## Report on fish harvest which was performed on 21 October 2014 as part of action E2 on project LIFE Ljubljanica connects

On 21 October 2014 ichtyological research was performed on Ljubljanica River from Plečnik barrier to weir in Vevče as part of LIFE project Ljubljanica connects.

Fish were caught on 2 km long part of the river in 7 locations. In time of research water temperature was 15<sup>o</sup>C. Other physical-chemical parameters were not measured as those measurements are performed in other phases of the project.

The aim of this research was to catch and tag targeted fish species of the project (Danube Salmon *Hucho hucho*, Danube Roach *Rutilus pigus* and Striped Chub *Leuciscus souffia*). In research we have included also Common Nase (*Chondrostoma nasus*) especially because of its importance for survival of Danube Salmon and its fries and juveniles.

Complete ichtyological research is not planned as part of the project so size of each fish specie's population was evaluated subjectively. We have described its frequency of occurrence as individually, rarely, often, very often or massively. Fish species that were caught were counted and tagged.

During the research no Striped Chub were caught. We believe that the river section when harvest was performed is not appropriate area for this fish species as water is very deep and has slow flow. Striped Chub is known as fish who loves smaller and fast flowing streams.

In only one day of research we have caught 15 different fish species and estimated their frequency of occurrence.

Based on subjective estimation of populations' condition we estimate that all registered fish populations are in good condition. On 2 km long river reach we have caught 6 Danube Salmons which is quite a lot for only one day of fish harvest on quite a short section of the river. Sizes of caught Danube Salmons show that this fish is reproducing in this river.

We have expected to catch more Danube Roach but we assume that harvest was less successful due to our timing. At the end of October this fish species is already preparing for wintering. It looks like we haven't encountered the whole flock but only on individual examples.

Population of Common Nase is quality as we have caught fish examples of all sizes. In the selected section we have registered a very high incidence of *Thymallus thymallus* in all sizes. This shows that this fish is successfully reproducing in Ljubljanica River. According to the fishermen from fishing club Vevče it has been introduced into the river every year.

That kind of research will be repeated on the same river section in spring 2015 and check if marked fish managed to cross fish passes on Ambrožev trg in Fužine.

During the research there have been marked 6 Danube Salmons, 14 Danube Roaches and 27 Common Nases. The fish were marked with injecting of red or yellow colorant into the subcutaneous tissue behind the eye (figure 1) or into dorsal fin (figure 2).



Figure 1: Injecting into subcutaneous tissue behind the eye (left: Danube Roach, right: Danube Salmon)



Figure 2: Injecting into dorsal fin



Figure 3: Measurements of fish length