variety of site specific conditions, time- and resource-consuming methods

Administration is complex and needs good cooperation between different institutions

Current implementation status

Grasslands in management (ha)



- **2001-2017 increase 15 000 ha**
- **Maintenance scheme 30 000 ha**
- **Under restoration 7000 ha**
- **Subsidies for maintenance 4.6 mln EUR yearly (5.4 mln USD)**
- **Subsidies for restoration, infrastructure, equipment, livestock 3.4 mln EUR yearly (3.9 mln USD)**
- **Well-established institutional structure and farmer-expert-authority networks**



Next steps

- **Update of NBSAP, Semi-natural grassland Action Plan and Rural Development Plan by 2020**
- **More attention to priority habitats: alvars, wooded meadows**
- **Counselling service**
- **Increasing management quality**



Contributions to achievement of Aichi Biodiversity Targets

- AT1 – awareness increased
- AT3 – positive incentives and sustainable use of biodiversity
- AT4 – sustainable production and consumption
- **AT5 – rate of habitat loss reduced**
- AT7 – sustainable agricultural management
- AT11 – important sites for biodiversity conserved
- **AT12 – extinction of species avoided**
- AT14 – essential ecosystem services conserved and restored
- **AT15 – restoration of degraded ecosystems**
- AT17 – NBSAP in place
- AT19 – knowledge and science base on biodiversity constantly improved

Lessons learned (1)

- **Mainstreaming of biodiversity needs consistent effort:**
 - **communication**
 - **rising of awareness**
 - **involvement of stakeholders**
 - **finances**

Lessons learned (2)

NBSAP is a crucial tool to:

- **set countrywide targets and visions**
- **introduce the targets and visions to public**
- **apply for funding**
- **negotiate with other sectors**
- **achieve the targets**



REPUBLIC OF ESTONIA
MINISTRY OF THE ENVIRONMENT



Thank you!

Kadri Möller
kadri.moller@envir.