Experience of water level management for conservation of aquatic warbler in Lithuania and Belarus

Stepping stones towards ensuring long-term favourable conservation status of Aquatic warbler in Lithuania
(LIFE MagniDucatusAcrola LIFE15 NAT/LT/001024)

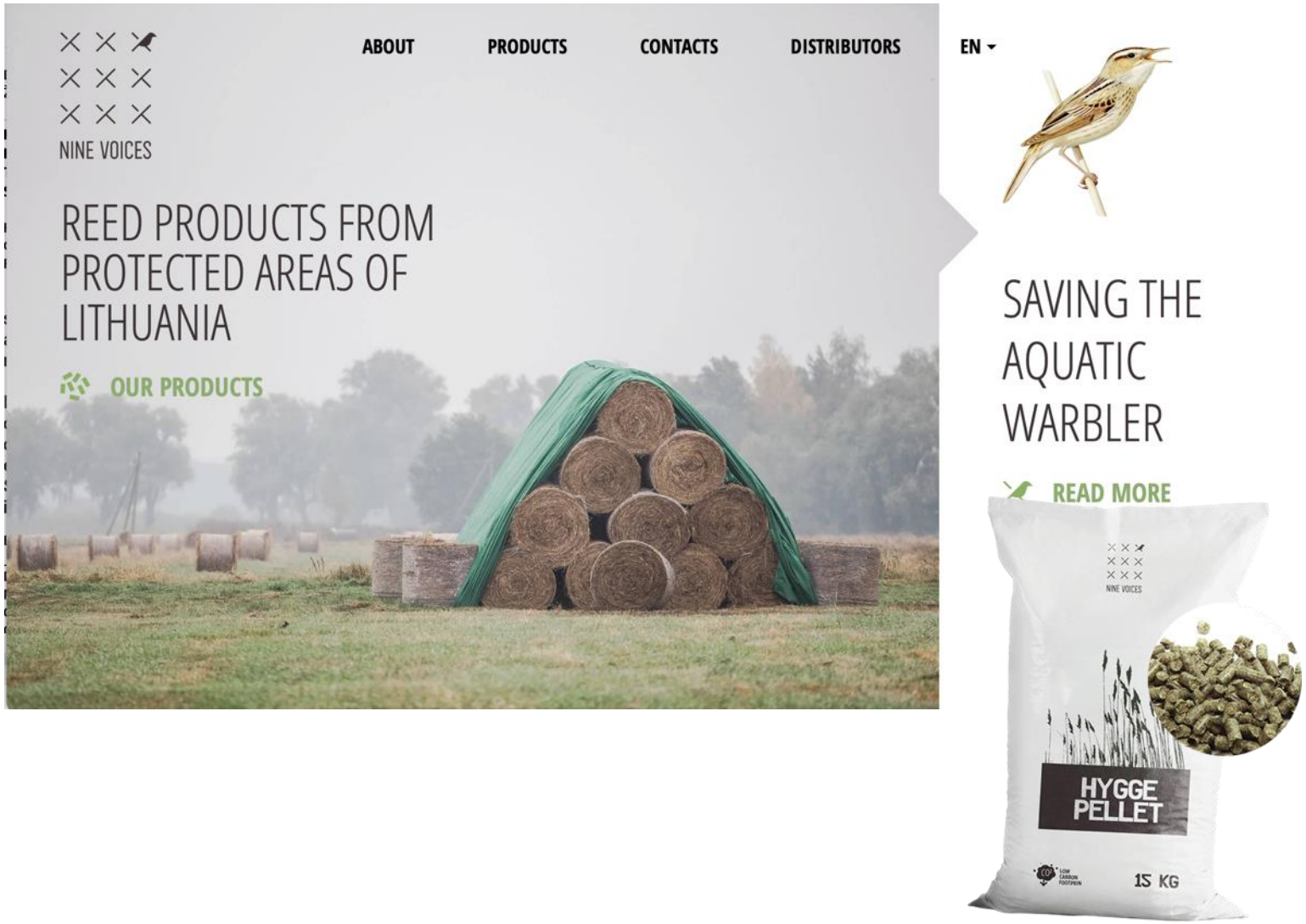
Project website: https://meldine.lt/en/
Duration: 2016-2023

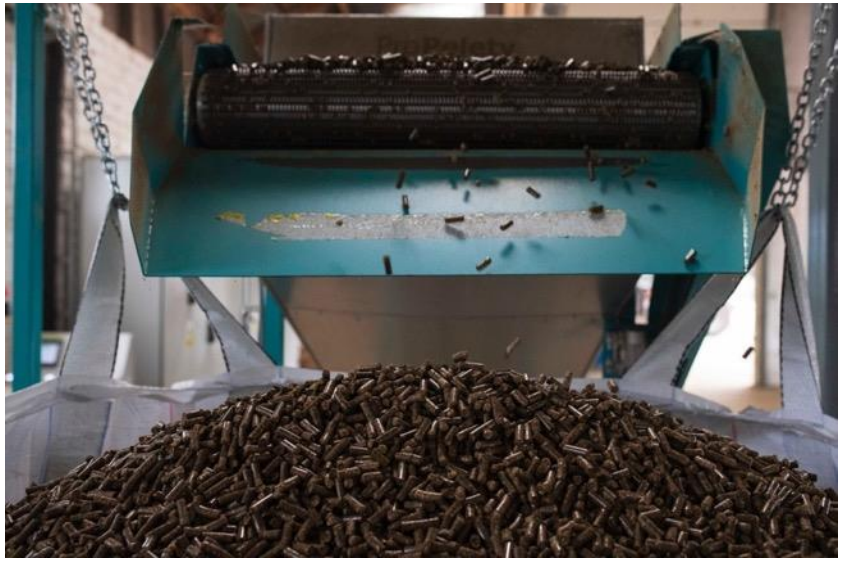
Žymantas Morvėnas, Baltic environmental forum
30 Sept. 2021, at the lake Lubāns, Latvia

Project work:
Habitat restoration in Lithuania and Belarus (project areas 20 000 ha);

Developing and implementing pilot conservation translocation

Establishing biomass processing business to sustain long-term habitat maintenance





Project work Stakeholder communication, awareness raising

Aquatic warbler highly specialised umbrella species

It requires:

- Large scale open sedge fen or eutrophic floodplain meadow landscape;
- Specific composition and structure of vegetation (sedges)
- Rich food source (invertebrates)

Good habitat condition is determined mostly by water quality and its level dynamics

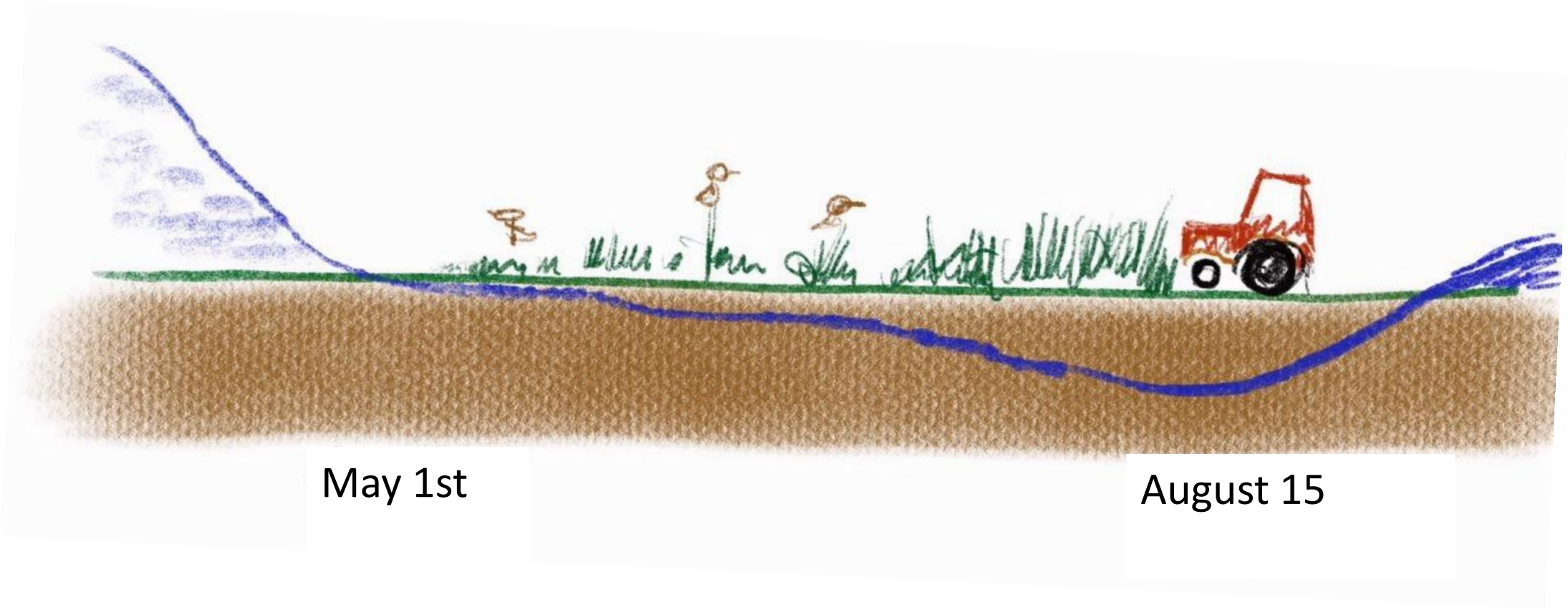
Eurtrophic floodplain meadows

- High farming interest

Low productivity marshes

- Low farming interest

Preffered water management scenario for aquatic warbler conservation at Šyša polder



May 1st

August 15

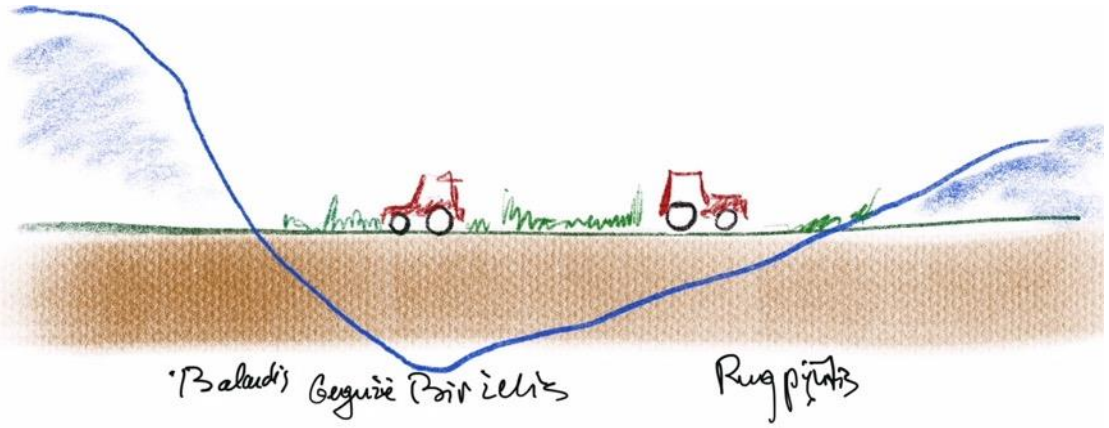
Specific agri-environmental measure

- Support for non-productive investments for restoration of AW habitats;
- Conservation of AW habitats in natural and semi-natural meadows (291 eur/ha);
- Conservation of AW habitats in wetlands (160 eur/ha)

The problem: confliting interests and old polder management routine

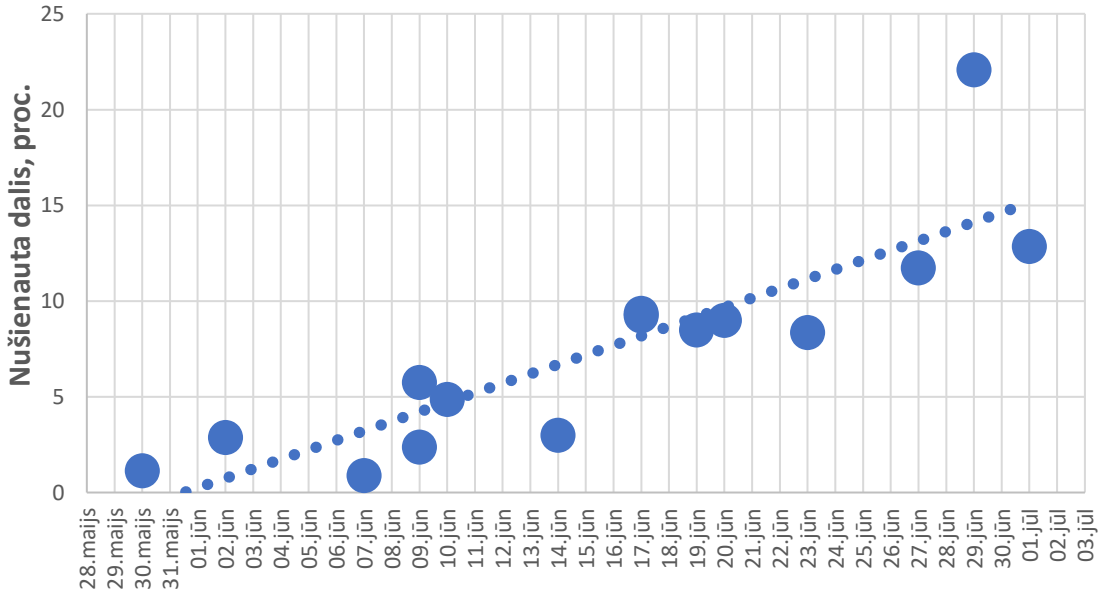
- Conflicting interests between nature conservation, farming and fish recources management;
- Early water pumping cause vegetation change unfavourable to species conservation;
- Lack of recources to pump water from the polder in autumn (important for collecting late-cut biomass).

Traditional water management in Šyša polder



Analysis of early mowing starting date based on satellite images (Sentinel data)

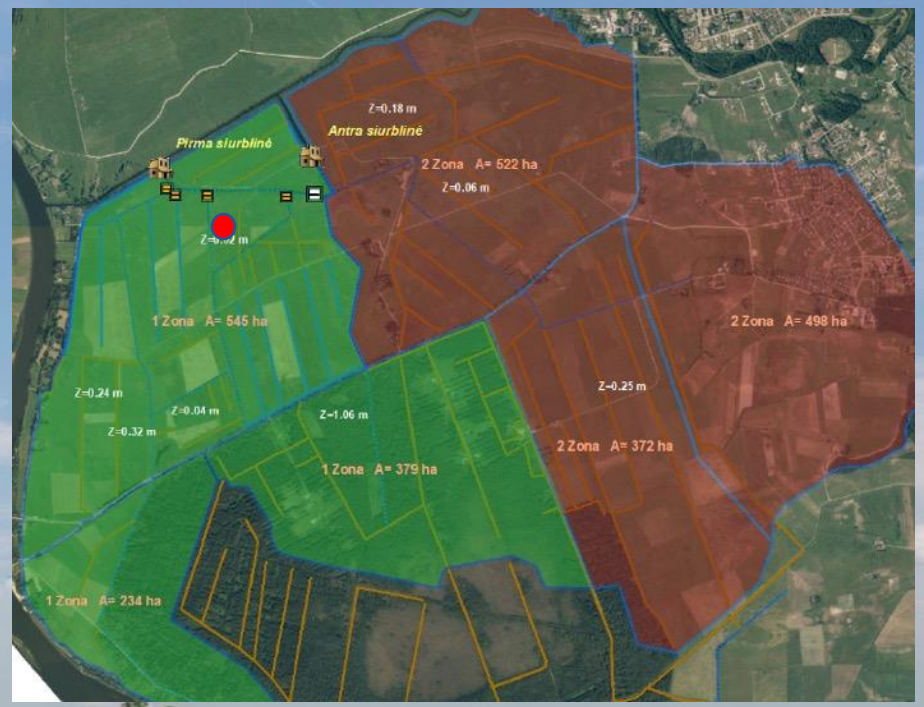
What is farmer's interest to start operating their tractor in the field?



10% of the area is mowed in June 17-20

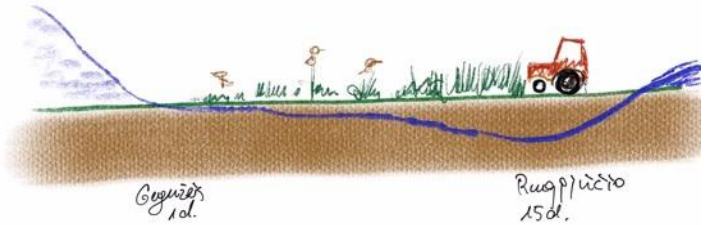
Sollution found

Separating conflicting interests by the sluice

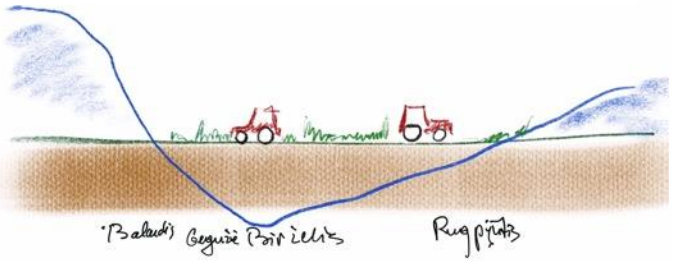


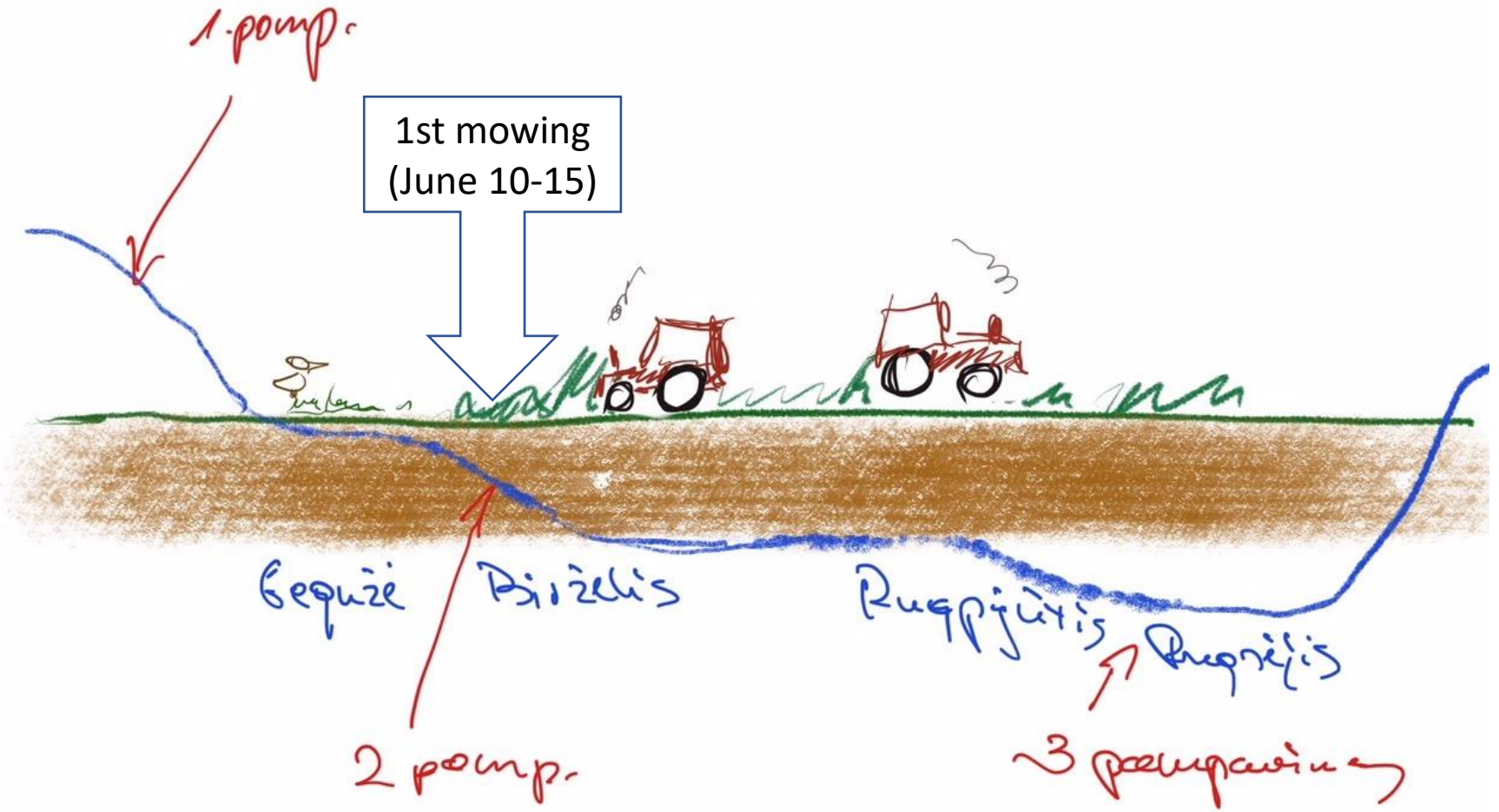
Setting a compromized water level management regime

Conservation need scenario



Traditional farming practice





Benefits of compromised water management scenario

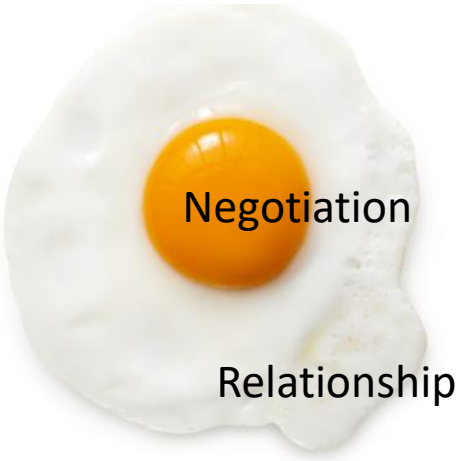
- Favorable habitat conditions (food basis, vegetation) for aquatic warbler and other biodiversity
- Better grass harvest for farmers;
- Adaptation to climate change (avoiding droughts);
- More efficient (quicker and cheaper) water management at the polder

Balancing interests and seeking agreement with farmers – how we did it?

The mindset determining cooperative intention

How do we, nature conservationists, understand farmer – a "management tool" or "full member in the ecosystem" who's interests are equally important as the bird's?

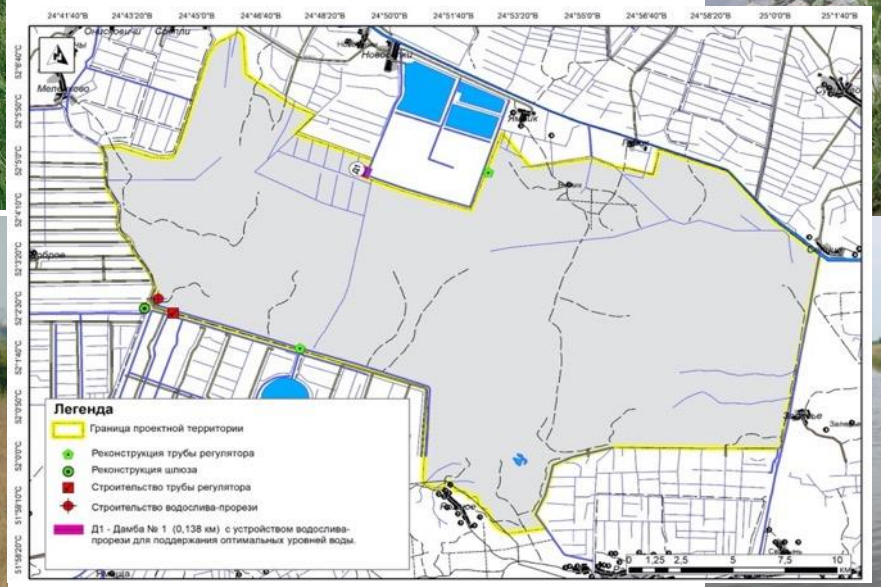
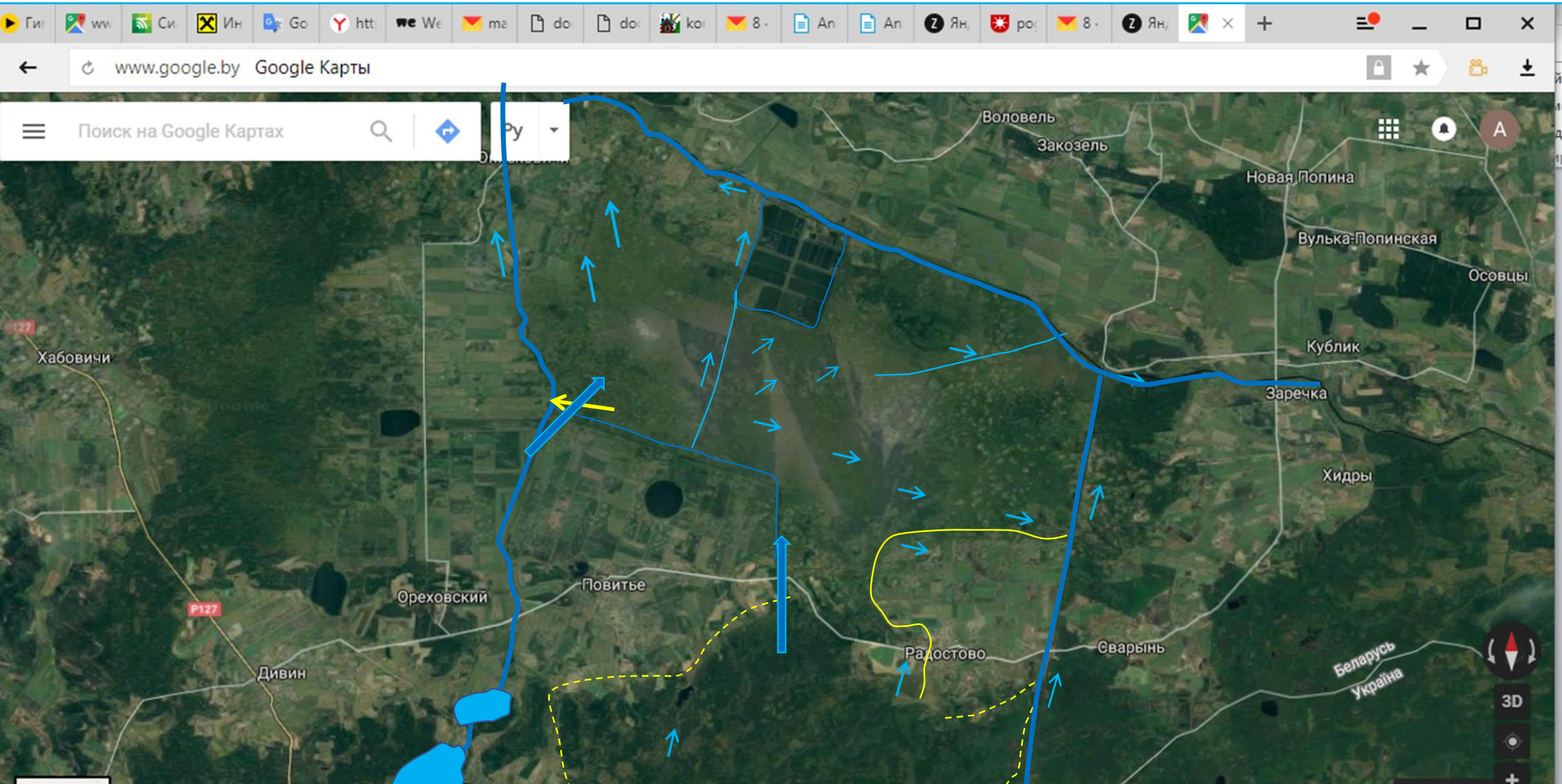
Sustainable use of priority habitats means not only favorable conservation status of Aquatic warbler, but also "favorable conservation status" of a Farmer.



- Long-term direct communication with farmers results relationships
- Several consultation meetings and a number of individual communication

Management of water level and quality in Zvanec fen mire (Belarus)

Water management infrastructure



Management of water level and quality in Zvanec fen mire (Belarus)