

Application from Joddu -project for funding in the year 2018

We, Dr Eero Niemelä and my assistant Fil.kand. Esa Hassinen, are kindly asking small funding from Joddu- project (Tana municipality) to produce a comprehensive report from the ecology of salmon in the River Tana watershed.

This report is combining all the basic data from the salmon ecology which has been collected during 45 years in cooperation with local salmon fishermen and in many different monitoring projects in the River Tana watershed between the years 1973-2017. The report is also combining the data from genetic studies by explaining the migrations of different Tana salmon stocks at sea in the North Norwegian coast and in the River Tana mainstem. Report will include details from the Tana salmon stocks caught at sea and their amounts in each age groups in the years 2008-2009 and 2011-2012. One of the most interesting results will be to see the very long-term changes in different salmon ecological parameters and we try to explain reasons to the observed changes.

This basic ecological knowledge collected from nature (juveniles and adults) will help the future work when asking local professional salmon fishermen their experiences from the behavior of salmon and what fishermen know from salmon based on their own observations or based on the inherited knowledge.

The produced report will explain these ecological parameters in nice graphics with Norwegian text in the figures. All the graphs and texts therein can be used for exhibition purposes and for education in schools.

The contents in the reports will be as the follows.

1. Life cycles for those stocks which have been identified in the River Tana watershed and how they have changed during the last 45 years
2. Early life of juvenile salmon from hatching to smoltphase
3. Migration as smolts from home rivers to Barents Sea
4. Long-term growth changes during the juvenile phase and effects of water temperature to growth
5. Long-term growth changes at sea and affects from the sea temperature variations
6. Sea-ages for different Tana river salmon stocks and long-term changes
7. Sex distributions in juveniles and in adult salmon and long-term changes
8. Timing of migrations in the coastal areas in North Norway, in the Tanafjord, and in the River Tana watershed.
9. How different Tana stocks are exploited in the river Tana mainstem
10. Which fishing methods are exploiting different sea-aged salmon and at which time of the summer

11. Differences in the timing of different sea-aged salmon in selected rivers and in the river Tana mainstem
12. The ecology of kelts and previous spawning salmon

Proposed budget

Budget includes only salaries for two persons. Persons are Dr. Eero Niemelä and his assistant Fil. kand. Esa Hassinen. Funding needed is:

for Eero Niemelä, 3 months, a' 1 000 € /month; social costs and salary is $3 \times 1\,000 \times 1.5 = 4\,500$ €

for Esa Hassinen, 3 months, a' 3 200 €/ month; social costs and salary is $3 \times 3\,200 \times 1.5 = 14\,400$ €

Total costs between the period 2.5.2018-31.7.2018 18 900 €

If we get the funding the work will be done in Utsjoki and Vadsö

In Vadsö 15.3.2018 Eero Niemelä