

# **INDIVIDUALITY FOR HETEROGENITY IN OVERBUREAUCRATIC ENVIRONMENT**

## **Coastal meadow management in Luitemaa Nature Reserve**

**Murel Merivee, SNCC Pärnu-Viljandi region**

**Marika Kose, Estonian Wetlands Society**

Photos: Mati Kose, Murel Merivee, Heikki Luhamaa, Gunnar Sein

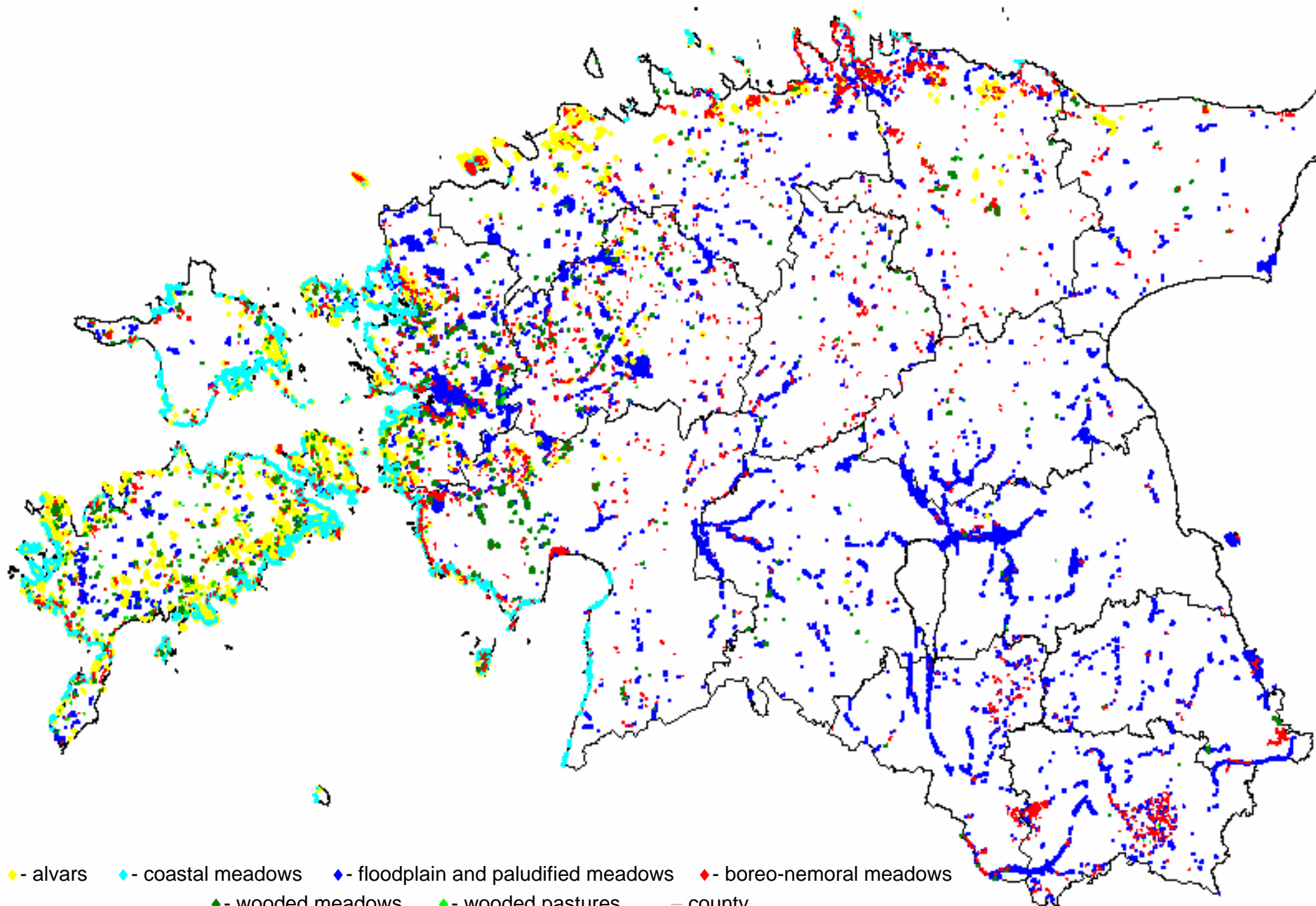
# Contents of the presentation

1. Overview about seminatural communities and their subsidized management in Estonia;
  - Distribution of seminatural communities
  - Different subsidies paid for management
  - General problems in the management of seminatural communities:
2. Story of Luitemaa:
  - Overview about Luitemaa meadows and their management history
  - Values of Luitemaa meadows
  - Value based management, is it possible?

# Seminatural communities in Estonia

<b>Year</b>	<b>Area</b>
<b>1900</b>	<b>1 800 000</b>
<b>1950</b>	<b>1 480 000</b>
<b>1980</b>	<b>400 000</b>
<b>2000</b>	<b>130 000</b>

**By the year 2006 there was inventorised 118 000 ha of seminatural communities.**



◆ - alvars    ◆ - coastal meadows    ◆ - floodplain and paludified meadows    ◆ - boreo-nemoral meadows  
◆ - wooded meadows    ◆ - wooded pastures    - county



**Nedrema wooded meadow**



**Kastna juniper heaths**

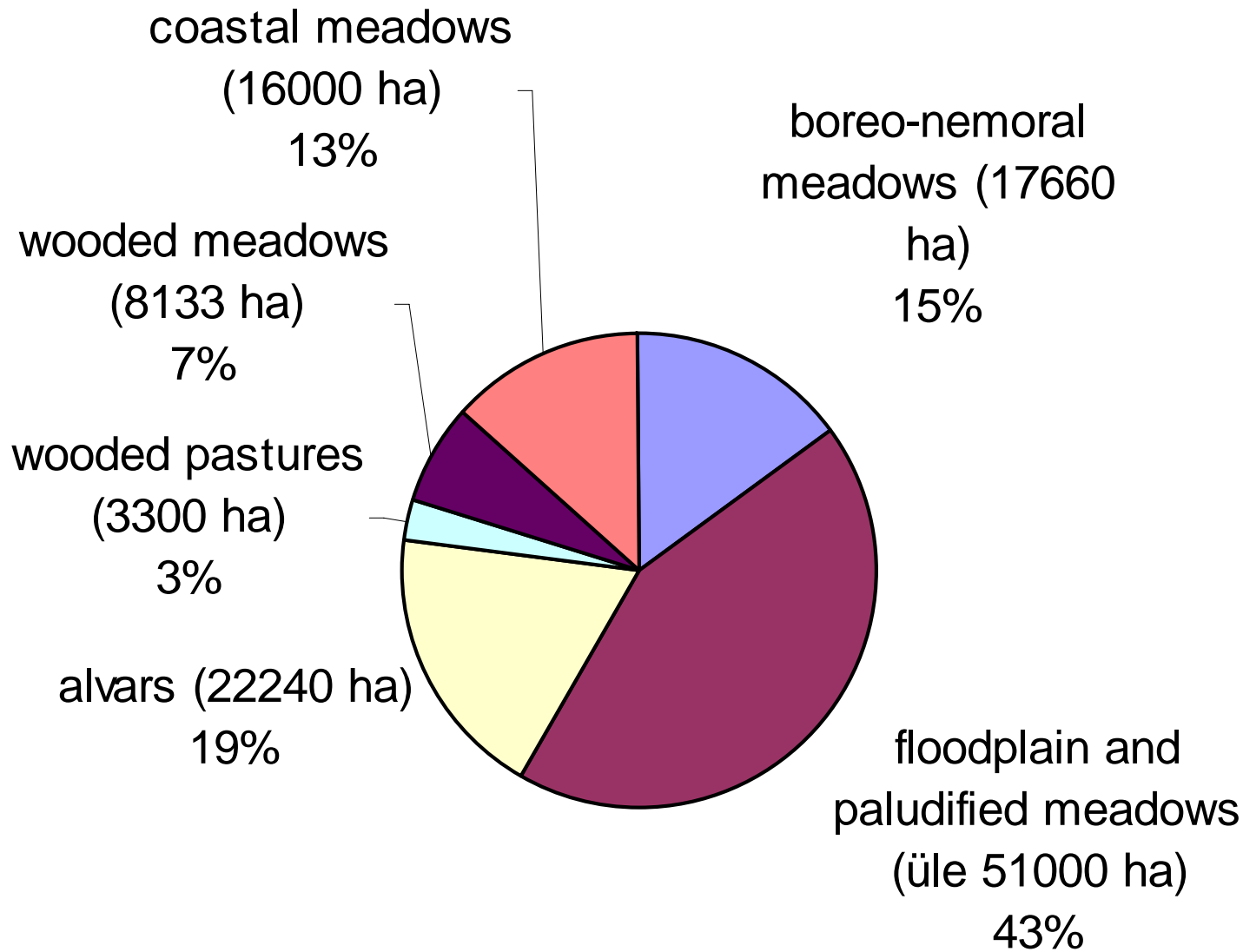


**Coastal meadows in Manija islet**



**Floodplain meadows in Soomaa**



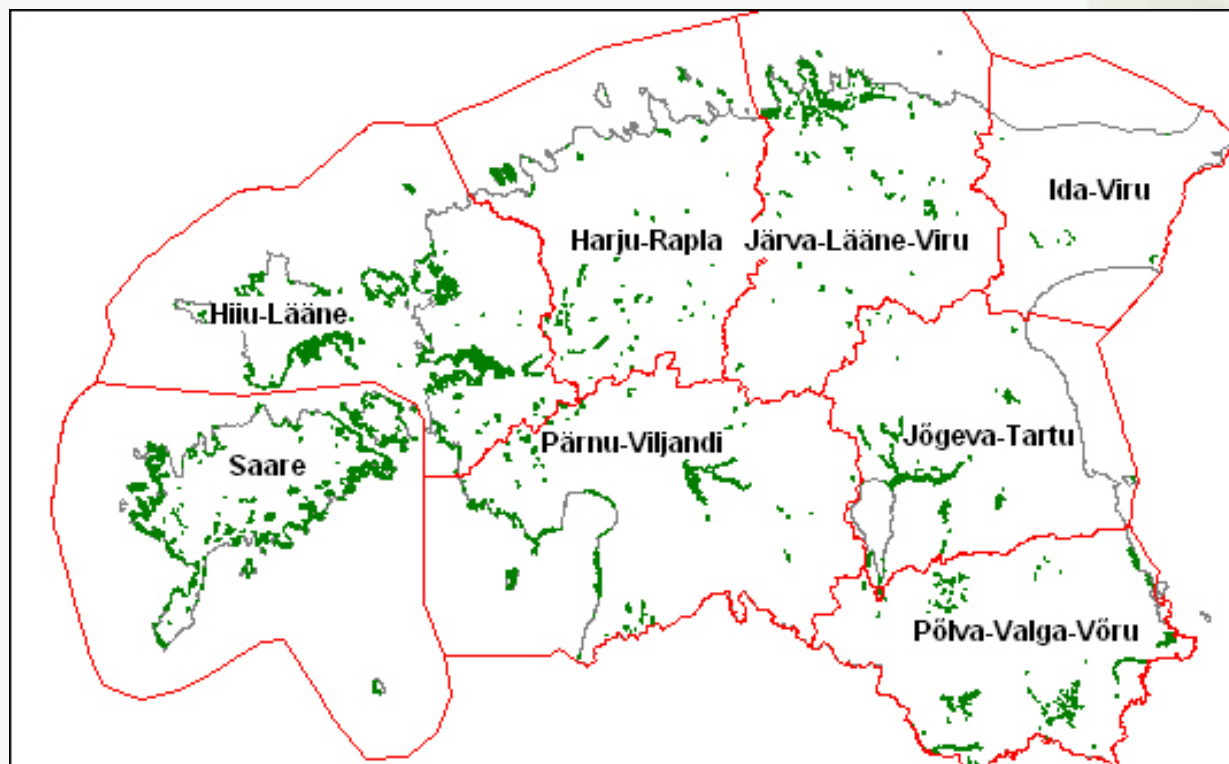


# Protection of Estonian seminatural communities (1)

98 710 ha of Estonian seminatural communities are protected.

80 500 ha of all the seminatural communities have high or medium natural value, 40 400 ha of those are protected.

**Protected seminatural communities in different SNCC regions**



# Protection of Estonian seminatural communities (2)

The seminatural communities have been protected in Estonia for a relatively long period of time. Already in 1930's when the first Estonian republic created its system of protected areas there were already several protected areas designated that had seminatural communities as protection objective. Also with the soviet Estonian nature conservation law, which was approved in 1957 valued several seminatural habitats as either nature reserves or special protected areas.

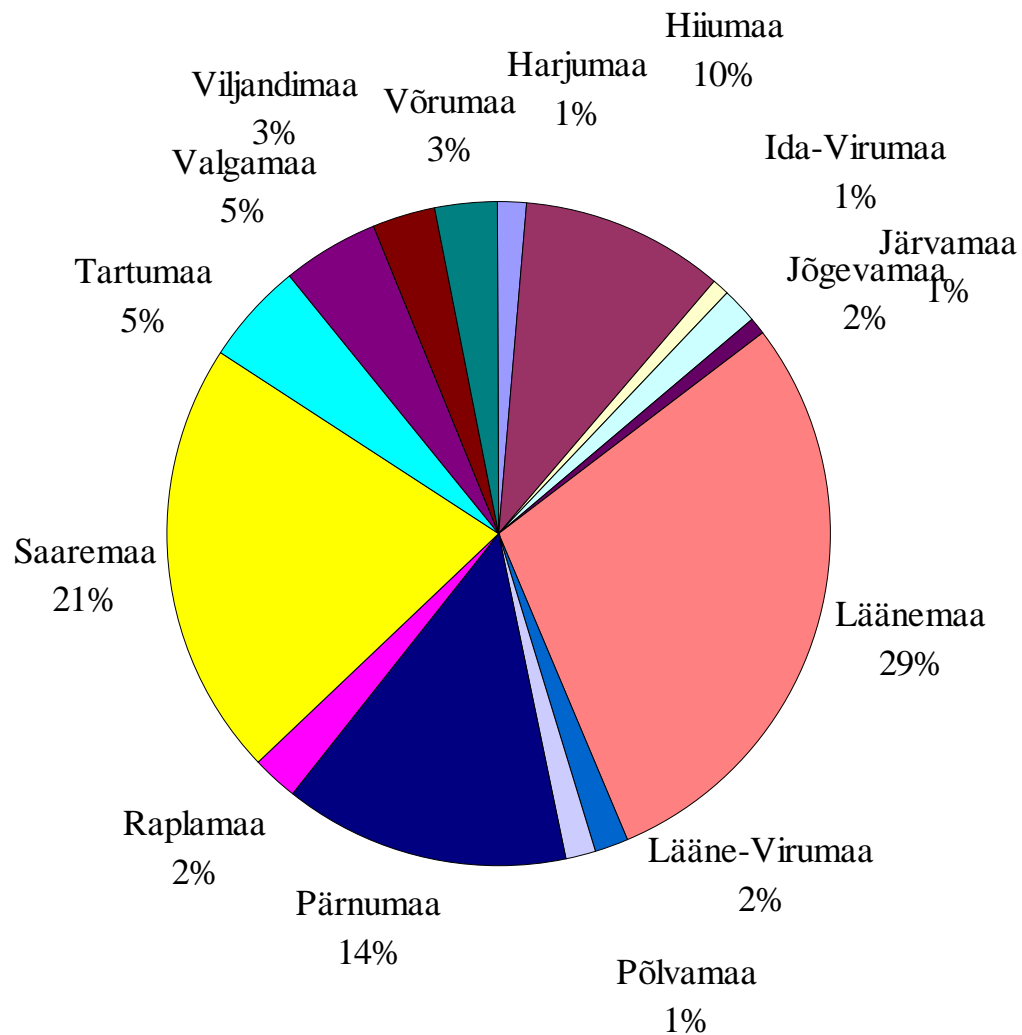
Since then the seminatural communities are values and protection objectives in 220 different protected areas (from 407), plus in many SPA.

# Subsidizing the management of seminatural communities

3 different sources for subsidizing management:

- 3,8 mln eur annually from EU budget for subsidizing the management of seminatural communities in Natura 2000 areas (in operation since 2007, paid by PRIA - Estonian Agricultural Registers and Information Board )
- 1,1 mln eur annually from state budget for subsidizing the restoration of seminatural habitats in private lands (in operation since 2001, paid by SNCC)
- 0,61 mln eur annually from state budget for contracting managers to restore seminatural habitats in state lands (in operation since 2001, paid by SNCC)

# Distribution of supports paid in the years 2003-2006



# General problems in management of seminatural communities in Estonia

- Too much bureaucracy in subsidies systems;
- Changing subsidies system (ie administrating offices, regulations etc);
- Too few interested stakeholders;
- Big differences in conservation activities and their activeness
- Until 2007 limited budget, but since 2007 problems with support administration office.

An aerial photograph of a coastal landscape. In the foreground, a large, dark body of water, possibly a bay or a wide river, flows towards the left. A wide, sandy beach runs along the water's edge, with some small structures or markers visible. Beyond the beach, the land is covered in lush green fields and patches of trees. The sky is filled with large, white, fluffy clouds, and the overall scene is bright and clear.

# Luitemaa story

# Management history of Luitemaa meadows (1)

Historically the main characteristic of coastal meadows of Pärnu county was their wideness, the meadows spread from one corner of the county to another just splittig in towns and villages. Relatively intensive management – grazing and mowing kept the meadows open from the fields up to the sea shore – there was only very few single trees and almost no reedbeds. In the beginning of 20th century was possible to get income to allow summergrazing by cattle from inland, so the management of the coastal areas was especially attractive. To assure the feed for own cattle and reduce overgrazing was even agreed upon the rules of meadow use and measures for those who break the rules.





**Joint mowing in Häädemeeste in late 1930's – it was not typical to mow near the seashore, the common way of management was grazing on the seashore and mowing close to fields on more flat areas.**



# Management history of Luitemaa meadows (2)

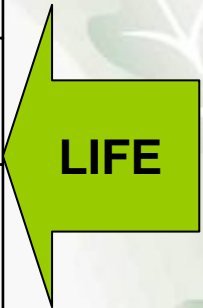
Still in the 1960's until 1980's the meadows were rather intensively used for grazing large cattle of collective farms (up to 350 milkcows in the middle of 1980's). Also it was relatively common to graze the animals of single households together with the cattle of collective farms and also the single households collected their hay from more flat parts of the meadows.

# Management history of Luitemaa meadows (3)

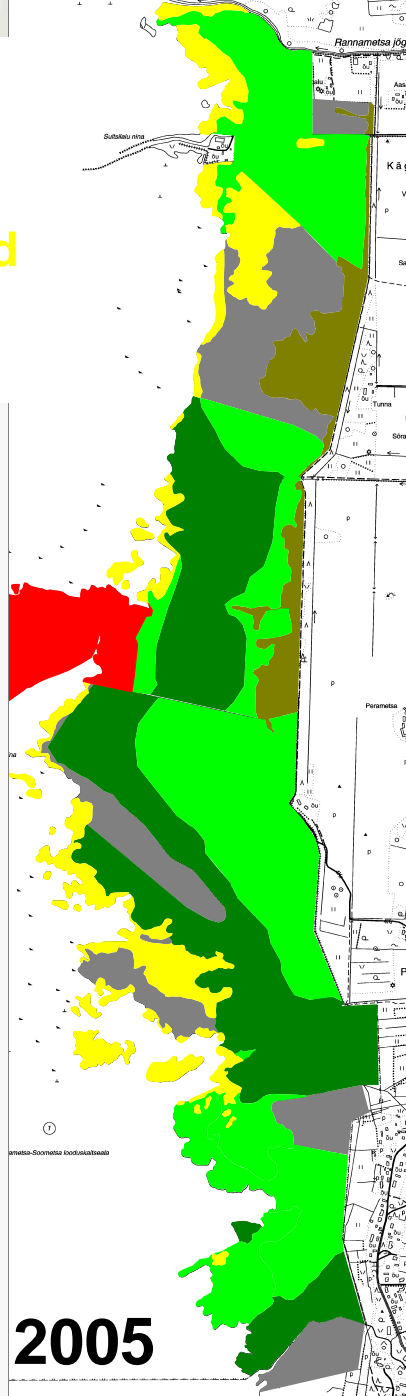
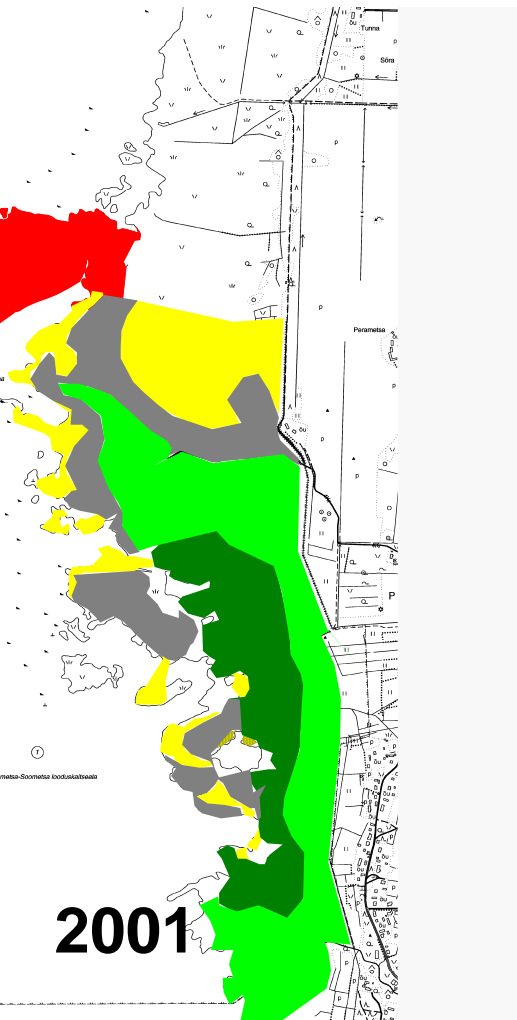
In 1980's the management of meadows started a rapid decrease – many smallscale households quit farming and also the collective farms used less of the coastal meadows. By the end of 1990's the number of cattle had decreased to minimum and the landreforms caused by reindependancy worsened the situation. Because all those reasons the managment had more or less stopped by the year 2000.

# Management history of Luitemaa meadows (4)

Year	The number of managers	Number of animals (all ages)	Grazing units 1GU = 1 cattle, 1 horse, 3 sheep, 2 calves	Managed area (ha)
2000	0	0	0	0
2001	8	46 cattle 38 sheep	39	321 0,12 GU/ha
2002	21	150 cattle 3 horse 130 sheep	131	422 0,31 GU/ha
2003	26	197 cattle 8 horse 250 sheep	230	512 0,45 GU/ha
2004	27	288 cattle 15 horse 239 sheep	255	530-550 0,48-0,46 GU/ha
2005	21	292 cattle 16 horse 78 sheep	238	519 0,46 GU/ha



**Very well managed**  
**well managed**  
Poorly managed  
**Problematic reedbed**  
**Permanent reedbed**  
**Brushwood**



## Meadows were saved, but what about the values?

Too small area and fragmentation of meadows with low grass level;

Reedbeds and turf on poorly managed meadows;

Predation pressure on shorebirds;

Slow increase of wader species with high habitat demands;

Possible but not suitable management practice implemented;

Unmanaged areas and fragmentation.

# Value – Natterjack toad

Amphibians demand shallow temporal waterbodies and trampling. Lots of maneur is appreciated, because creates habitats for insects and gives food base

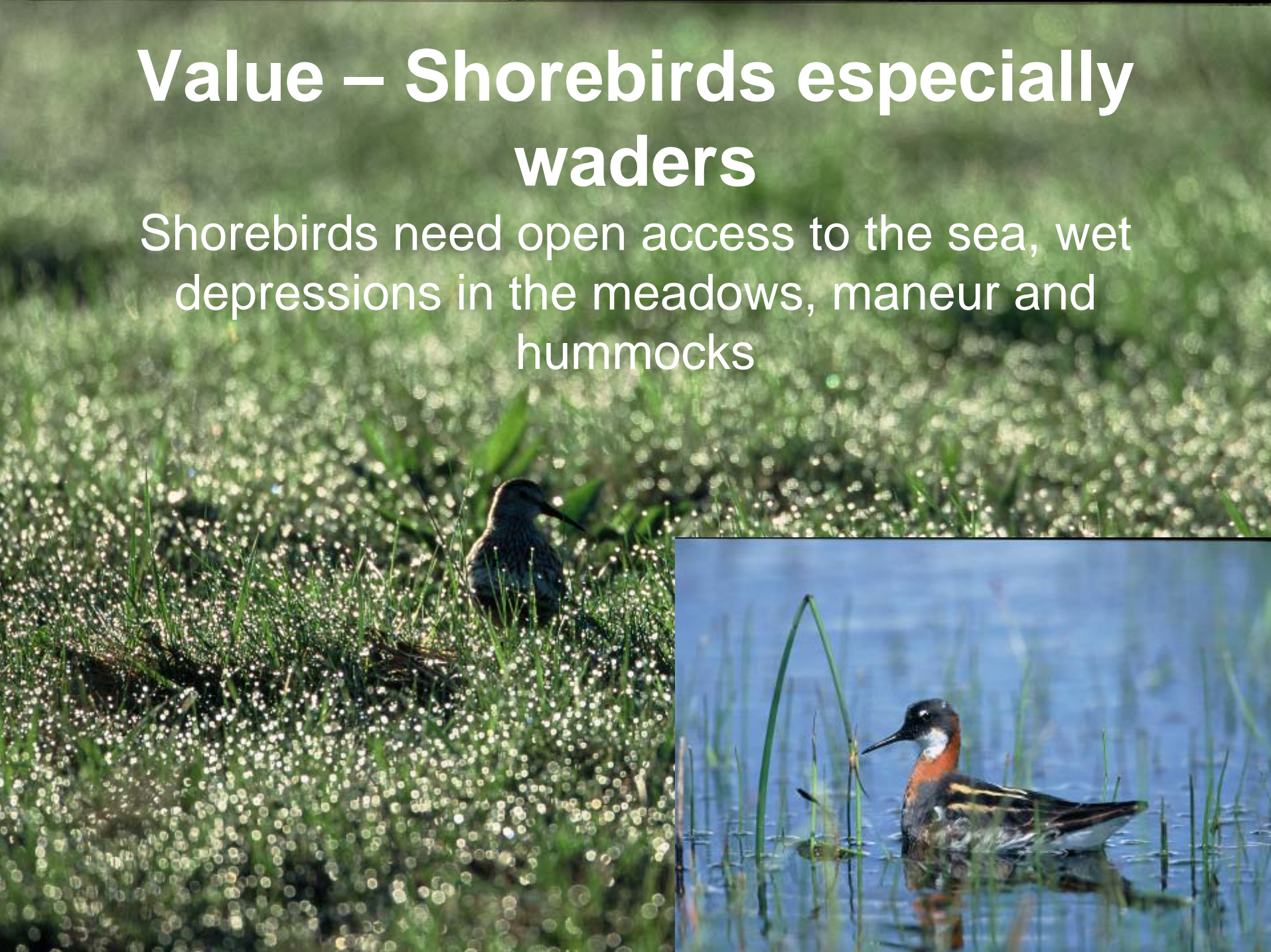


- possible in the places where the area is not regularly overflooded
- Area has to be intensively grazed



# Value – Shorebirds especially waders

Shorebirds need open access to the sea, wet depressions in the meadows, maneur and hummocks



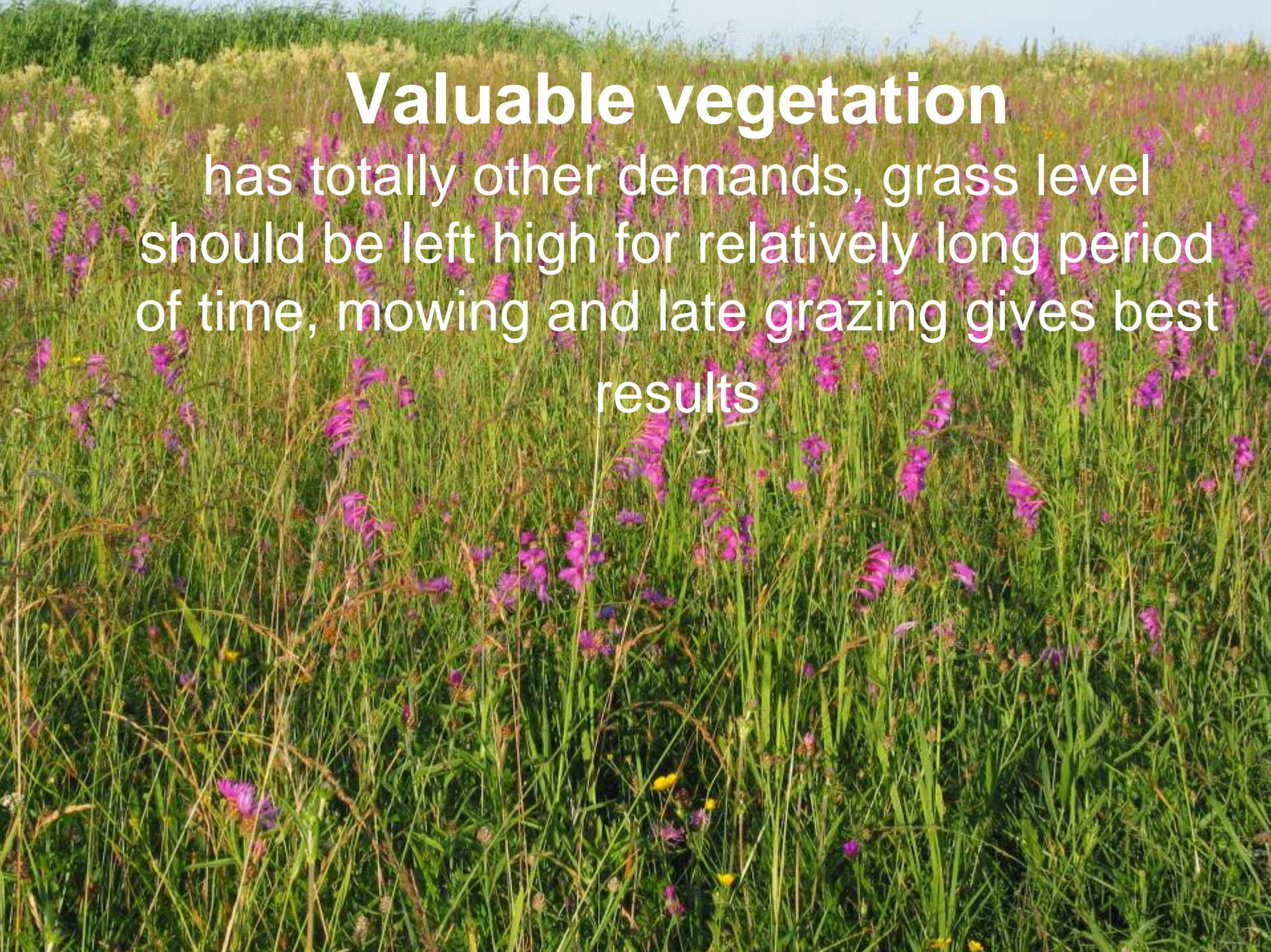
**Value - Migratory waterfowl**  
demand large areas with low grass level and  
prefer open access to the sea






# Valuable vegetation

has totally other demands, grass level should be left high for relatively long period of time, mowing and late grazing gives best results



# Value – manager

Being adaptive depending of the managers possibilities and interests

A photograph showing three men in a grassy field. The man on the left is wearing a black jacket, a black helmet, and black boots. The man in the middle is wearing a blue jacket. The man on the right is wearing a grey t-shirt and dark pants. They are all holding a thick, brown rope that runs across the field. The background shows a line of trees under a blue sky with some clouds.

Local community has a strong interest in meadowmanagement. But not everybody is interested in keeping cattle or mowing the hay in October.

# Value and manager based meadow management plans for Luitemaa

In 2006-2007 in the frame of an ERDF project of Häädemeeste Municipality were prepared meadowmanagement plans for Luitemaa, which prioritise the management of coastal meadows depending from the values and taking into consideration also the interests of managers.

The plans are partially implemented already.

# On the 1000 ha of coastal meadows was differed 7 regions

The seven regions were zoned on the base of:

- Natural conditions of meadows
- Visible borders (ditches, roads etc)
- Ownership

1. Häädemeeste;
2. Pulgoja;
3. Rannametsa;
4. Muhuküla;
5. Piirumi;
6. Pikla;
7. Võiste

<b>Aim</b>	<b>Management measure</b>	<b>Conditions</b>	<b>Conservation objective</b>
Low grasslevel on the seashore	Late grazing	The start of grazing period 25th o May (1,0 – 1,2 GU/ha)	Wader and other shorebird habitats conservation
Low grasslevel on the side of the mainland	Early grazing	Year-round grazing or since 15th of May (0,7 -1 GU/ha)	Natterjack habitats conservation
High grass level	Late mowing and aftermowing grazing	Mowing starting from 1st o August – 1st of September + grazing after mowing ( 0,5 – 1 GU/ha)	Valuable vegetation
Restored meadow, beach and lagoons	Early mowing and grazing	The start of grazing 15th of May, (1,5 GU/ha) I mowing 1st July – 1st August, II if necessary 15th o September	Restoration of habitats
Permanent reedbeds	No measures		Have to sustain also reedbeds – valuable habitat for many birds, but also long term monitoring objective

# **Problem arises**

**Special limitations are developed, but not compensated - how to sustain value-based management in over-bureaucratic support scheme?**

# Why people in Luitemaa manage meadows?

Want to have a view to the sea...

Have to graze their livestock somewhere...

Want to hear natterjacks curgle...

Want to have the meadows for their children...

Want to manage them for the biodiversity...

Because of the subsidies...

**INDIVIDUALITY in communication with these managers is the key for now! But...**



**Thank You!**

For more information:  
<http://www.luitemaa.eoy.ee/>  
<http://www.nigula.ee>  
[murel.merivee@lk.ee](mailto:murel.merivee@lk.ee)