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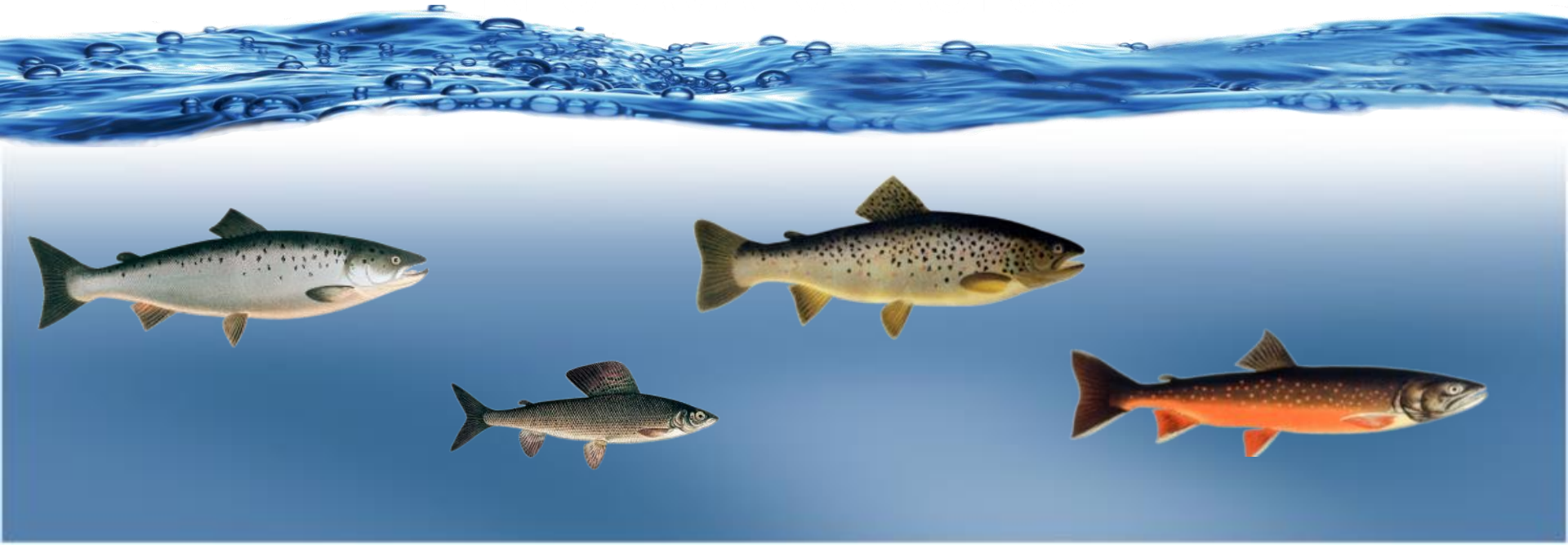
Elinkeino-, liikenne- ja ympäristökeskus

Sustainable fishing of Salmonidae in the Lake Saimaa District 2.4.2014



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General information

Duration:

- 1.10.2011-30.6.2014

Funding:

- National 181 035 e
- EC co-funding 180 635 e
  - Life+ information and communication
- Total budget 361 670 e

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Project's implementors and staff

Coordinating beneficiary:

- Centre for Economic Development, Transport and the Environment for North Karelia

Associated beneficiaries:

- Centres for Economic Development, Transport and the Environment (South-East, North-Savo and South-Savo)

Staff:

- Project manager Mr Mirko Laakkonen
- Project assistant Mr Juho Rajala
- Project assistant Ms Sirpa Kaunisto

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Target groups and species

Target groups:

- 20 fishery districts
- 44 owner units of waters
- 18 fishing clubs
- fishery consultation organizations

Target species:

- Landlocked salmon (critically endangered)
- Freshwater brown trout (endangered)
- Arctic char (critically endangered)
- Grayling (near threatened)

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General objective of the project

”To maintain the genetic diversity of the valuable salmon populations in the Lake Saimaa region.”

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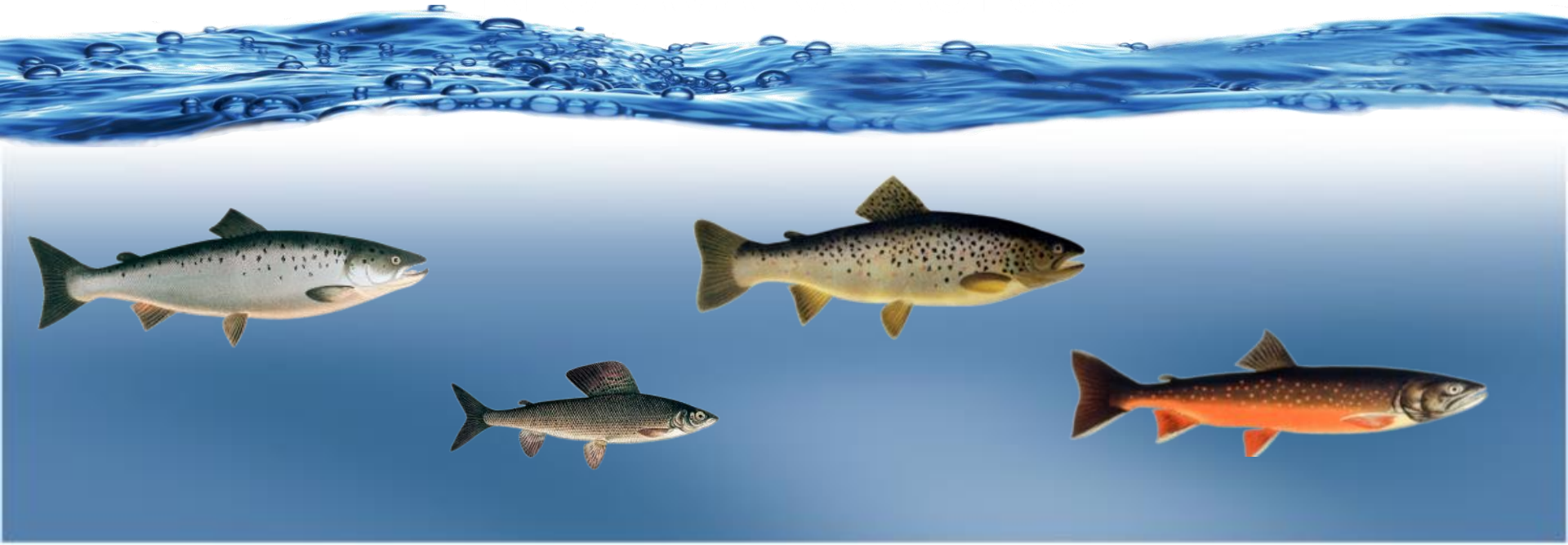
Endangered Salmonidae in the Lake Saimaa District



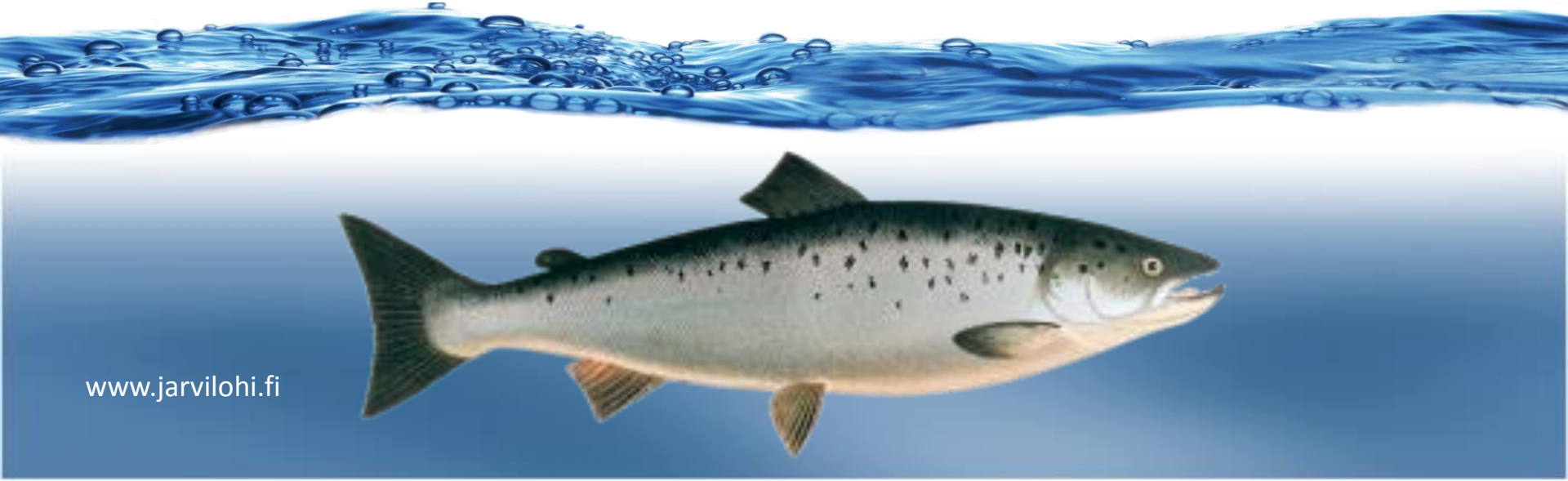
Landlocked salmon
(Salmo salar m. *sebago)*

Conservation status

- Critically endangered

Minimum landing size

- 60 cm



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Landlocked salmon stocks in Finland

- Lake Pielinen
- Lake Saimaa

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Landlocked salmon in Lake Pielinen

Lake Pielinen

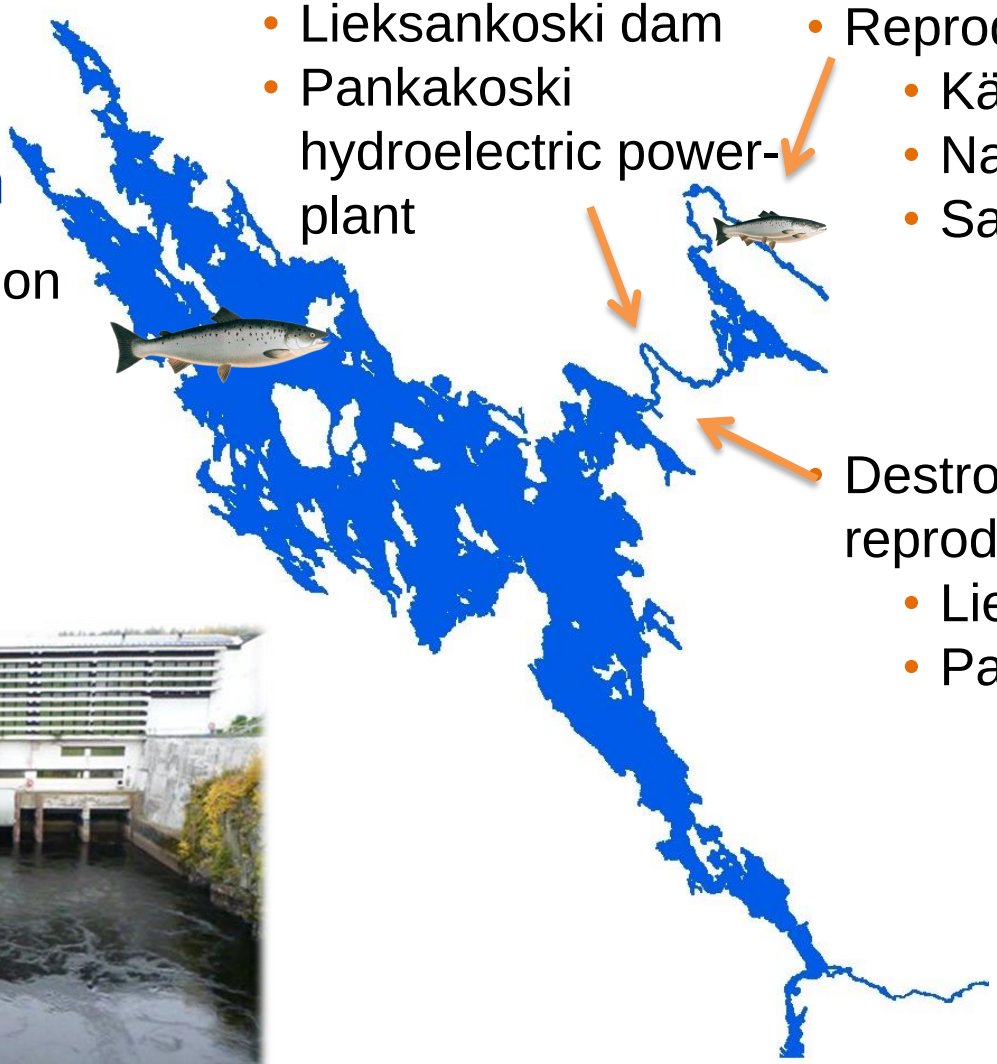
- Feeding migration

Fish barriers

- Lieksankoski dam
- Pankakoski hydroelectric power-plant

River Lieksanjoki

- Reproduction area
  - Käpykoski Rapids
  - Naarakoski Rapids
  - Saarikoski Rapids



- Destroyed former reproduction area
  - Lieksankoski Rapids
  - Pankakoski Rapids

Landlocked salmon in Lake Saimaa

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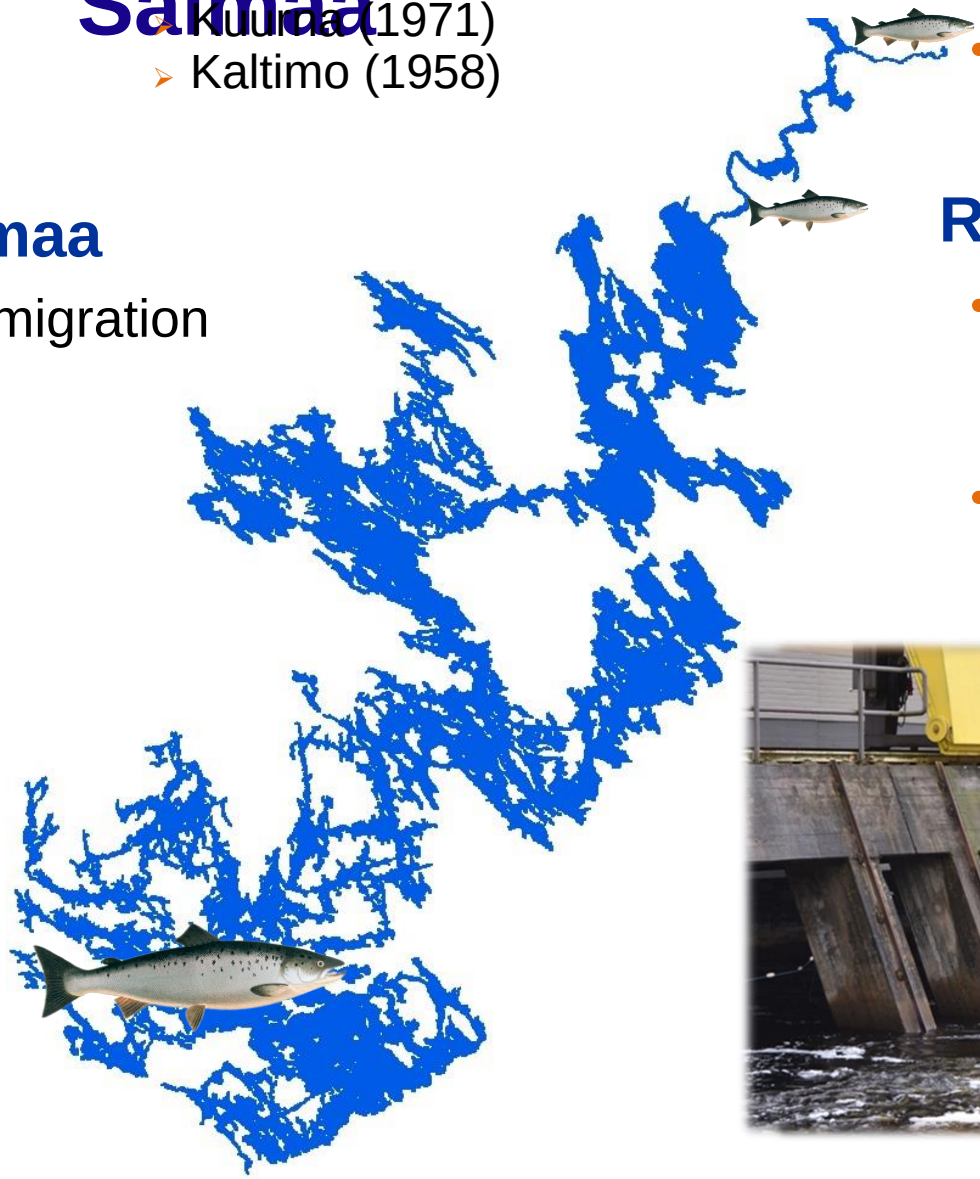
- Hydroelectric power-plants
  - Kuurna (1971)
  - Kaltimo (1958)

Lake Saimaa

- Feeding migration

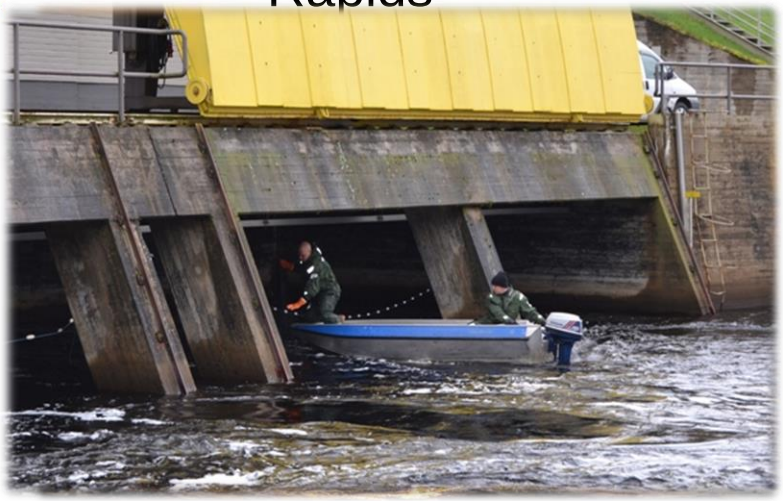


River Ala-Koitajoki

- Reproduction area
  - Lots of rapids

River Pielisjoki

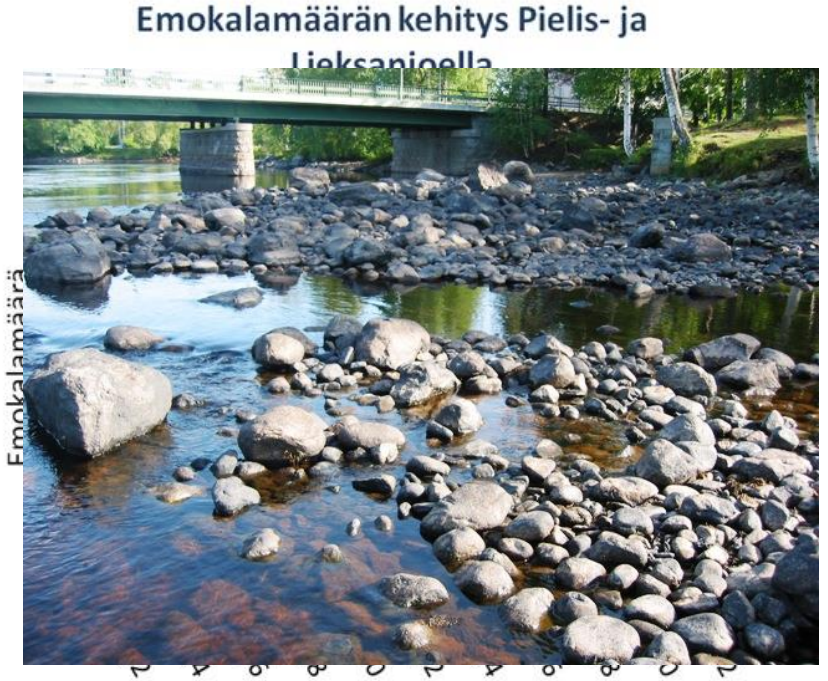
- Most of the reproduction areas destroyed
- Joensuun kaupunginkosket Rapids



Landlocked salmon
(Salmo salar m. *sebago)*

Current state

- Natural life cycle prevented
  - Access to the reproduction areas prevented
  - Many of the reproduction areas destroyed
- Brood fish harvest gives information about the state of the stock



Freshwater brown trout *(Salmo trutta* m. *lacustris)*

Conservation status

- Endangered

Minimum landing size

- 60 cm

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Reproduction areas

- Key areas
  - River Lieksanjoki
  - Heinävesi route
  - Joroisvirta route
  - Partakoski Rapids
- Several smaller rapids

Feeding area

- Migrates from rivers to lakes

Freshwater brown trout *(Salmo trutta* m. *lacustris)*

Current state

- Many of the most important reproduction areas destroyed
- Access to the reproduction areas partially prevented
- Natural reproduction rates very low
  - High pressure from fishing in the lake areas limits the number of reproducing fish

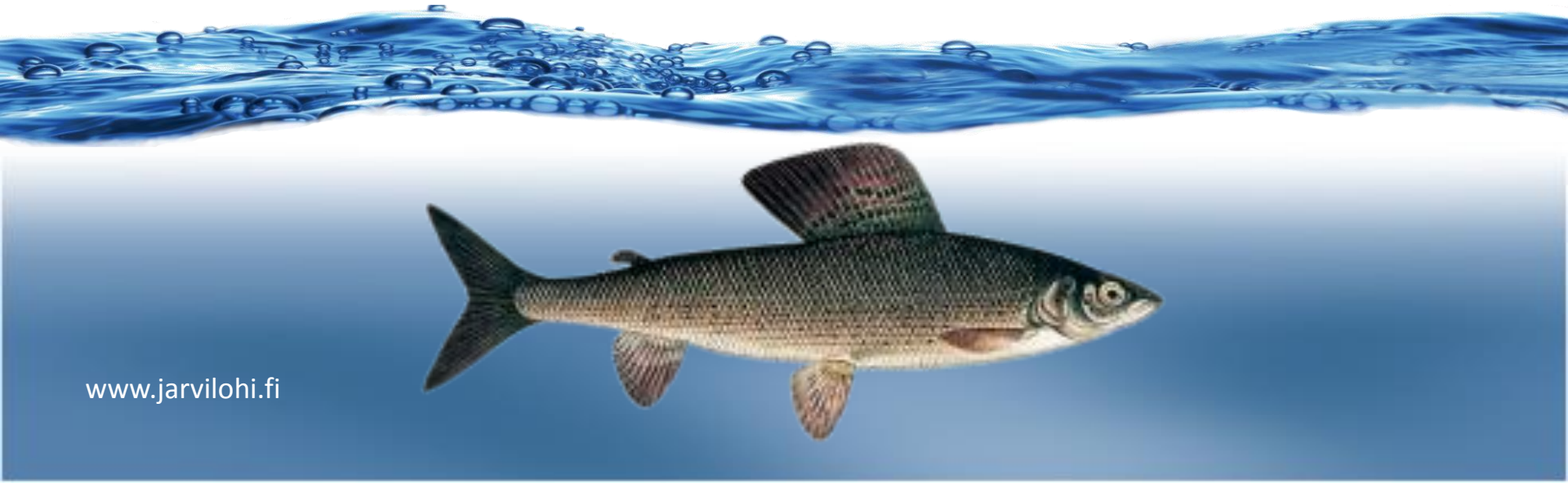
Grayling
(Thymallus thymallus)

Conservation status

- Near threatened

Minimum landing size

- 35 cm



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Arctic char
(Salvelinus alpinus)

Conservation status

- Critically endangered

Fishing is totally prohibited

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What we have done?

Meetings with Fishery districts:

- more than 100 meetings
- 60 fisheries management proposals

Other meetings, seminars and events:

- taking part in fairs and other events
- dozens of seminars
- taking part in preparation of management plan for freshwater brown trout in Eastern Finland

Communication:

- good results, lots of articles etc.

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Examples of proposed measures

•Banning the catching of landlocked salmon and brown trout with adipose fins, regardless of the size of the fish

• Minimum landing sizes

• Fishing quotas

• Restriction on the number of hooks per lure

• Banning the cutting or filleting of landlocked salmon, brown trout, grayling and Saimaa arctic char prior to returning to the shore

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Examples of proposed measures

- Banning salmon line fishing year-round.
- Setting a minimum mesh size for surface and midwater gillnets at 80mm (with the exception of vendace nets)
- Migration routes (narrows and river deltas)
- Conservation areas around islands and near the shore (within 100 metres of the shore), or alternatively a ban on fishing with nets that have a mesh size of less than 55mm. (Grayling habitats)
- Other conservation areas

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Examples of proposed measures

- Instruction for fishermen to use traps that allow fish to be released alive when necessary (such as fykes and wire mesh fish traps)
- restrictions on the number of nets used per fisherman. Our recommendation is a maximum of four nets (in total 120 metres) per recreational fisherman
- In certain key areas, ban gillnet fishing using nets with a mesh size of less than 80mm (excluding vendace nets) from 1 September until the lake freezes over

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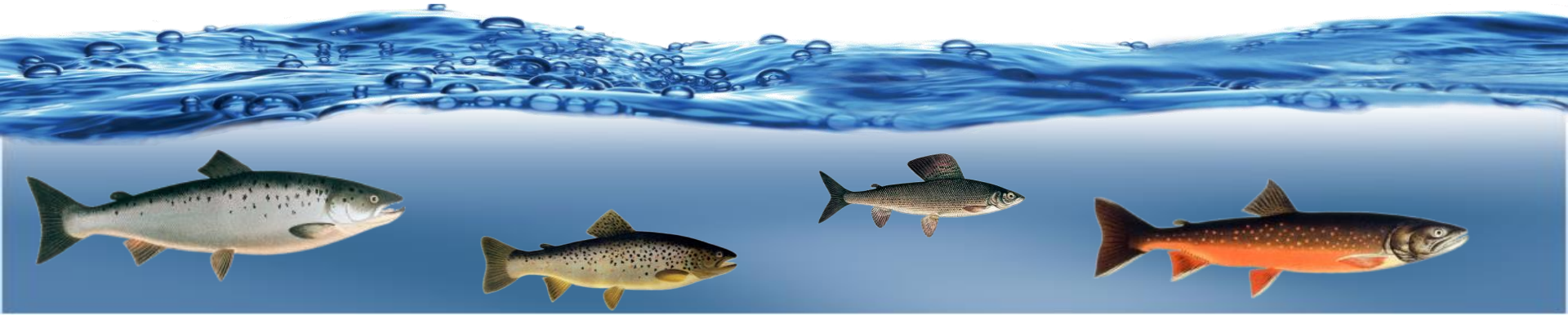
Future aims

- Restoration of the natural reproduction
- Increase in brood fish numbers
  - Attitude of the fishermen in a key role
- Restoration of the breeding areas
- Bypassing fish barriers
- More research!



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Good practices for sustainable fishing

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Life

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Sustainable fishing

”Fish stocks are harvested in a way which does not affect the regeneration rate of the stock and the total catch does not decline in the future.”

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Good practices for sustainable fishing

All fishing methods:

- Respect the minimum landing size
  - Avoid catching undersized fish
- Fish for different species
  - Prefer vital, naturally reproducing species
- Do not take more fish than you need

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Good practices for sustainable fishing

All fishing methods:

- Release all landlocked salmon and freshwater brown trout specimen with adipose fin
  - Fish with adipose fin ensure the future of the stock (Naturally born or stocked in the river)
  - Fish with clipped adipose fin are stocked for fishing

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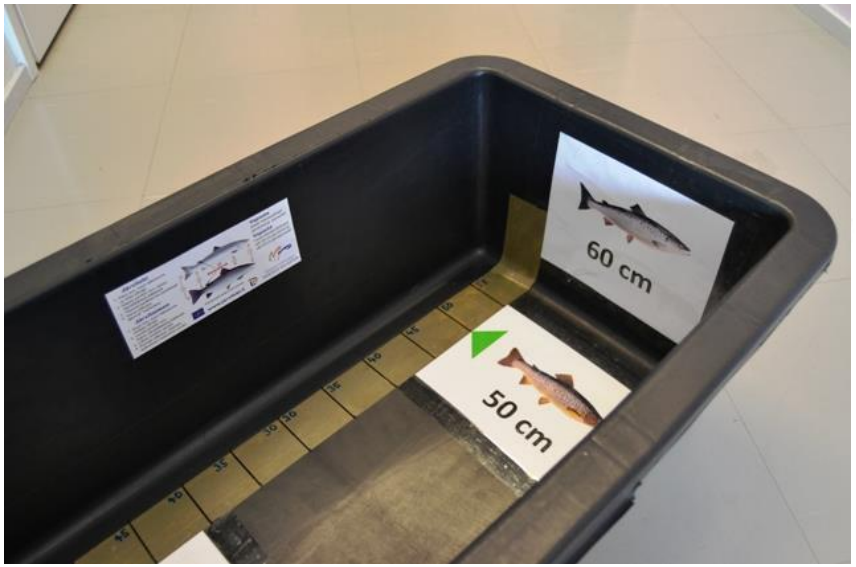
Good practices for sustainable fishing

How to release fish:

- Use fishing pliers to release the fish without taking it away from water
- Moist your hands if you need to touch the fish
- Use a knot-free, rubber-coated landing net
- Use of water container makes the release easier



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Good practices for sustainable fishing

Lure fishing

- Set yourself a catch quota
  - 1-2 Salmonidae per day
  - 5-10 Salmonidae per year

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Good practices for sustainable fishing

Lure fishing

- Reduce hooks in lures
  - Single hooks
  - Only one treble hook
- Less hooks prevent eye and gill damage
- Fish are easier and faster to release

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Good practices for sustainable fishing

Passive fishing

- Reduce the number of gill nets
  - 4 gill nets is enough for recreational fisherman
- Choose a gill net with a mesh size that correlates to the minimum landing size
  - Landlocked salmon 60 cm / 80 mm
  - Pikeperch 45 cm / 60mm

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Good practices for sustainable fishing

Passive fishing

- Prefer passive traps from which fish can be released alive
  - Fyke
  - Fish trap
- Do not use longlines
  - Fish will not survive

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Thank you for your attention!

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