

How animals benefit

The focus species in the project are **freshwater pearl mussels**, **salmon**, **otters** and **bullhead**, but naturally other species also benefit from the measures.

Freshwater pearl mussel: If there is freshwater pearl mussel in the stream it indicated high water quality and it shows that the ecosystem is functioning. Freshwater pearl mussel is dependent on brown trout and salmon during its larval stage. Then it lives on the gills of fish before it falls to the riverbed and becomes a mussel.

Salmon: Salmon needs free migration routes to find spawning-grounds and food. Salmon migrates for long stretches and lives a part of its life in the sea.

Otters: Otters mark their territory with droppings. They prefer to mark strategic locations which are visible and protected from the weather, for example, below a tree or on a stone below a bridge. By creating good marking locations and beach passages by bridges, you can attract otters to cross below the bridge instead of on the road.

Bullhead: Bullhead is a small ordinary fish which can be found in clear water. It is very sensitive to barriers and a cascade of 20 cm can be a complete stop for the bullhead.

Facts about the project

The project is funded by the EU Commission through the programme Life+ which is the EU's environment fund. The EU Commission has approved a grant for 183 projects within the framework of the programme Life+.

The project within the area Nature and Biodiversity increases the opportunities to preserve endangered species and habitats.

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Demonstration site, river Varjisån
– free migration for fish and other animals in streams

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Background of the project

Remibar is a project which will reduce the number of culverts and dams that are migratory barriers in five large water systems in Norrbotten and Västerbotten. The aim is to create free migration routes in water systems which support fish and other aquatic animals.

What is a migratory barrier?

For fish and other aquatic animals it is essential to be able to move around in streams, both upstream and downstream, to search for food, find spawning-grounds or a partner. A perched culvert, dam or high water speeds can stop or delay this migration. As much as 30 per cent of all culverts are a migratory barrier for fish.

Culvert which is a migratory barrier. Störhusträskbäcken.
Photo: Fredrik Broman, www.humanspectra.com.



Measures in the area

During the project period, in the river Varjisån we are remedying 49 migratory barriers for fish, other aquatic animals and animals which move along the beaches, for example, otters. One of these measures is a constructed beach under a bridge for otters and the remainder are perched culverts. In several cases we have replaced round culverts with solutions with a natural riverbed.

Collaboration increases nature preservation benefits

There may be many culverts along the same stream. One problem is that they can have different owners; private persons, the Swedish Transport Administration or forestry companies. If you remove a migratory barrier, the environmental benefit is not equally large if there is another barrier downstream the removed barrier. In this project all road managers cooperate to remedy the stream in the entire system. It provides great environmental benefits and fish and other animals can migrate freely in the streams.

Arch in river Varjisån. Lul-Hansbäcken.
Photo: Fredrik Broman, www.humanspectra.com.

