



EuroRun – Short progress report for EFFS representatives meeting (during SEFS 10, July 2017)

❖ The project

EuroRun aims towards a better estimation and understanding of riverine CO₂ fluxes. The major focus of EuroRun is laid on estimating CO₂ fluxes from European running waters and represents the first coordinated European-wide study to examine fluvial CO₂ fluxes. An extended team of freshwater scientists from all over Europe allows comparing seasonal and diurnal fluvial CO₂ fluxes but also differences between Northern and Southern Europe.

❖ The team

EuroRun is coordinated by Dr. Pascal Bodmer and Dr. Katrin Attermeyer (PIs) and consists of seven core teams which are each represented by members of the seven limnological societies that provided funding (Germany, Switzerland, Italy, Spain/Portugal, Austria, United Kingdom, France). Those teams were complemented by nine more (to a total of 16) teams that were selected after an open call. EuroRun received **24 applications** in response to this call (see Fig. 1 for teams applying and invited), while we limited the number of additionally invited teams based on our financial possibilities. EuroRun thus coordinates **16 teams** from **11 European countries** with two to six members each. This adds up to a total of **47 young and early career researchers** that are connected via EuroRun. These researchers conduct samplings at **34 stream sites**.



Figure 1. European map showing all teams that applied (black and red stars) and that were finally invited to EuroRun (red stars).



❖ The workshop

The chambers for the measurements were constructed during a workshop at Lake Erken, Sweden. In addition, the handling of the chamber and data analysis were taught at this workshop. It took place from the 13.-15.09.2016 and brought together **17 early career researchers** (Fig. 2) who were the representatives of their respective team and hence the major contact persons for the PIs of EuroRun. It was a very stimulating atmosphere and a lot of ideas were discussed and developed during this time.



Figure 2. Group picture from the EuroRun workshop at Lake Erken in Sweden.

❖ Status of the project & next steps

The stream sites in the EuroRun project are measured in four seasons within a period of two weeks (except for a few streams which were completely frozen during winter). During this time, each team has to measure CO₂ fluxes with floating chambers at each of their sites at day and night time. In addition, they collect several background parameters (e.g. physico-chemical parameters, hydrological parameters, land use, etc.). The first three sampling campaigns are done (03.-14.10.2016 for autumn; 09.-20.01.2017 for winter; 03.-14.04.2017 for spring) and created already a huge dataset. All data from the first campaigns are now collected in a master table and will be presented at the SEFS 10 in Olomouc. So far, EuroRun collected **736 CO₂ flux values**. The last sampling campaign is planned and will happen after the SEFS conference (10.-21.07.2017 for summer).

❖ Outreach

EuroRun was presented at two conferences and one Mini-Symposium. There is a homepage with information about the project and updates on what is happening (<https://freshproject-eurorun.jimdo.com/>). Additionally, a project was created on ResearchGate which has 53 followers and 383 reads (on the 20.06.2017). At the upcoming Symposium for European Freshwater Sciences (SEFS) conference in Olomouc, Czech Republic, the PIs of EuroRun organized a special session (SS06) on “Spatial and temporal heterogeneity of greenhouse gas fluxes in inland waters”, a topic related to the EuroRun project. It received 18 abstract submissions (3 posters and 15 talks).



List of conferences/symposia:

- 04. July 2017 Symposium for European Freshwater Sciences 10 in Olomouc, Czech Republic, Talk by Katrin Attermeyer
- 07. June 2017 Mini-Symposium for Early Career Researchers in Uppsala, Poster presentation by Katrin Attermeyer
- 23. March 2017 Flow Country Conference IV in Thurso, Scotland, Talk by Pete Gilbert
- 26.-30. September 2016 Joint conference of the Austrian and German limnological societies in Vienna, Austria, Poster presentation by Katrin Attermeyer

❖ **Associated projects**

The framework of the EuroRun project offers a great opportunity for associated projects. The PIs of EuroRun always encouraged other researchers to use the structure of EuroRun and think about their own ideas. Andrea Garcia Bravo used the first sampling campaign in October 2016 in order to measure mercury in European streams. The data is analyzed and Andrea is currently exploring the dataset. Pascal Bodmer received funding from the German Research Foundation (DFG) for a project about “The Magnitude and Drivers of Sediment Methane Production in Streams across Europe” and all teams in the EuroRun project are invited to participate. The EuroRun teams were always open for new ideas and reacted positively towards the ideas that came up during the EuroRun project.

❖ **Finances**

The total budget of EuroRun was 13.000 € of which 8.000 € was provided by the FreshProject call and 5.000 € from the Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin. Figure 3 shows the expenses split by the different parts/actions of EuroRun:

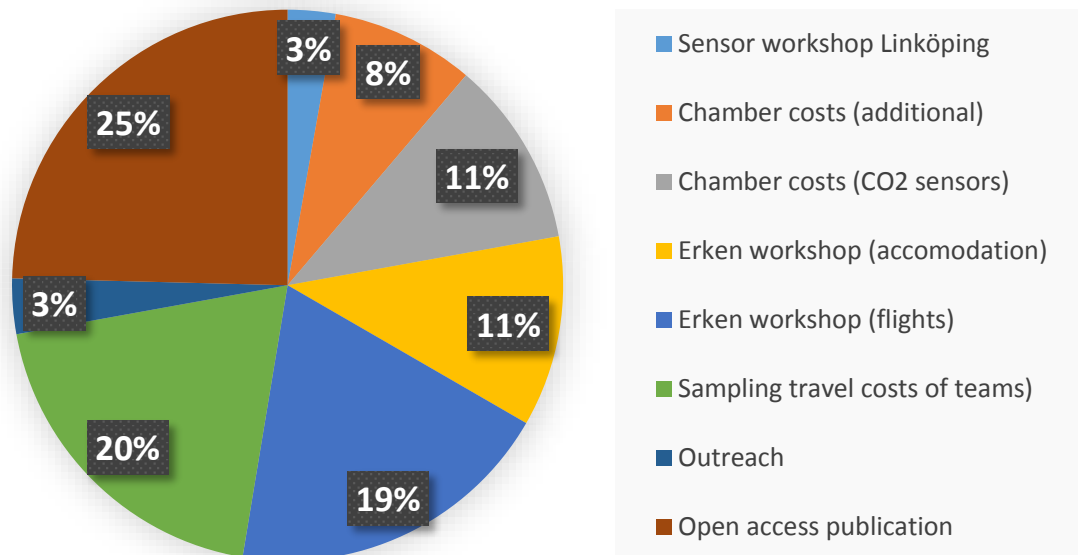


Figure 3. Expenses of EuroRun (total of 13.000 €).