The International Seminar
„ACHIEVEMENTS, SUCCESS STORIES AND LESSONS LEARNED OF THE AQUATIC WARBLER CONSERVATION“,
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Achievements, challenges and successes of the “Baltic Aquatic warbler” project and Aquatic warbler population trend in Lithuania

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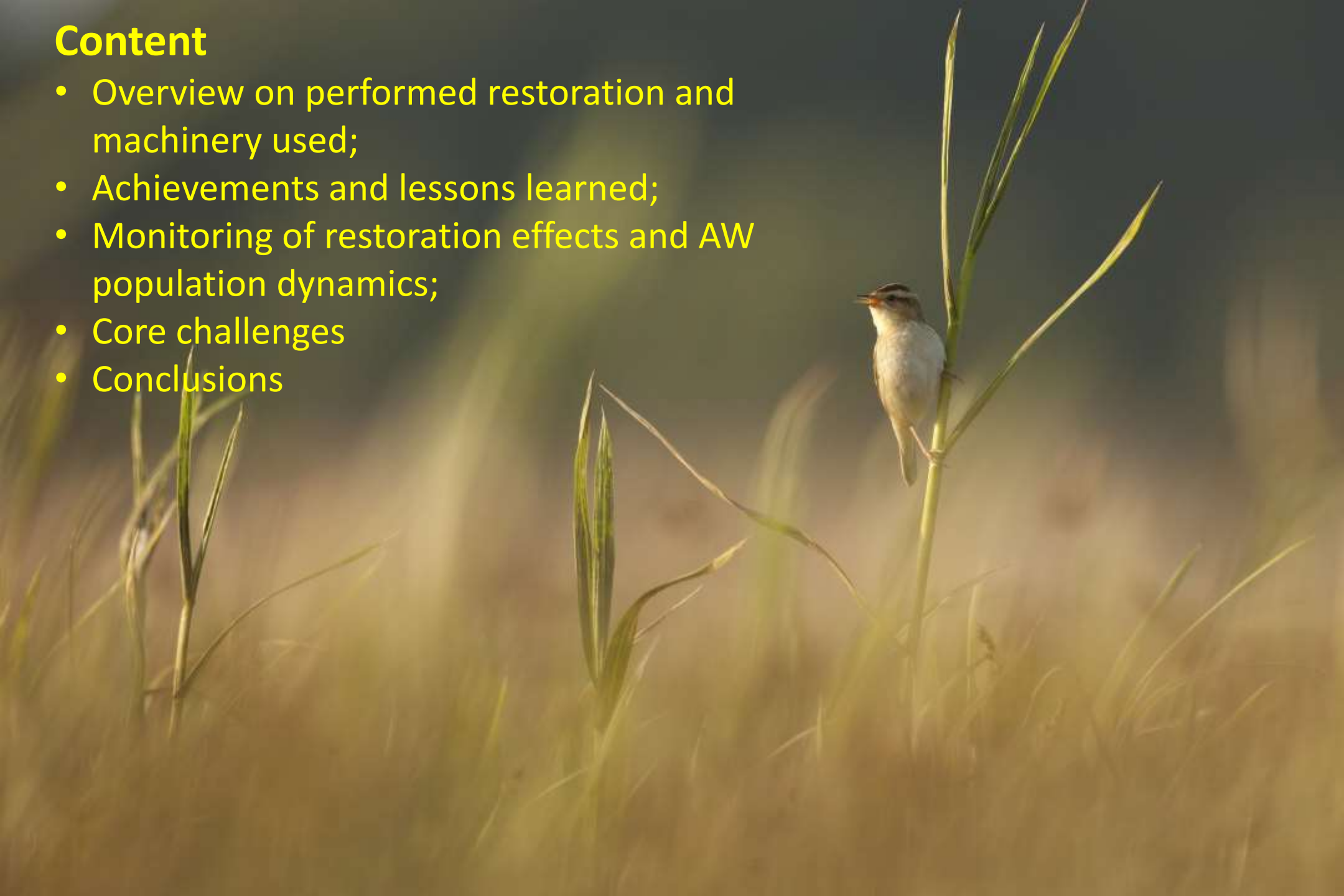


Content

- Overview on performed restoration and machinery used;
- Achievements and lessons learned;
- Monitoring of restoration effects and AW population dynamics;
- Core challenges
- Conclusions

Project area

Lithuania and Latvia

- 6 areas
- ~1200 ha area for restoration

Type of habitat restoration performed

Removal of old vegetation

Elimination of reeds

Burning of reeds

Type of habitat restoration performed

Management of hydrological regime

Wood vegetation removal

Setting up infrastructure necessary for habitat maintenance

Equipment used

Double-wheel tractors with 6 m wide working capacity

Equipment used:

Brielmayer mowing device

Equipment used

Wide caterpillar “Ratrack” for reed collection

Seiga

Achievements

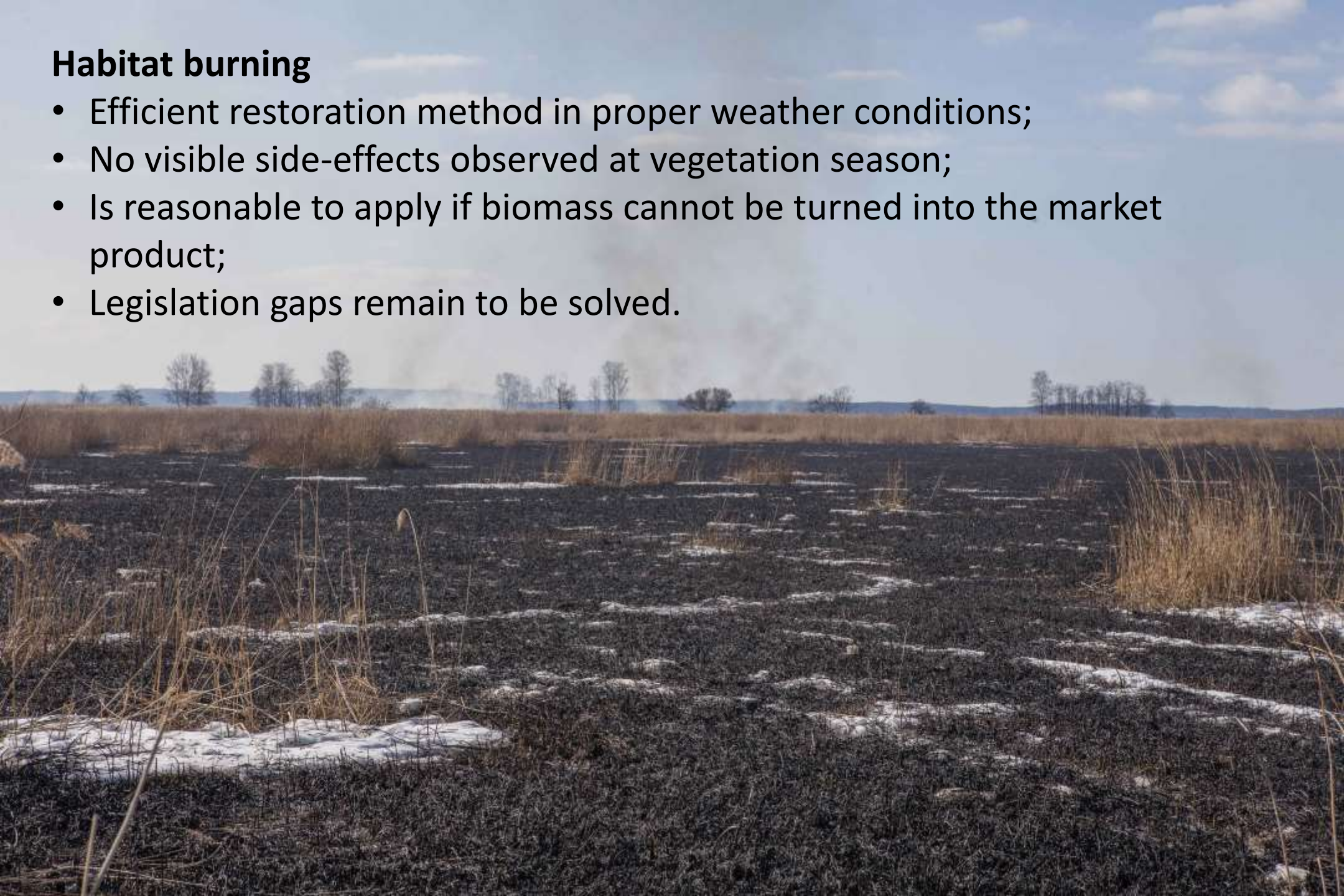
- Tyrai: 3+1 restoration seasons
- Tulkiaragė: 4 restoration seasons
- Habitat burning experience: 70 ha
- Conservation contracts covering 80 ha;
- Agri-environmental measure

Achievements and lessons learned

- Starting reed removal at July 1st to ensure survival of other species, but needs longer years of management;
- Reed biomass - dry longer than other grass;

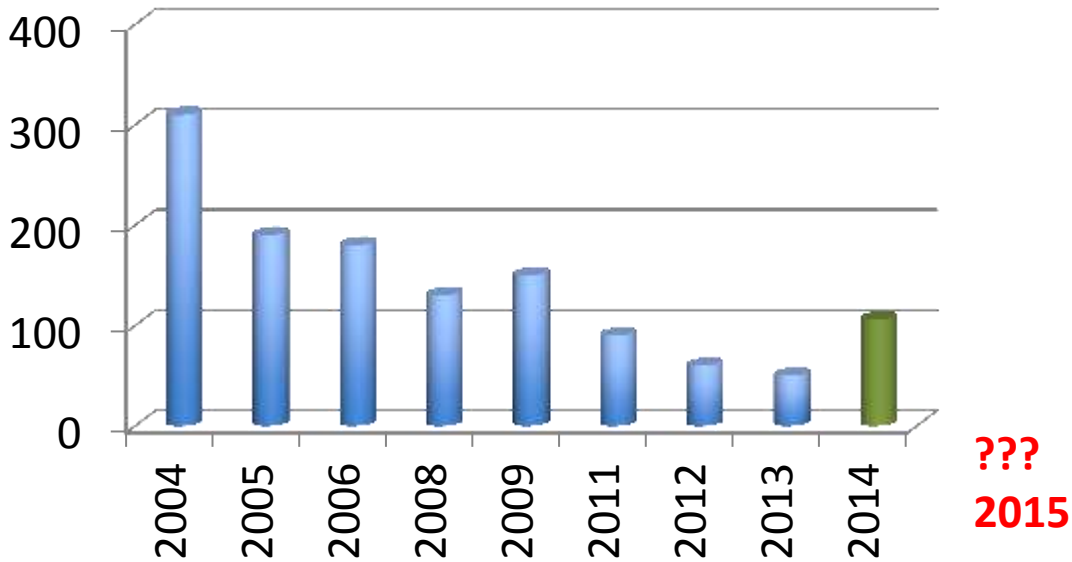
Habitat burning

- Efficient restoration method in proper weather conditions;
- No visible side-effects observed at vegetation season;
- Is reasonable to apply if biomass cannot be turned into the market product;
- Legislation gaps remain to be solved.



What is the best machinery to use?

Dynamics for Aquatic warbler population in Lithuania



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2015

Constant decline since 2004 due to:

- Abandonment of the habitat;
- Too intensive (early) mowing causing low breeding success;
- Possible other external factors (e.g. wintering conditions)

Other species benefiting from habitat restoration

Great snipe
Gallinago media

Northen lapwing
(*Vanellus vanellus)*

Common redshank (Tringa totanus)

Citrine wagtail
Motacilla citreola

Black-tailed godwit
(Limosa limosa)

Crane
(Grus grus)

Montagu's harrier
Circus pygargus

Scarce large blue
Maculinea teleius

Other species benefiting from habitat restoration

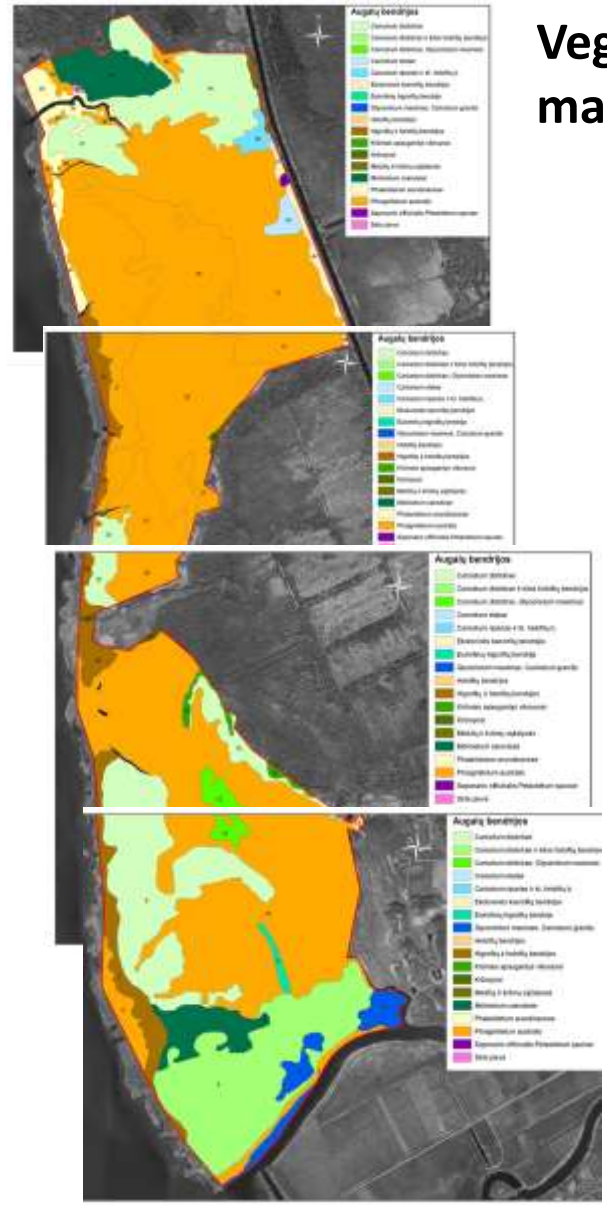
Great snipe *Gallinago media* (GM)
Black-tailed godwit *Limosa limosa (LL)*
Northen lapwing *Vanellus vanellus (VV)*
Montagu's harrier *Circus pygargus (CP)*
Common redshank *Tringa totanus (TT)*
Crane *Grus grus (GG)*

Scarce large blue Maculinea teleius

Other species:

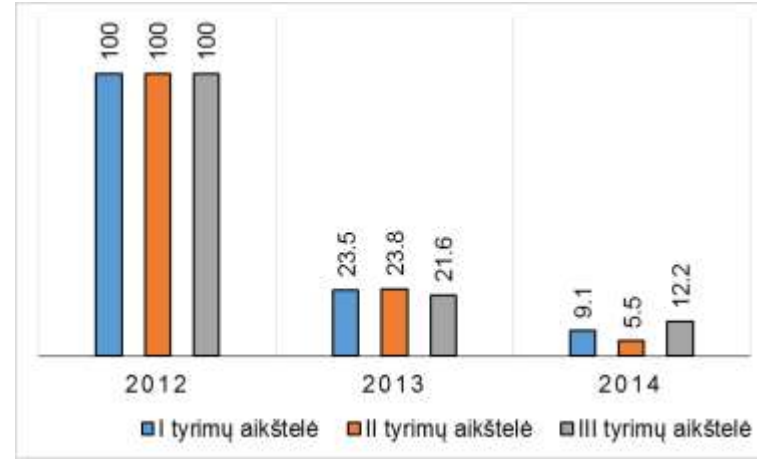
- Marsh harrier;
- Wood sandpiper;
- Little gull;
- Ruff;
- Lesser spotted eagle;
- Bittern;

Monitoring of habitat restoration effects

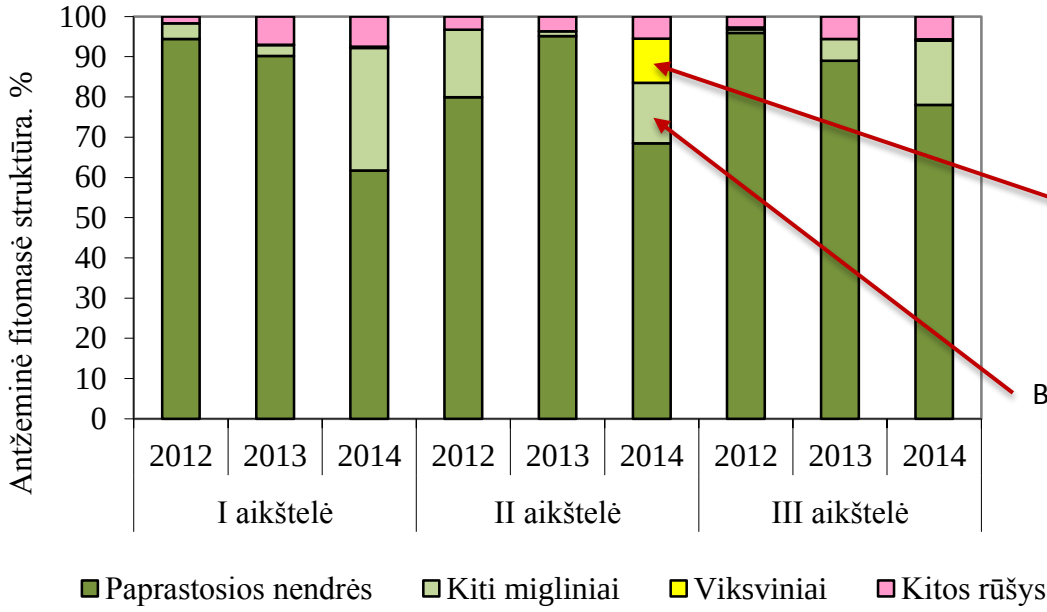


Vegetation community mapping

Monitoring of habitat restoration effects (Tyrai)



Proportion of dead biomass in sampling plots (%)



Dvieile viksva – *Carex disticha*
Juodoji viksva – *Carex nigra*
Pelkinis duonis – *Eleocharis palustris*

Baltoji smilga - *Agrostis stolonifera*

Vegetation structure dynamics in sampling plots

Core challenges

Removal of reed vegetation

- How to address survival of other reed habitat species?
- Extreme mowing conditions due to absence of firm vegetation layer;
- High risk of machinery “sinking” at coastal habitats and swampy habitat at Liepaja

Biomass use as a product

Agri-environmental measures as precondition for habitat maintenance:

- Different viewpoint of Agriculture and Environment sectors;
- How to setup a proper payment level?
- Fine-tuning a management regime;
- Making important areas eligible for participation

Conclusions

- Currently most important Aquatic warbler habitats are successfully restored, having appropriate maintenance preconditions;
- Overall habitat area is still too small, further habitat restoration shall continue in other areas;
- Restoration clearly benefits for other biodiversity and local development (e.g. high nature tourism potential);
- Biomass use – area, which needs improvements on setting up proper business model (products with higher added value, proper institutional setup);
- Burning seems to be a good tool for restoration if harvest is could not be used; legal gaps needs to be filled;
- Our conclusion on the currently available best machinery solution – a double-wheel high power tractor with attachable caterpillars;
- A lot of new and in-depth knowledge, which needs to be integrated as an update of the national species conservation action plan.

Thank you!