Expected results

- Results from the project will generate recommendations on how to provide a more sustainable, knowledge-based management of salmon stocks in the Barents region.
- Results from the DNA analysis will provide genetic tags for individual stocks and assist in tracing the river of origin of individual salmon caught along the coast. It will also facilitate the creation of a unique gene map of the northern salmon stocks.
- Migratory patterns in time and space of the various salmon stocks will be mapped.
- The numbers of escaped farmed salmon will be systematically identified, and the information used to make recommendations on dealing with these.
- We will provide indications of the impacts of climate change on Atlantic salmon of this region.
- We will also leave a legacy of active cooperation and dialogue among management, various research disciplines, sea salmon fishing organizations and local fishermen. We want to bring together traditional and local knowledge with modern science and research.

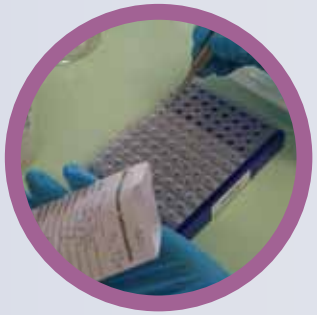

Photo: Juha-Pekka Vähä (UTU)

Photo: Panu Orell (FGFRI)

Partners and associates:

Norway: The County Governor of Finnmark (Lead Partner), Institute of Marine Research – Tromsø (IMR), Norwegian Institute for Nature Research – Tromsø (NINA) and Sea salmon fishing associations in Troms and Finnmark counties.

Russia: Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO) – Murmansk and Archangelsk. Associates: Karelrybvod - Karelia, Sevrybvod – Archangelsk and Komirybvod – Komi.

Finland: University of Turku – The Kevo Research Station (UTU-Kevo) and Finnish Game and Fisheries Research Institute (FGFRI)

Project period:
January 2011-December 2013

Financing:
The project is funded through EU's Kolarctic ENPI CBC 2007-2013 Programme + national funding and funding from the partners participating.

The project web site:
www.fylkesmannen.no/kolarcticsalmon

Project coordinators:
Norway: Tiia Kalske, thk@fmfi.no

Russia: Sergey Prusov, prusov@pinro.ru

Finland: Eero Niemelä, eero.niemela@rktl.fi

ENPI CBC Kolarctic

ARC CIRAFF 03/2011 www.arcgiraff.no

KOLARCTIC SALMON 2011 - 2013

KOLARCTIC SALMON

Photo: Eero Niemelä (FGFRI)

The Kolarctic ENPI CBC project "Trilateral cooperation on our common resource; the Atlantic salmon in the Barents region (KO197), aims to merge modern science with traditional salmon fishing knowledge to create a future sustainable, long-term and knowledge-based salmon management regime for the common Atlantic salmon stocks of the Barents region.

"Merging modern science with traditional knowledge to improve the future management of the Atlantic salmon in the Barents region"

A common heritage and natural resource

The border areas between Norway, Russia and Finland have unique natural qualities and natural resources. The Atlantic salmon is a symbol of healthy and vital ecosystems and is of significant economic and cultural importance, both through commercial and recreational fishing. Fishing for Atlantic salmon has a long tradition in the area, as evidenced by a unique vocabulary about the species in the Sami language, and the existence of a large number of traditional fishing methods.

Photo first page: Eero Niemelä (FGFRI)

Aims of the project

- To develop an integrated, long-term management of Atlantic salmon in the northernmost distribution area of the species.
- To provide data to implement customized, sustainable, knowledge-based harvesting regimes, and to preserve the rich traditions of fishing and coastal culture.
- To unite empirical knowledge (local and traditional) with scientific knowledge.
- To provide synthesized and new knowledge about Atlantic salmon, its adaptation to climate change and its migration along the coast.

Photos by: Vidar Wennevik (IMR), Eero Niemelä (FGFRI) and Sergey Prusov (PINRO)

Merging modern science and traditions

The project is a joint venture between management, research, salmon fishing organizations and salmon fishermen in the participating countries. We will merge modern research technologies and traditional knowledge. Exchange of personnel will take place and we will arrange mutual visits to get deeper understanding and knowledge of the different management regimes and fishing traditions in the three countries.

The project area supports important and pristine Atlantic salmon stocks

The project area encompasses regions from the southwest county of Nordland through Troms, Finnmark, the Kola Peninsula, the White Sea to the Petchora area in the northeast. This region is home to some of the world's most pristine and important Atlantic salmon stocks. Because of its accurate natal homing, it is presumed that every salmon river has its own unique population and some rivers have even several unique sub-populations.

Activities

We will collect adult salmon scale samples from salmon fisheries along the Norwegian and Russian coasts. The collection will cover most of the salmon migration period (late April to late August). We also intend to collect samples during the period September to December to ascertain where the salmon spend their winters in the ocean, and to assess the incidence of escaped farmed salmon.

Samples of juvenile salmon will also be collected from the many salmon rivers in the project area, to construct a so called genetic baseline map of salmon populations in the study area. The collected salmon samples from the fishery along the coast and from the rivers will be analyzed using molecular genetics techniques (DNA) to identify the river of origin of the captured salmon as well as the evolutionary history and relatedness of the salmon populations in the region.