



REPUBLIC OF ESTONIA
ENVIRONMENTAL BOARD



SAAREMAA **VALLAVALITSUS**

LIFE+ URBANCOWS - Restoration of urban coastal meadow complex in Pärnu town, Estonia

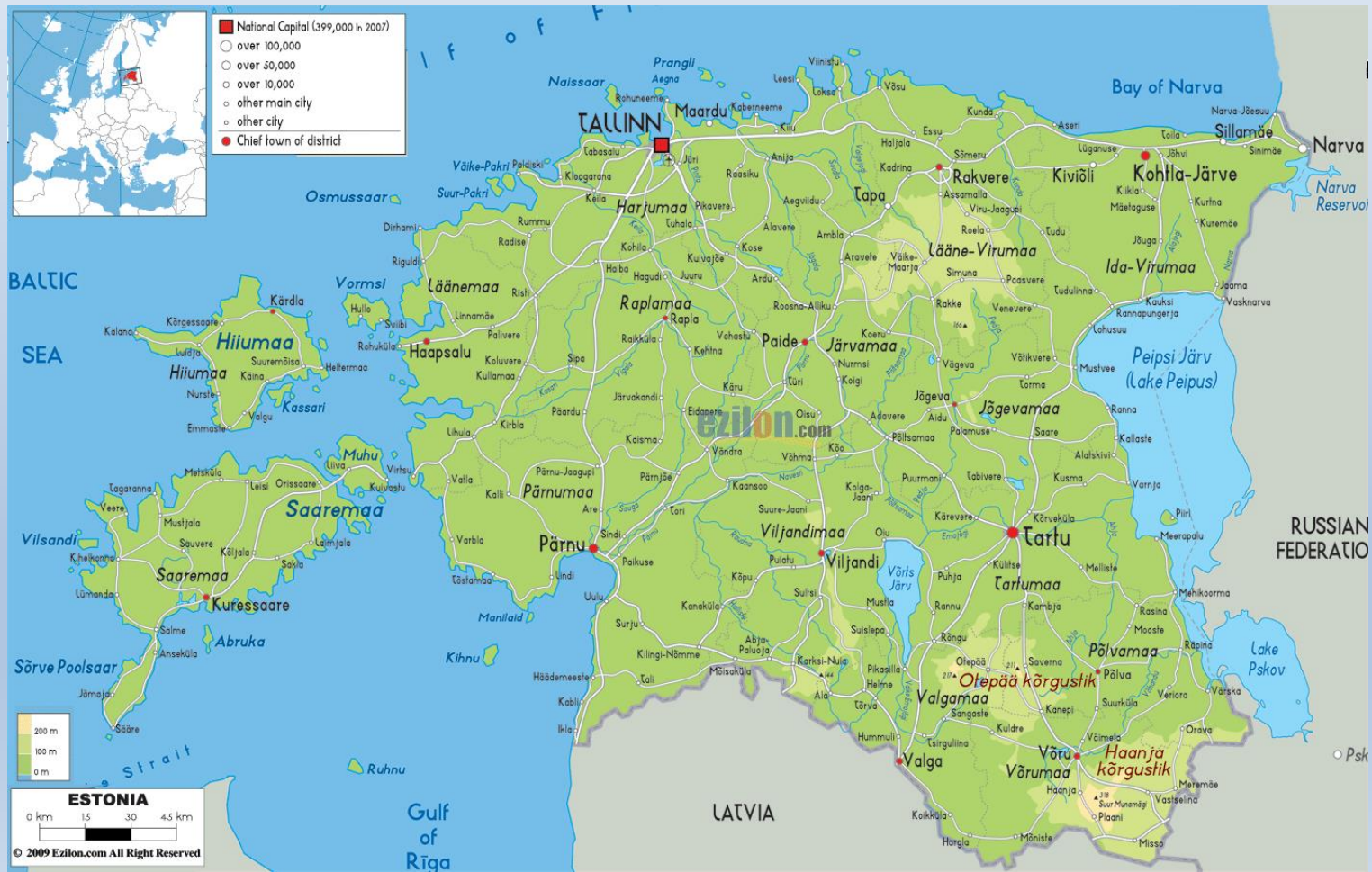
Bert Holm, PhD.

bert.holm@saaremaavald.ee



Pärnu town, West-Estonia

- A coastal town, the population of ca 40 000 inhabitants;
- the most famous summer vacation destination;
- annual number of visitors more than 300 000.



Rannaniidu NATURA 2000 site, Pärnu town

- 220 hectares of coastal meadows; 90 hectares of coastal lagoons;
- in the summer resort, between the city and the sea;
- habitat for several endangered plant and bird species;
- historically the pasture for several hundred livestock;
- traditional management (grazing) ceased in late 1980ies;
- habitat degradation and biodiversity loss during last 30 years.



Rannaniidu NATURA 2000 site, Pärnu town

- By 2012 the whole area of the reserve was covered with the reed bed of 2,5...5 m high;
- the use of the area was physically blocked by reedbed;
- secure place for dumping the garbage.



LIFE+ URBANCOWS project (2012-2016)

- To improve the conservation status of the coastal meadow and coastal lagoon habitat complex of the nature reserve:
 - to remove old reed and bushes from 220 ha of coastal meadow;
 - to restore 75 ha of coastal lagoons by removing floating reed rhizome and sediments;
 - grazing infrastructure establishment;
 - immediate reintroduction of cattle grazing at restored areas;



LIFE+ URBANCOWS project (2012-2016)

- To introduce the values of the area to the locals and visitors and foster the recreation:
 - visitor infrastructure establishment;
 - disseminate, educate, change the public opinion on the values of the area.



LIFE+ URBANCOWS project (2012-2016)

- Planning and preparing the relevant documentation:
 - detail planning process and different kind of technical documentation preparation - ca 1,5 years.



LIFE+ URBANCOWS project (2012-2016)

- An old reed and bushes removed mechanically in 220 ha of coastal meadow;
- Used for bioenergy production, thatched roofs or mulched/burned;



LIFE+ URBANCOWS project (2012-2016)

- 75 ha of coastal lagoons restored mechanically by removing floating reed rhizome from edges;



LIFE+ URBANCOWS project (2012-2016)

- Natural water regime of the area improved by clearing streams and placing culverts under the road dams;
- one pedestrian trail improved.



LIFE+ URBANCOWS project (2012-2016)

- Grazing infrastructure established (fences, shelters);
- immediate reintroduction of cattle grazing after the restoration;



LIFE+ URBANCOWS project (2012-2016)

- Visitor infrastructure established;
- dissemination events and materials, outdoor conservation events, active work with residents and visitors.



LIFE+ URBANCOWS project (2012-2016)

Educational impact:

- 55 000 leaflets in 4 languages distributed;
- specific outdoor learning programs launched for the area;
- number of visitors increased ~ 10%, the time spent in the area increased ~5%;
- 80% respondents positively minded towards the restoration and cattle reintroduction (20% increase during project).



LIFE+ URBANCOWS project (2012-2016)

Sustainability:

- The grazing of restored coastal meadow complex will proceed with the support of RDP agri-environmental subsidy;
- tourism infrastructure belongs to the town government, no large investments needed in 10-15 years;
- several other towns have adopted the idea and reintroduced historical grazing at urban grasslands.

More than 105 ha of coastal meadows restored in Kuressaare town, inspired by URBANCOWS. Photos by Katrin Koppel.



LIFE+ URBANCOWS project (2012-2016)

Transferability:

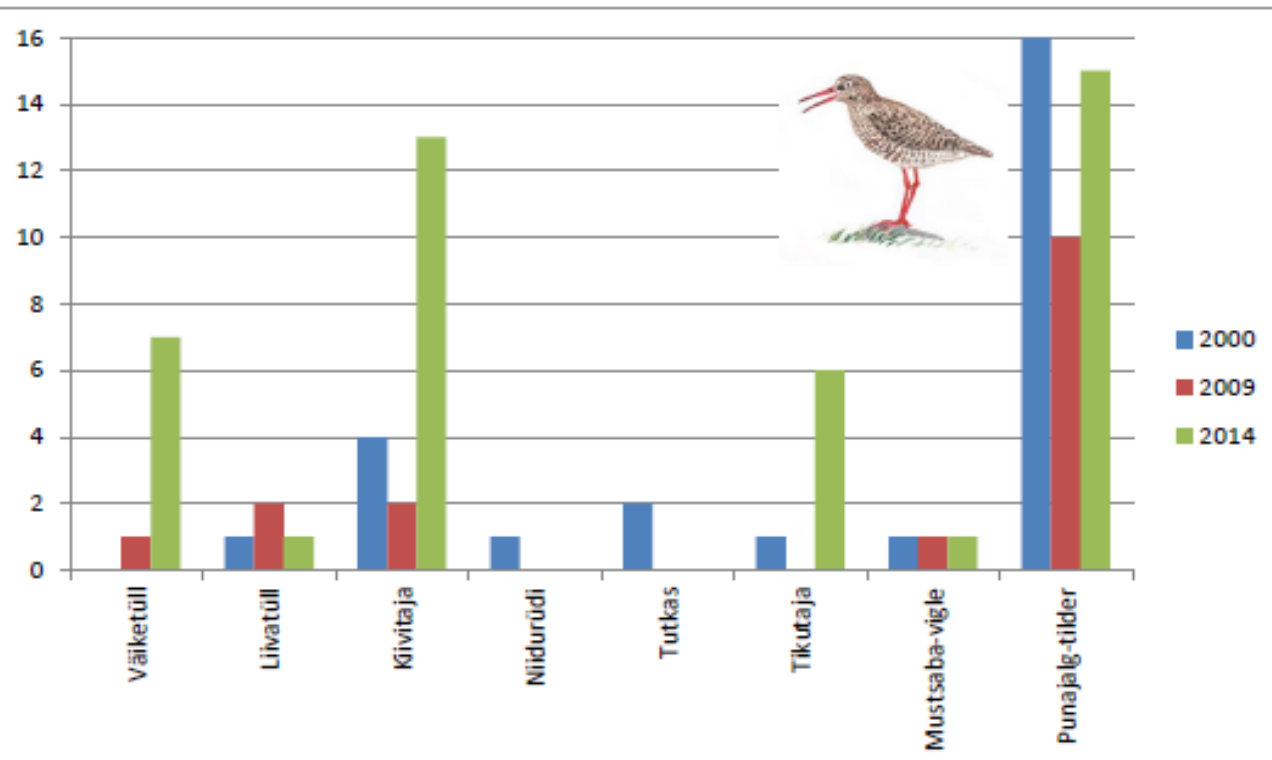
- Mechanical restoration methodology widely used in meadow restoration all over the country by now;
- mechanical meadow restoration in protected areas subsidised from EC Cohesion Funds;
- LIFE+ „LIFE to alvars“ running in 2500 ha of alvar grasslands;
- more than 2000 ha meadows restored in last few years.




LIFE+ URBANCOWS project (2012-2016)

Environmental impact:

- Coastal meadow and coastal lagoon habitat conservation status improved due to restoration and management reintroduction;
- protected plant species populations increasing;
- breeding meadow bird and migratory bird numbers increasing;
- no pollution of surface water or seawater occurred.



 SUPLUSVEE KVALITEET ON PIISAV <div> ★ ★ ★ VÄGA HEA ★ ★ HEA ★ PIISAV — HALB </div>				
VEEPROOVIDE TULEMUSED				
NÄITAJA	MAI	JUUNI	JUULI	AUGUST
ESCHERICHIA COLI				
FEKAALSED STREPTOKOKID				
PROOVIDE HINDAMINE				
MIKROBIOLOOGILISED NÄITAJAD	VÄGA HEA KVALITEET	HEA KVALITEET	HALB KVALITEET	
COLI-LAADSETE BAKTERITE ARV 100 ml VEES	<500	<10 000	>10 000	
FEKAALSETE STREPTOKOKKIDE ARV 100 ml VEES	<100	-	>100	

LIFE+ URBANCOWS project (2012-2016)

The benefits for the Pärnu town:

- 220 hectares of low vegetation traditional coastal area instead of impenetrable reed bed;
- improved sea view and access;
- improved recreational possibilities;
- new image as a nature preserving town;
- new tourism targets inside the town;
- direct financial investments into the town environment.





REPUBLIC OF ESTONIA
ENVIRONMENTAL BOARD



SAAREMAA **VALLAVALITSUS**

Thank you!

More information:

<http://life.envir.ee/urbancows>

In Facebook: URBANCOWS