



Protection Margaritifera at the G Green Belt Bavaria – Czech Republik

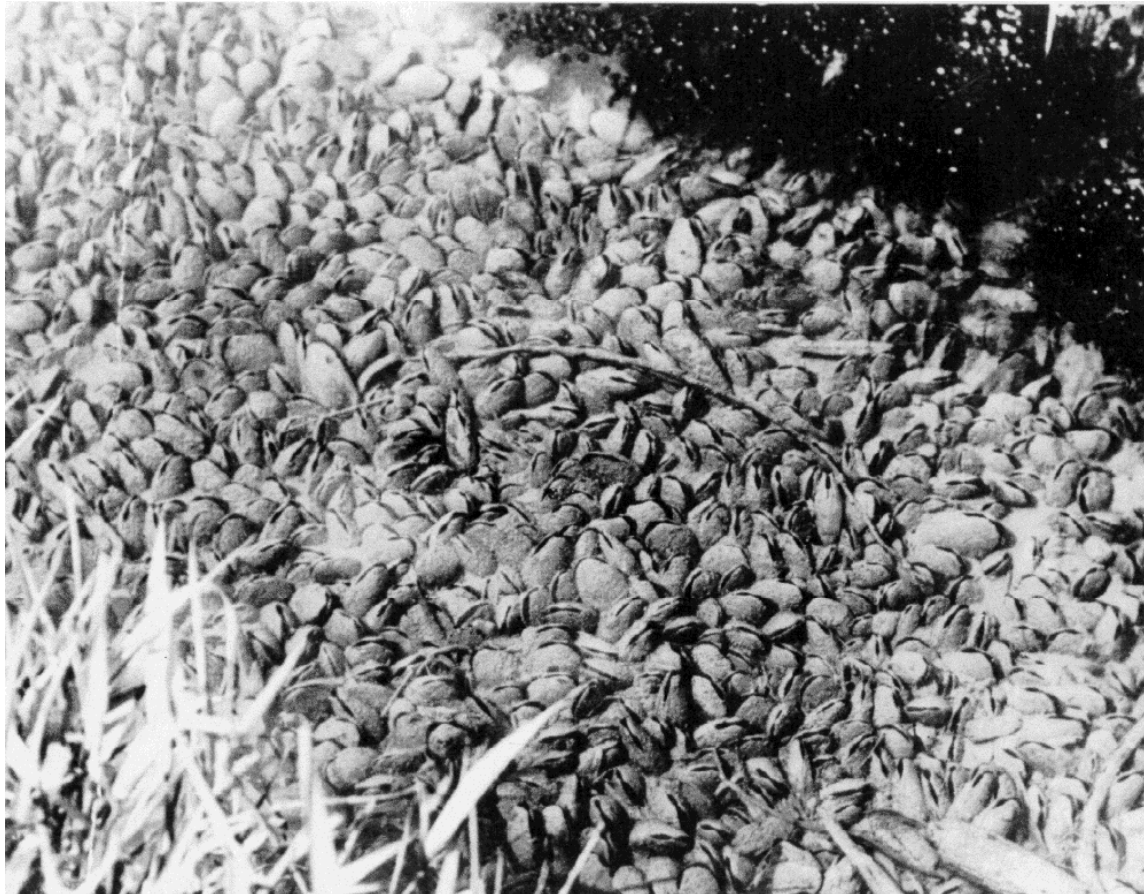
Programm zur grenzüberschreitenden
Zusammenarbeit Freistaat Bayern –
Tschechische Republik Ziel ETZ 2014-2020

Projekt 221

Reicipt Margaritifera in the Green Belt Bavaria-Czech Republic



Chronologie of Margaritifera in North-East Bavaria



**At 1900 ca. 700.000
Individuals**



Chronologie of Margaritifera in North-East Bavaria



Since middle 20.
century massiv
decline

2012 the result of a
count : only 31.000
individuals are left



Chronologie of Margaritifera in North-East Bavaria

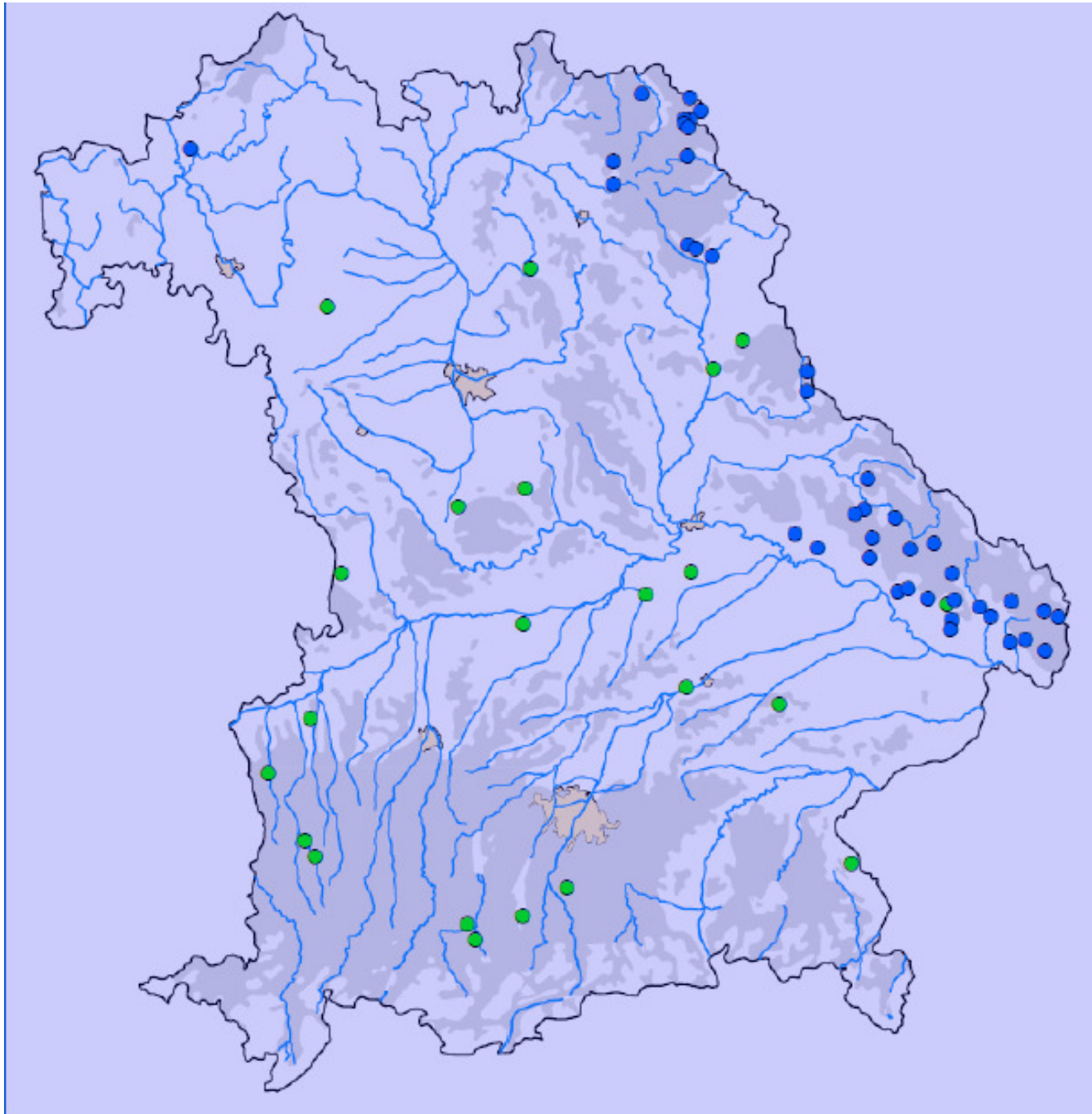
- Nearly no juveniles
- Age of the individuals between 60 und 80 years



**In a few years
the age of
Margaritifera
will be over**



Recept Margaritifera in the Green Belt Bavaria-Czech Republic



Receipt Margaritifera in the Green Belt Bavaria-Czech Republic

Tasks for the project:

- * Building and running of a breeding station in an old building direct at the border Bavaria Czech Republic
- * Restoring of some parts of the mussel-rivers
- * Monitoring of all works
- * Public relation and environmental Education
- * Restoring of the head waters and small brooks
- * Maintenance of the grasland with the goal, to change the composition of the different grasland species



Recept Margaritifera in the Green Belt Bavaria-Czech Republic







Region and localities

Oberfranken

West part of Czech
republic

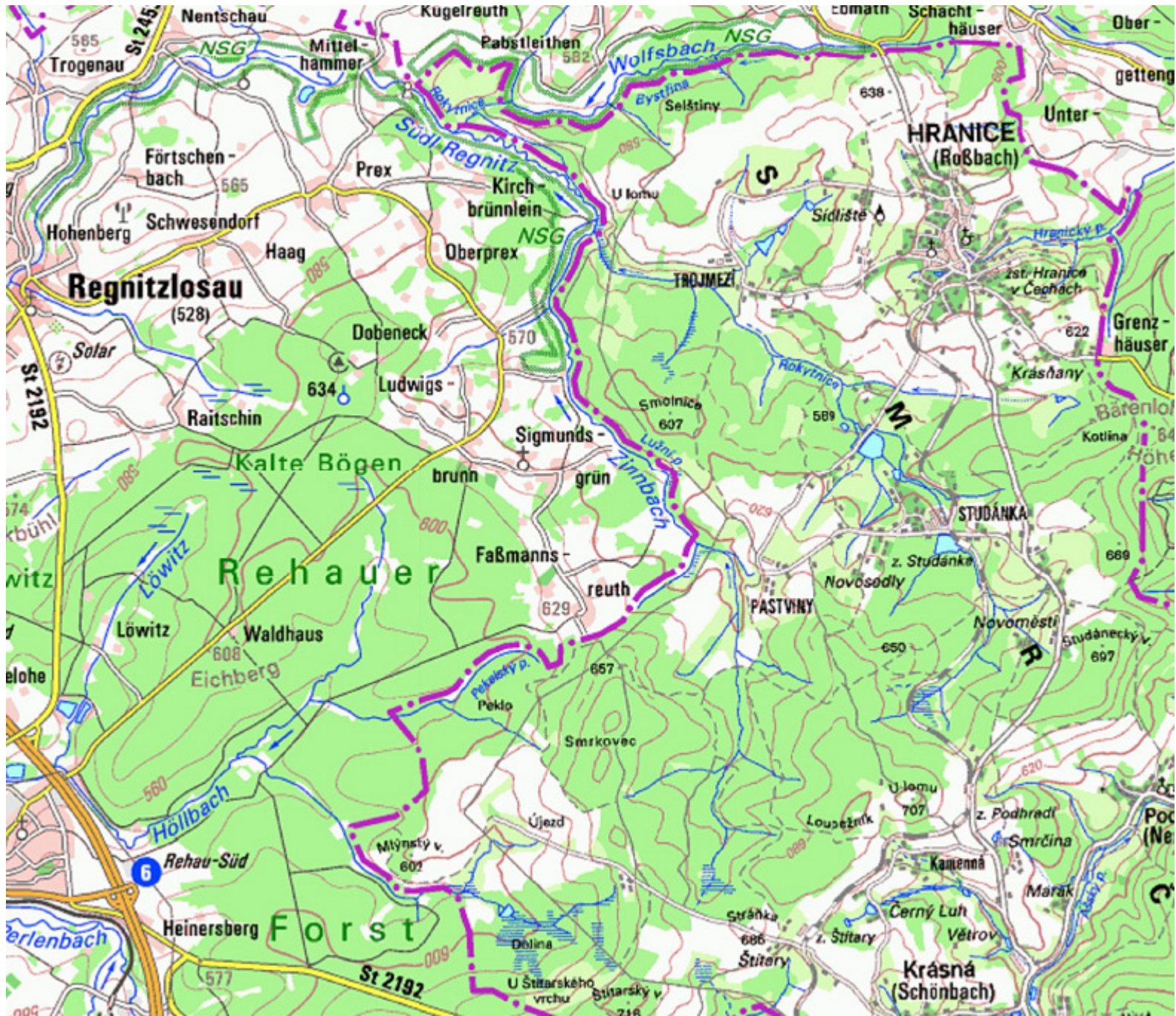
Zinnbach, S. Regnitz

Höllbach, Mähringsbach,
Metzreutherbach, Bockbach
Perlennbach

Wolfsbach (CZ + Sa)

Oberpfalz
Waldnnab, Grenzbach





Our plan with station

Margaritifera margaritifera

Unio crassus

Anodonta cygnea, Anodonta anatina

Fish – **Salmo trutta, Lota lota**, (plan for future Thymallus Thymallus)



Breeding

Planing for 3 breeding cycles inside the house

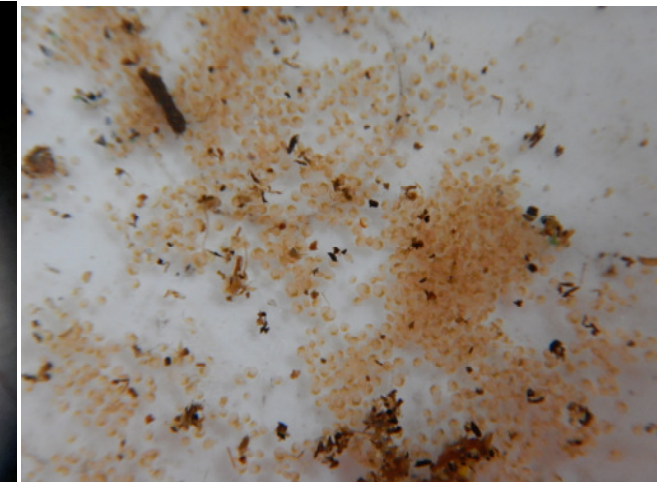
Autumal – October/November, actual finish (cca. 10 000 mussels)

Winter – January/February

Spring – April/May



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Feeding

3 system for feeding of the mussels

-Natural food only – detritus

-Combination food source – detritus + alge (NANO, Shelfish...)

-Alge + - only „comercial food“



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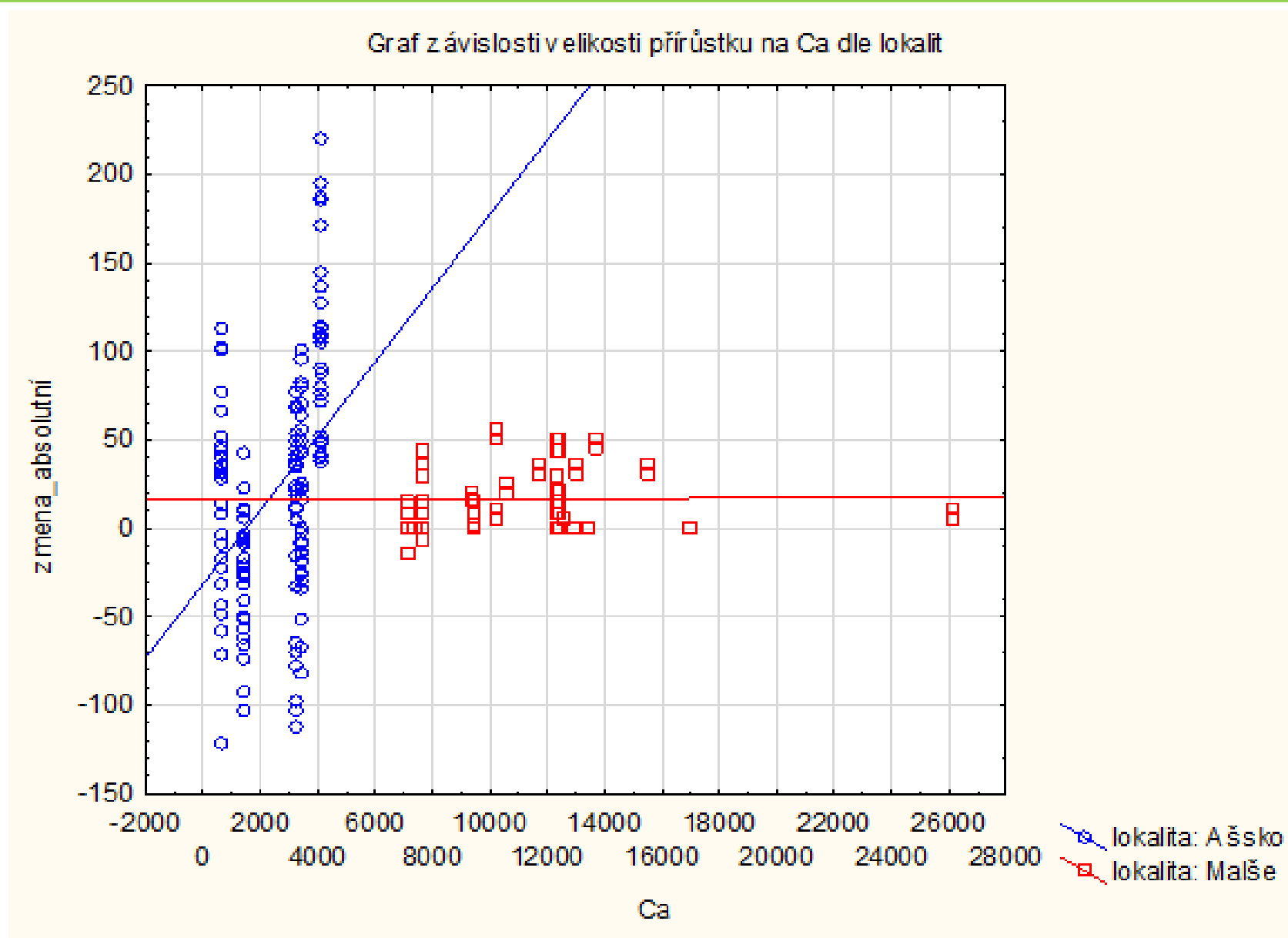
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Vyhodnocení bioindikace
Kategorie úživnosti
velikost přírůstku za 10 dní
(μm)
mimořádně úživné
> 150
velmi dobře úživné
150 - 100
středně úživné
99 - 76
podprůměrně úživné
75 - 50
nedostatečně úživné
49 - 30
téměř neúživné
29 - 10
neúživné
< 10

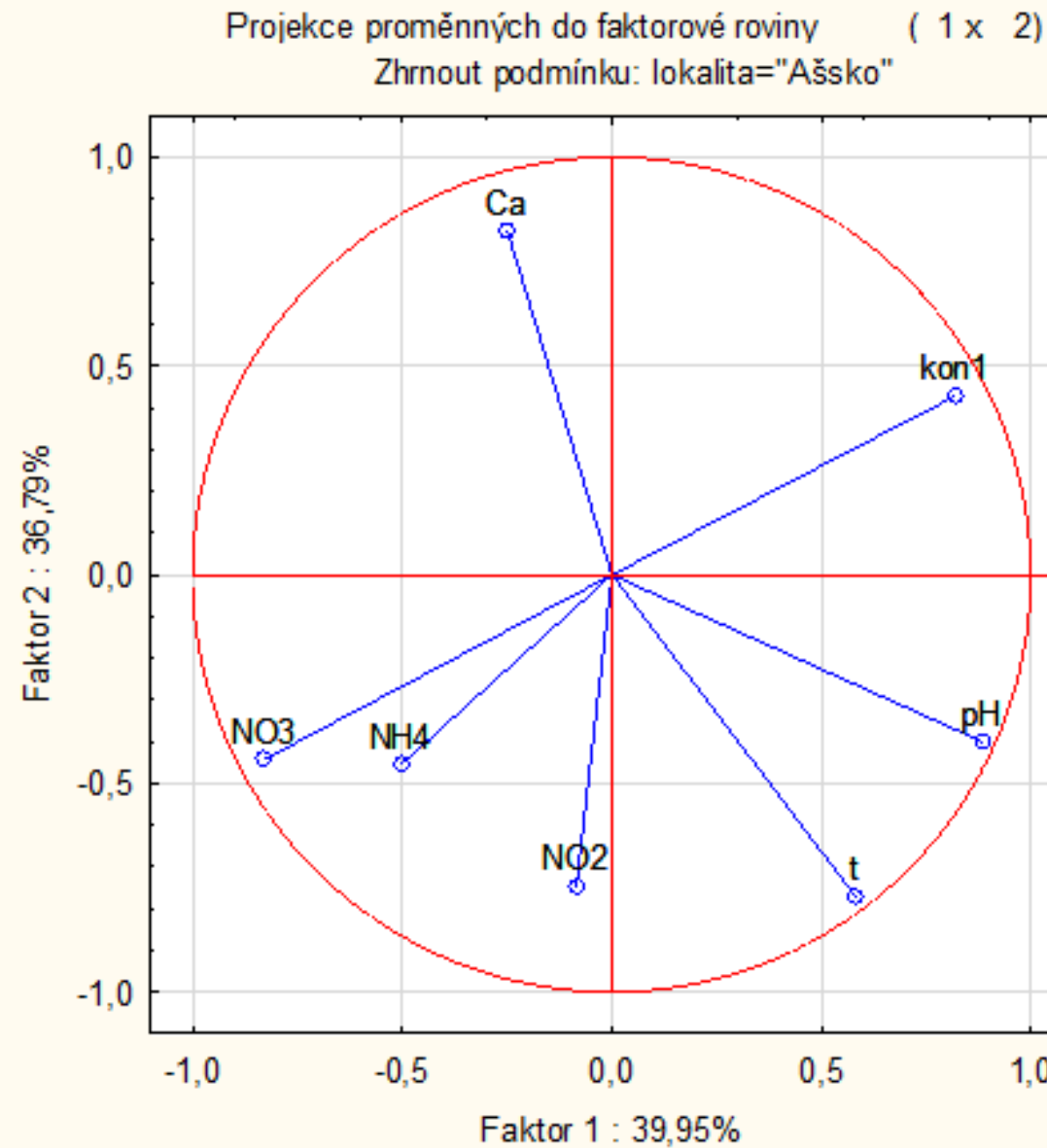
Auswertung der Bioindikation
Nährwertkategorie
Größenzuwachs in 10 Tagen (μm)
außerordentlich nahrhaft
> 150
sehr nahrhaft
150 - 100
durchschnittlich nahrhaft
99 - 76
unterdurchschnittlich nahrhaft
75 - 50
ungenügend nahrhaft
49 - 30
fast nicht nahrhaft
29 - 10
nicht nahrhaft
< 10



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Care of mussels for 5 years

1.st year holeplates + boxes

2.nd year holeplates

3.rd → 5.th year boxes



Monitoring and release of subadults

Search for stabil sectors and places at brooks, bioindikation tests...

Monitoirng of annual growth, survival, dfirt distance....

Water quality monitoring

River spring monitoirng / food sources restoration and establish the new



Brown trout breeding



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OS1



Thank you attention



