



Salmocross

An innovative research and implementation
project in the aquaculture

Martyna Sas
Olsztyn, 17/11/2022



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Salmocross?



- Salmocross is an innovative research and implementation project.
- The main goal of the project is to develop a new trout subspecies that is resistant to disease and changing farming conditions.



Salmocross



- Basics developed in 2017.
- The grant agreement was signed in November 2021.
- Lasts until mid-2023.
- Later?





Goals



- to develop and implement a comprehensive technology of fish breeding
- with a possibility of breeding new subspecies of salmonids,
- with their main desirable feature as resistance to viral diseases,
- the project facility will also serve as a practical experimental base for students of Aquaculture - Business and Technology, at the Faculty of Oceanography and Geography of the University of Gdańsk,
- we also invite other teaching units interested in cooperation.





Consortium

1. TARNOWO TROUT Fishery (Rybajka Aquaculture) – Ziemowit Pirtań

64-930 Tarnowo 16, Greater Poland Voivodeship

PROJECT COMMERCIAL LEADER





Consortium

2. Institute of Animal Reproduction and Food Research – Polish Academy of Sciences in Olsztyn

ul. Tuwima 10, 10-748 Olsztyn, Warmian-Masurian Voivodeship

PROJECT SCIENTIFIC LEADER



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Consortium

3. University of Gdańsk

ul. Jana Bażyńskiego 8, 80-309 Gdańsk, Pomeranian
Voivodeship

Department of Marine Biology and Ecology,
Faculty of Oceanography and Geography,
University of Gdańsk

Al.M. Pilsudskiego 46, 81-378 Gdynia, Pomeranian
Voivodeship

CONSORTANT – SCIENTIFIC PARTNER OF THE PROJECT



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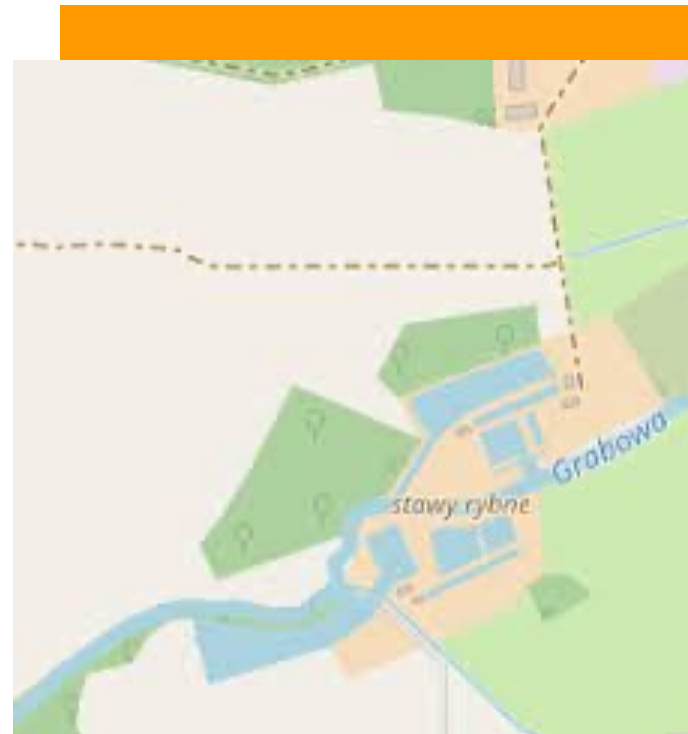


Consortium

4. Agricultural farm – Salmonid Fish Breeding Grzegorz Materka

Nowy Żytnik 6, 76-129 Ostrowiec, West Pomeranian Voivodeship

CONSORTANT – COMMERCIAL PARTNER OF THE PROJECT





Consortium

5. The Czarci Jar Fish Farming Center – Rafał Chwaluczyk

Czarci Jar 1, 11-015 Olsztynek, Warmian-
Masurian Voivodeship

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What do we do here?





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64-930 Tarnowo 16, Greater Poland Voivodeship

PROJECT COMMERCIAL LEADER





What we do here?



Rainbow Trout

X

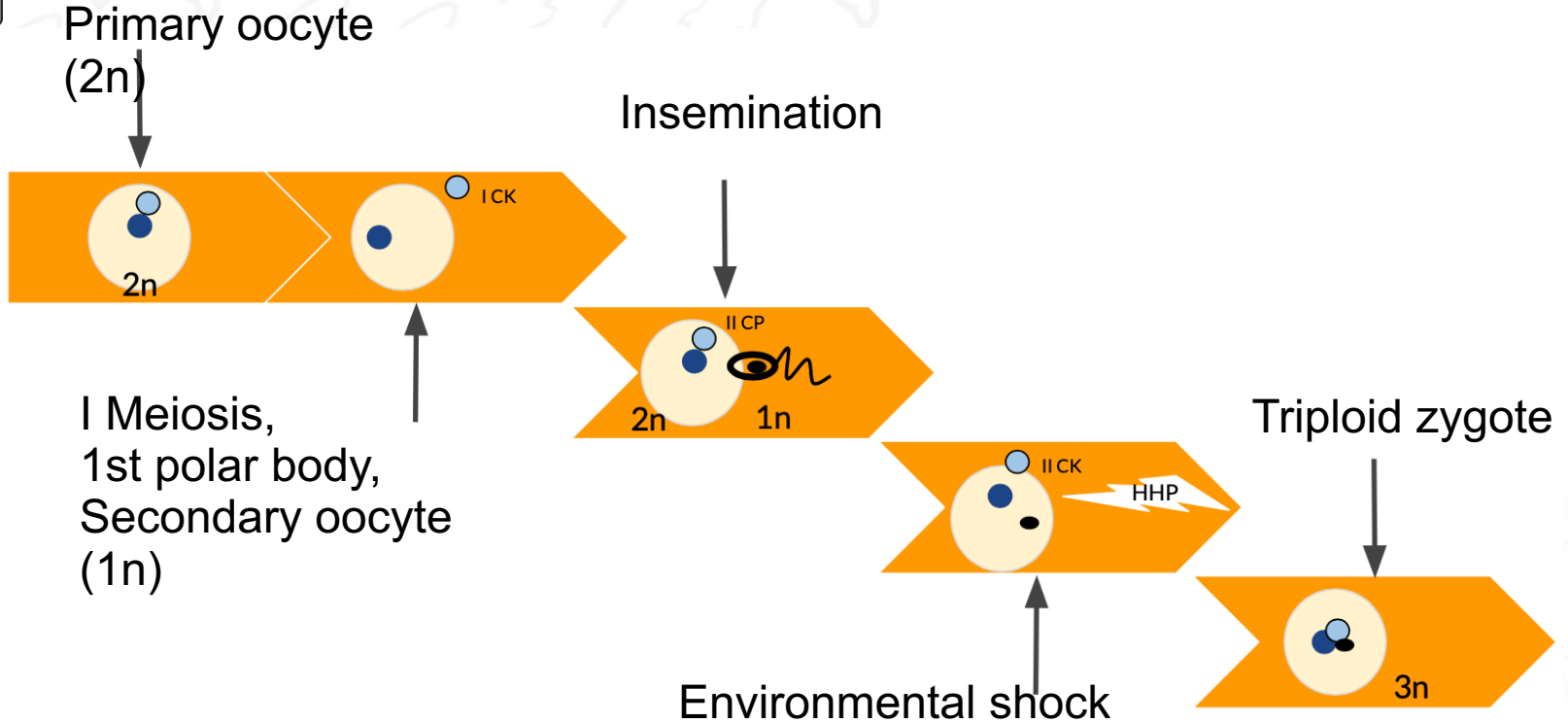


Spring Trout





What we do here?





What we do here?





What we do here?



Greater-Poland Trout





What we do here?





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What we do here?

Kriokonserwacja nasienia
Zapładnianie nasieniem świeżym



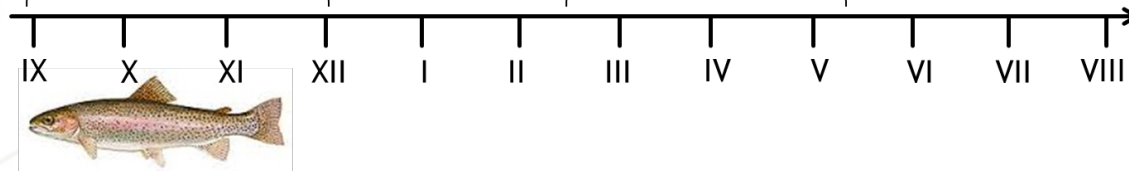
Zapłodnienie
nasieniem mrożonym



Jesienne tarło



Wiosenne tarło



Wykorzystanie kriokonserwacji nasienia do produkcji krzyżówek ryb łososiowatych - przykład - salvelinus x oncorhynchus





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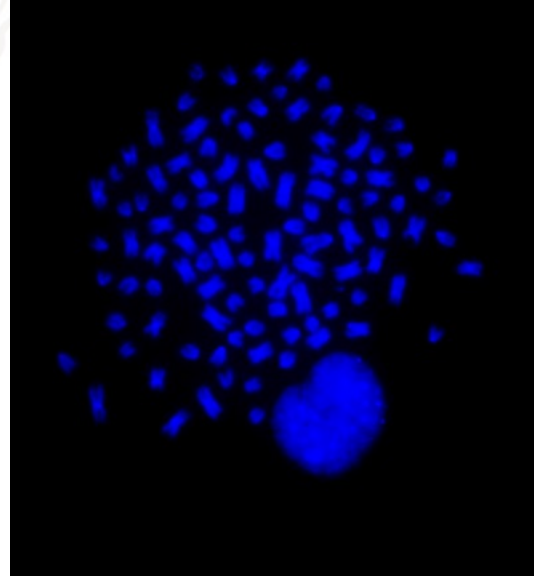
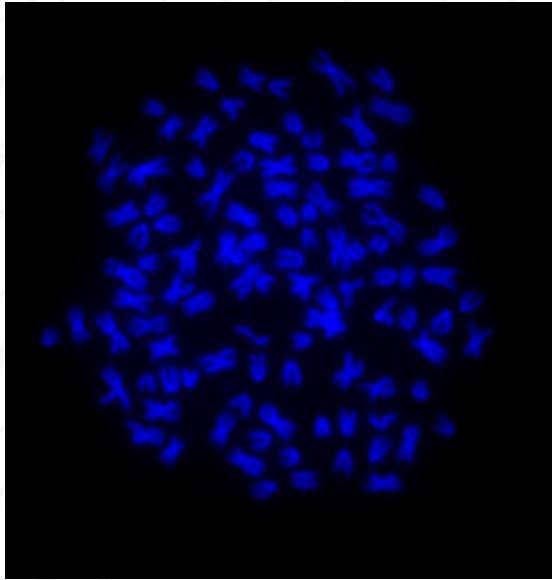


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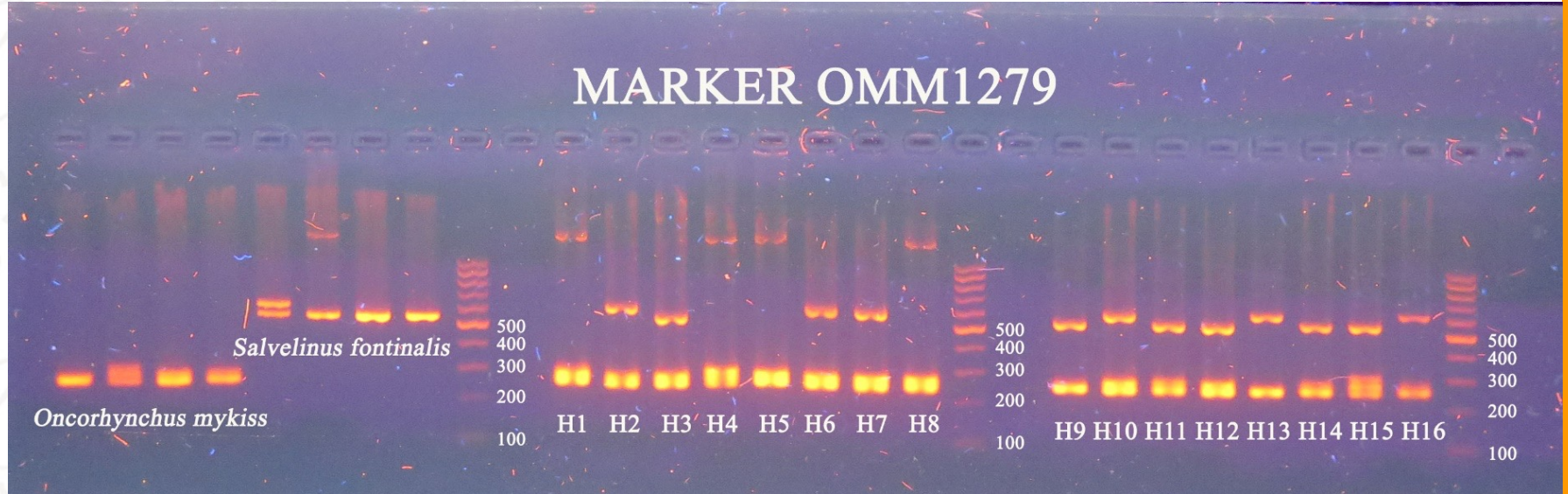
Molecular analysis of triploid hybrids of rainbow trout (♀) and spring trout (♂)





What we do here?

MARKER OMM1279



Confirmation of the participation of genomes of both species in hybrids from the 3n group



XLVII SZKOLENIE - KONFERENCJA
HODOWCÓW RYB ŁOSOSIOWATYCH
13 - 14 PAŹDZIERNIKA 2022 | GDYNIA



MINISTERSTWO
ROLNICTWA
I ROZWOJU WSI

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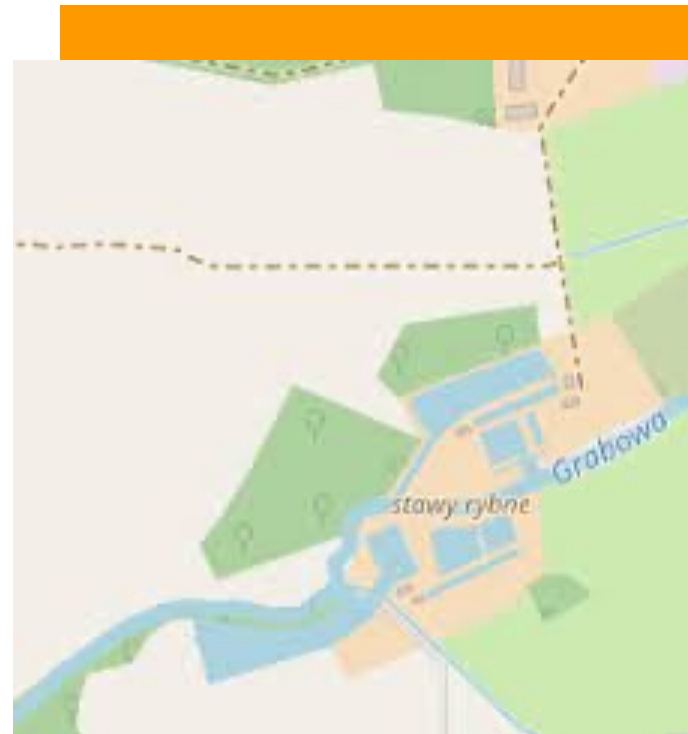


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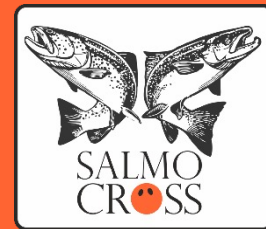
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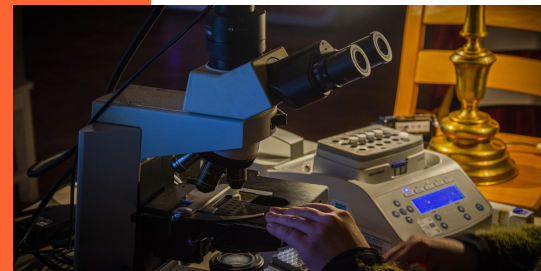
Where are we so far?



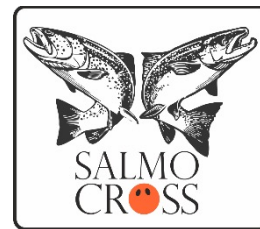


So far:

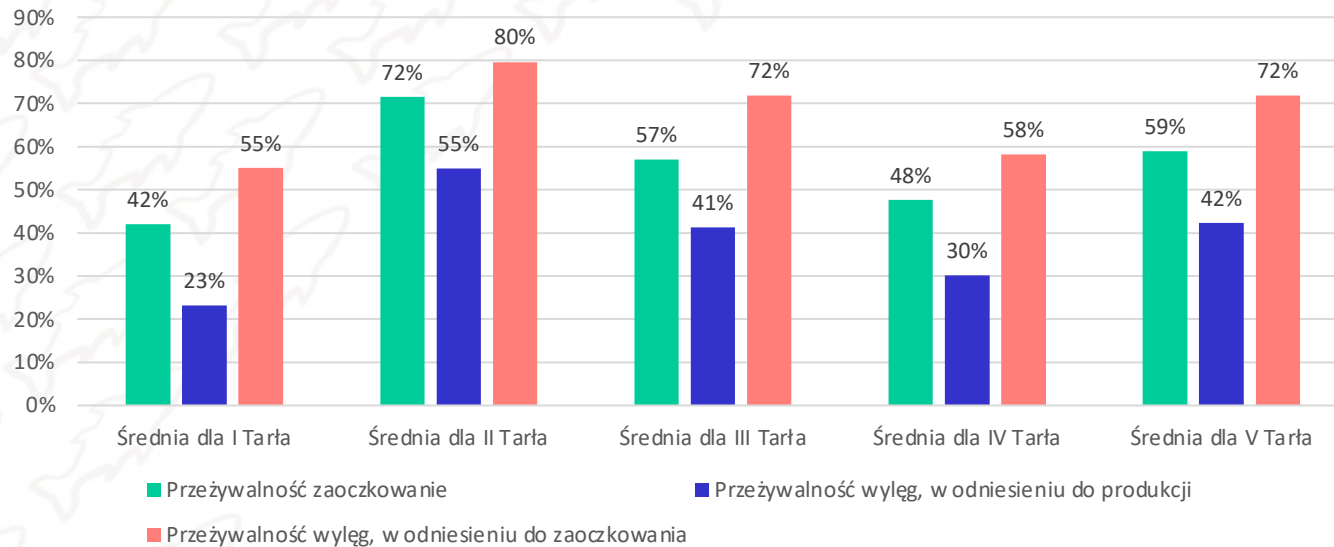
- 212,25 liters of eggs
- 2 360 263 eggs
- 23% - 80% survival rate

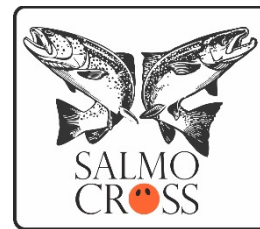


Survival rate



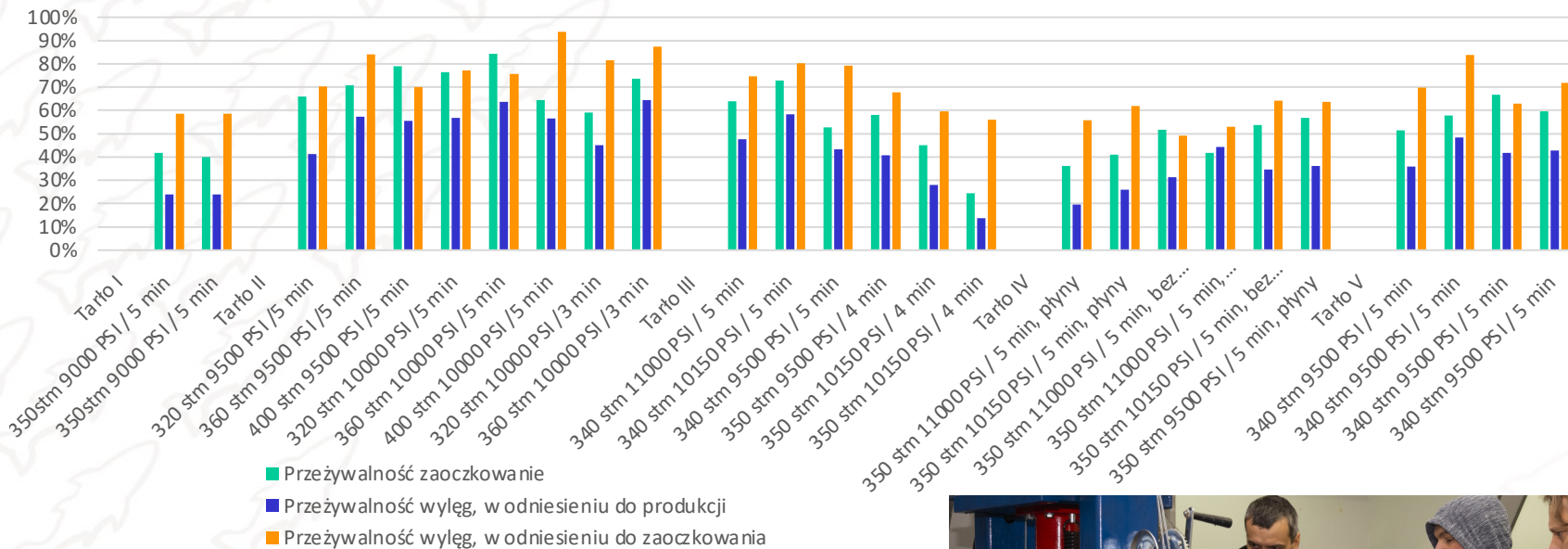
Survival rate for individual spawning





Survival rates – all groups

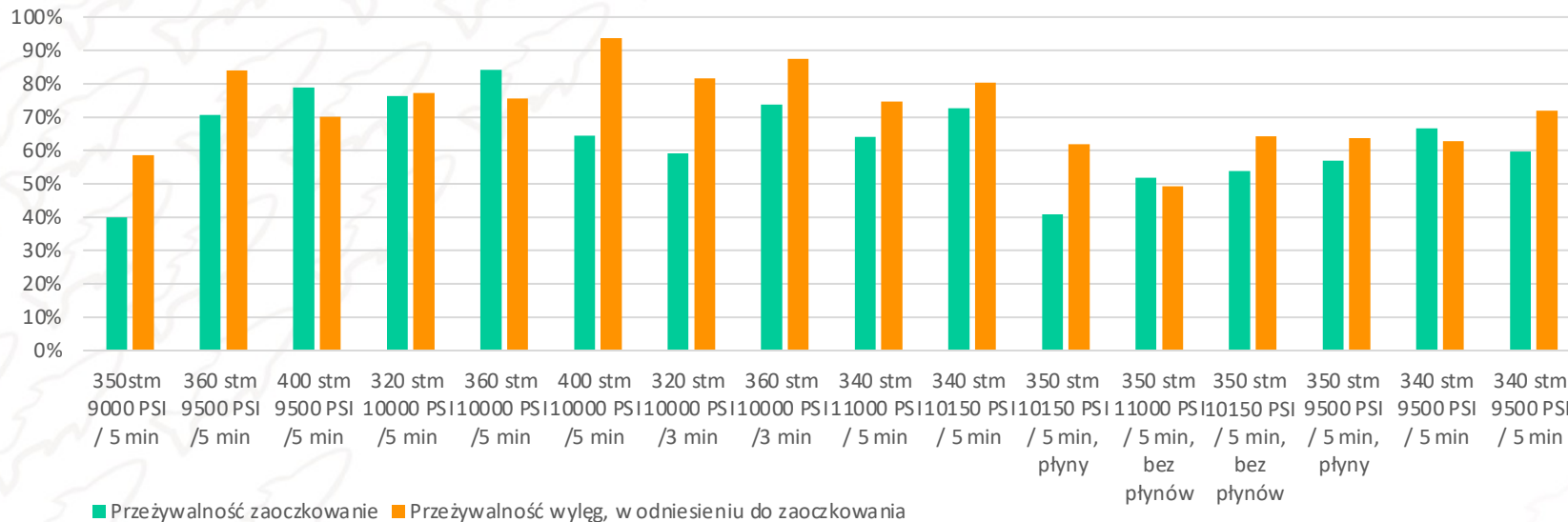
Wydajność z perspektywy produkcji





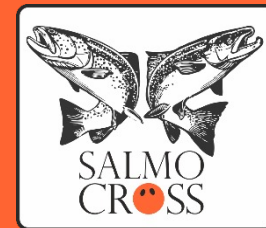
Survival rate for individual groups

Wydajność względna



What's next?

- Estimate the best spawning time,
- Estimate the best conditions for environmental shock (only one experiment variant),
- Increase survival rate.





Thank you!!!

Any questions?

our website:

✓ <https://salmocross.pl>

social media

✓ <https://www.facebook.com/Salmocross/>

