

Western Uusimaa HOLA Lake II - project

6.11.2023

The Association for Water and Environment of
Western Uusimaa / Länsi-Uudenmaan vesi ja
ympäristö ry (LUVY)



HOLA Lake II

- Lakes Hiidenvesi and Enäjärvi (Vihti)
- Total budget: 176 950 €
- Involving local residents in fisheries management and monitoring
- Increasing the knowledge of predatory fish population and recruiting people to do citizen science (monitoring fish and invasive species)
- Improving the utilization of local fish and less valuable fish
- Gathering and sharing information of experiences related to management of fisheries

Western Uusimaa HOLA Lake II –project

What has happened?

- **The project has gone almost as planned**
- **Changes to the budget and project plan**

Procurement of refrigeration/fish processing equipment (20000 €)

→ Cyprinid and *G. maxima* themed video series and marketing (~12000 €) and survey of cyprinid fish processing and storage facility (5000 €)

- **Voluntary work accumulated in a different way than planned**

The interest was strongly focused on the utilization of cyprinid fish and courses

Neither the monitoring of *G. maxima* nor the monitoring of pike fingerlings attracted any volunteers

All the remaining budgeted voluntary work hours were collected during the summer 2023

Ilmoita havaintosi isosorsimosta:

Tähdellä * merkityt kentät ovat pakollisia

Isosorsimo on minulle tuttu vieraslaji ja tunnistan sen ulkonäöltä *

Kyllä
 Ei, toivon havainnoilleni vahvistuksen

Isosorsimo-esiintymä/levinneisyys havaintoalueellani on arviolta *

alle 10 m2
 alle 100 m2
 yli 100 m2
 en osaa arvioida

Suunnittelen isosorsimon niittoja *

en suunnittele niittoja tai en halua osallistua kasvun seurantaan
 haluan osallistua kasvun seurantaan
 tarvitsen lisätietoja niiton toteuttamista varten

Isosorsimoesiintymän sijainti ja muuta *

Observationer av jättegröe:
Fält markerade med en * är obligatoriskt

Jättegröe är en för mig bekant främmande invasiv art och jag känner igen den *

ja
 nej, jag vill få mina observationer bekräftade

Förekomsten av jättegröe/utbredningen på mitt observationsområde är uppskattningsvis *

under 10 m2
 under 100 m2
 över 100 m2
 kan inte uppskatta

Jag planerar slåtter av jättegröe *

jag planerar inte slåtter eller jag vill inte delta i uppföljningen av växten
 jag vill delta i uppföljningen av växten
 jag är i behov av tilläggsinformation för att förverkliga slåttern

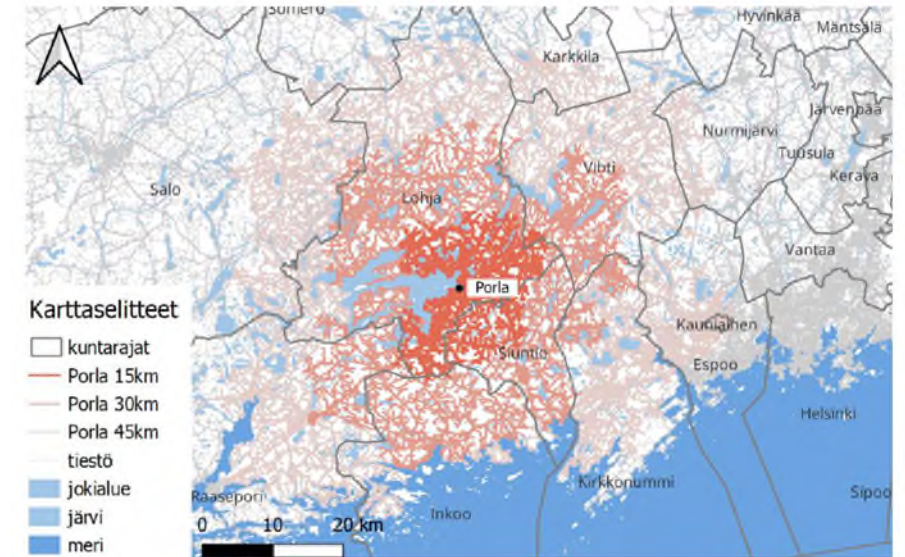
Jättegröebeståndets plats och övrigt *

No observations were reported 😞

Improving the utilization of cyprinid fish

- **Finnish Consulting Group** are studying and resolving which location in Western Uusimaa region would be logistically optimal for cyprinid fish processing and storage facility
- The survey is based on >10 interviews with municipal employees, processors, fishermen, and other subject stakeholders
- Profitability calculations
- In terms of storage facility, there were two alternative solutions compared: container solution and permanent storage/processing facility

Survey is now ready, and the presentation will be held on 22.11. 16.00-18.00, Welcome! (online but only in Finnish)



Kuva 3. Karttatarkastelu Porlan kalaväkin lähtöniemeenä Porlan vanha kalari

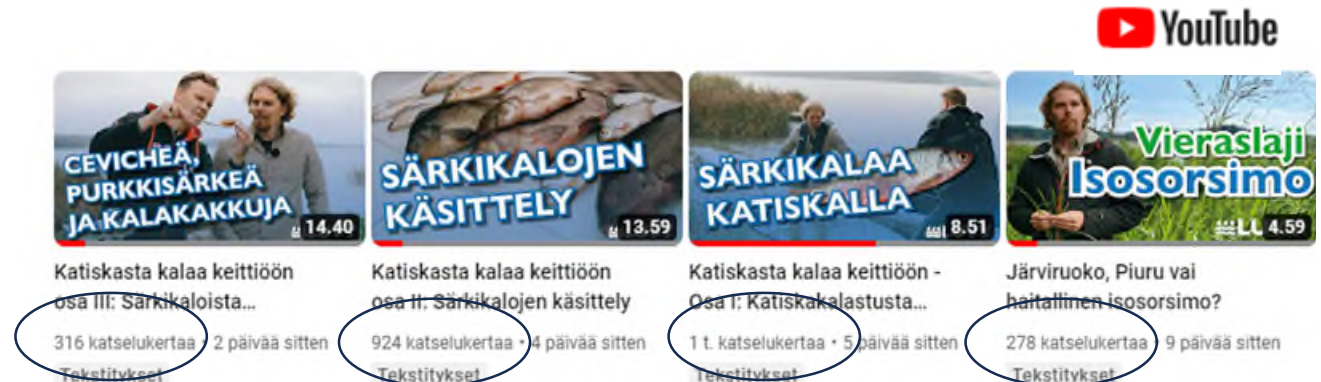


Cyprinid and *G. maxima* video series

- Cyprinid video series (subtitles in Finnish and Swedish):
 - [Part 1: Trap fishing](#)
 - [Part 2: Handling fish](#)
 - [Part 3: Cooking cyprinids](#)
- Videos have been published on the LUVY's YouTube channel and Instagram. Paid advertisements are running on Instagram and Facebook.



- Instagram statistics (5.11.)
 - Part 1: Targeted accounts 172, repetitions 312
 - Part 2: 157 and 238



YouTube

Video Title	View Count	Time
CEVICHEA, PURKKISÄRKEÄ JA KALAKAKKUJA	316 katselukertaa	14.40
SÄRKIKALOJEN KÄSITTELY	924 katselukertaa	13.59
SÄRKIKALAA KATISKALLA	1 t. katselukertaa	8.51
Vieraslaji Isosorsimo	278 katselukertaa	4.59

Katiskasta kalaa keittiöön osa III: Särkikaloista...
316 katselukertaa • 2 päivää sitten
Tekstitykset

Katiskasta kalaa keittiöön osa II: Särkikalojen käsittely
924 katselukertaa • 4 päivää sitten
Tekstitykset

Katiskasta kalaa keittiöön - Osa I: Katiskakalastusta...
1 t. katselukertaa • 5 päivää sitten
Tekstitykset

Järviruoko, Piuru vai haitallinen isosorsimo?
278 katselukertaa • 9 päivää sitten
Tekstitykset

5.11., at 20.00 (Part 3 had only been released on YouTube, and it had not been advertised yet.)

Other activity

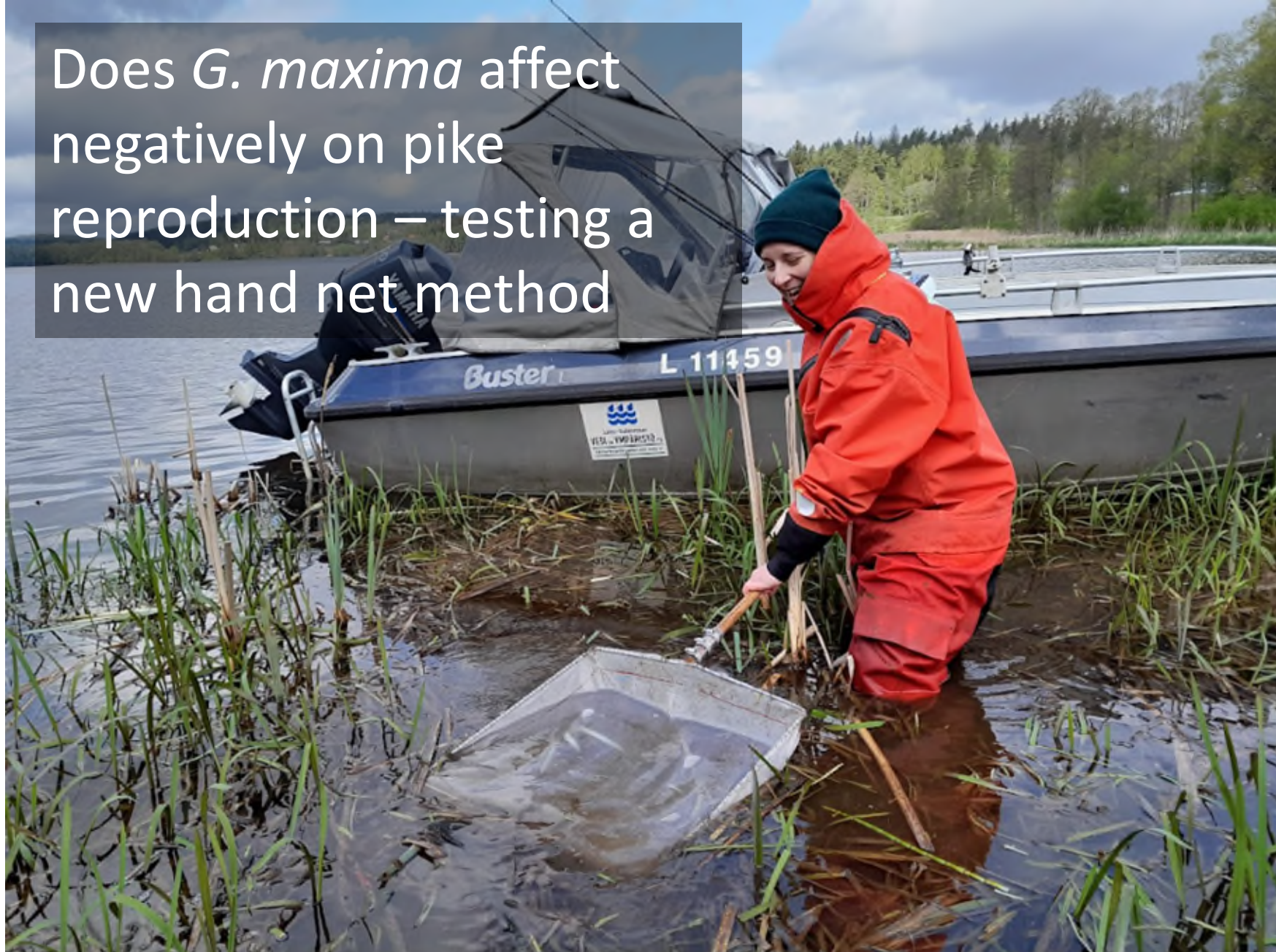
- Monitoring pike fingerlings
- Video series: [Controlling invasive Reed sweet-grass *Glyceria maxima*](#)
- Developing and manufacturing fish traps and monitoring equipment together with Vocational College Livia
 - Field testing day in June with students
 - Mowing reed sweet-grass with students
- Social media posts, newsletters...

What's left?

- Reporting
- Social media campaign (videos)
- The presentation of survey



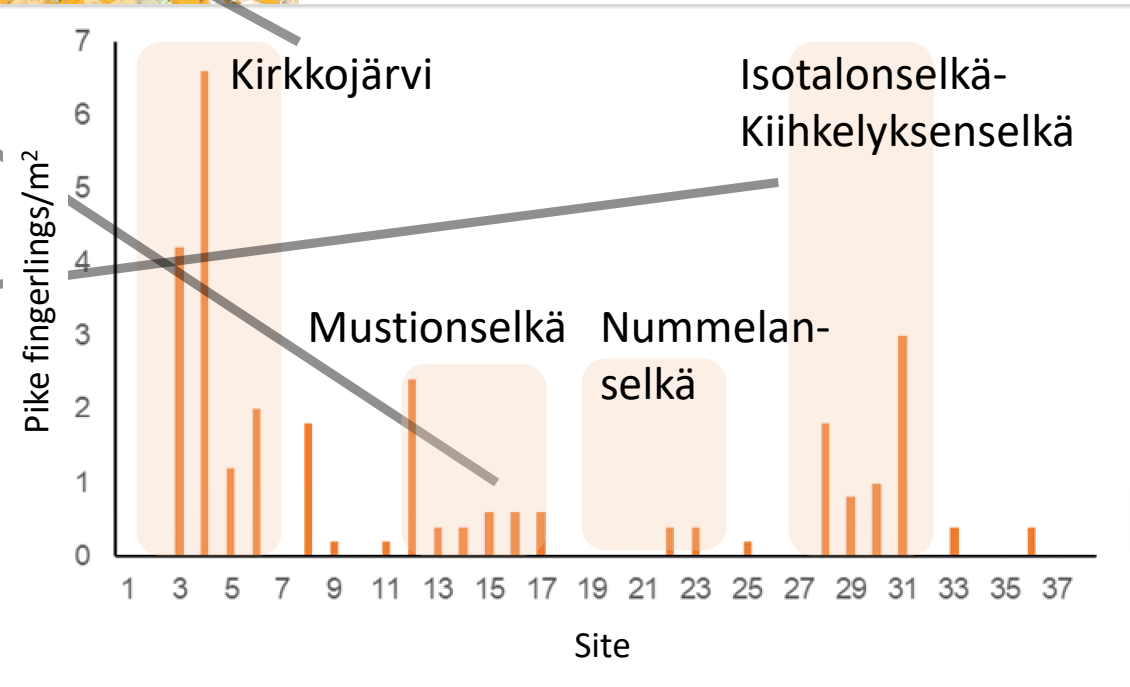
Does *G. maxima* affect negatively on pike reproduction – testing a new hand net method



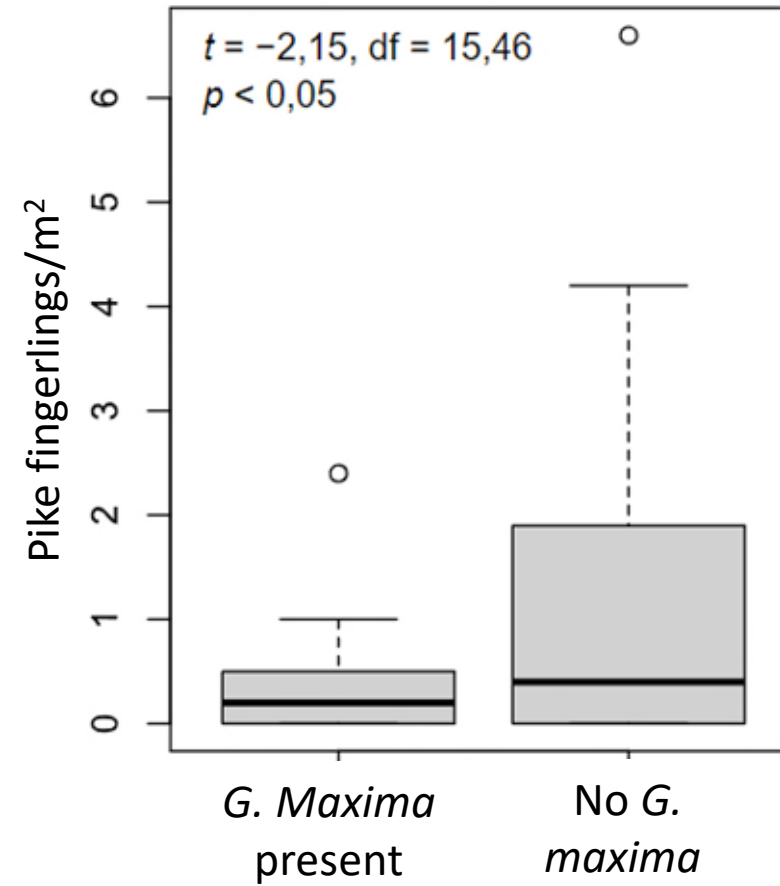
Monitoring pike fingerlings

- 38 different sites were sampled with a hand net during May 2023
- Special focus on the shallow and eutrophicated eastern parts
- Standardized method (20 hand net pull ups/site) → allowed us to do quantitative comparisons

Hola Lake II –project & Restoration of Lake Hiidenvesi 2023-2025



There were more pike fingerlings within the native macrophyte species





Pikes

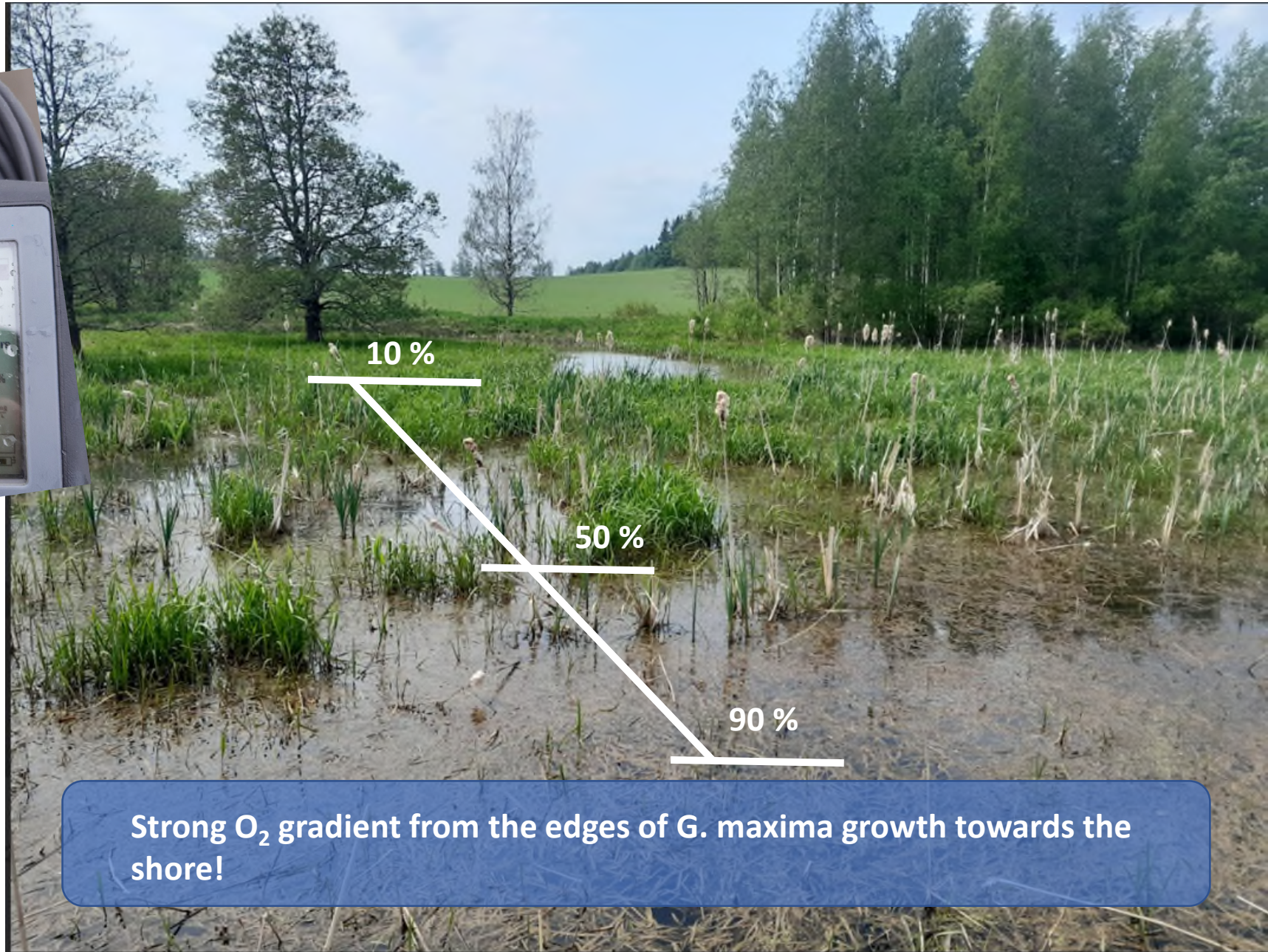
Preliminary thoughts

- *G. maxima* has reduced the pike reproduction potential in several bay areas in Hiidenvesi – the situation worse in the eastern basins where *G. maxima* has distributed the most
- Sparse *G. maxima* growth is suitable for pike fingerlings - in some stony shores *G. maxima* has actually provided new spawning habitats for pike!
- The highest pike densities were often found within native macrophyte species
- Existing wetlands (built for reducing external loading) around Hiidenvesi provide spawning habitats for pike and produce pike fingerlings

Smooth newt
(*Lissotriton vulgaris*)



- Pääkslahti in Mustionselkä basin one example of a former spawning habitat/flood plain, which is full of *G. maxima* nowadays
- Strong regulation of water level also prevents spring floods in Hiidenvesi → benefits *G. maxima* and harms pike reproduction



Strong O₂ gradient from the edges of G. maxima growth towards the shore!

Wetlands





Thank you!