



Call to join the 3rd European FreshProject “EUROPONDS”

led by

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BACKGROUND

We're happy to announce that **EUROPONDS** was selected as the **3rd Fresh Project**, part of the joint call of the European Federation of Freshwater Sciences (**EFFS**) board and the EFFS Societies as well as the European Fresh and Young Researchers (**EFYR**) and representatives of the Fresh Blood for Fresh Water (**FBFW**).



To evaluate the often overlooked ecological contributions and ecosystem services provided by ponds across Europe, we invite early career scientists to join the **EUROPONDS** project.

There are thousands of ponds across Europe, from Lapland to Mediterranean islands and from remote areas to densely populated cities. Most of them provide habitats for animals like aquatic insects and even rare species. Ponds also contribute to habitat connectivity and enable organisms to cross the landscape using these “blue stepping-stones”.

A diverse community of insects can emerge from ponds, providing food not only for aquatic organisms but also for terrestrial and avian consumers, such as bats, birds, spiders, lizards, thus supporting a range of important ecosystem services. Despite recognizing the importance of insects emerging from ponds, we understand very little in terms of the ecological role of emergent insects, but also the extent to which they contribute to terrestrial biodiversity and energy fluxes in adjacent ecosystems. Furthermore, little is understood about the ecological variation in these processes. For example, how does the trophic status of ponds affect the biodiversity and energy content of emerging insects? How different are ponds from various regions, e.g., cities vs. remote areas, in supporting insect biodiversity? Such questions are to be answered through a highly collaborative network of young freshwater scientists within **EUROPONDS**.

3rd European FreshProject “EuroPonds”

<https://europonds.jimdosite.com/>



AIM:

EUROPONDS will investigate:

- a) the taxonomy and biomass ('biodiversity');
- b) the energy content and dietary quality, as measured by total lipids and their fatty acids ('nutritional value for subsequent consumers') of emerging insects from ponds across Europe.

HYPOTHESIS:

EUROPONDS will test the hypotheses that the biodiversity and nutritional value of emerging insects will be higher in ponds with lower trophic status, yet the biomass of insects will be higher in ponds with higher trophic status.

METHODS and ORGANIZATION:

All participants of **EUROPONDS** should measure the same parameters, following established protocols:

- 1. Trophic state** of ponds will be assessed by Chl-a and Phosphorus measurements. Physical and chemical parameters (turbidity, conductivity, temperature, oxygen, Secchi depth) will be recorded at every sampling event when possible;
- 2. Taxonomy of insects:** using emergence traps and pond-netting, the **taxonomy** of these invertebrates and their **biomass** leaving the ponds will be assessed;
- 3. Nutritional value** of emerged insects will be determined as total lipids and their fatty acids analyzed in selected laboratories.

This project will provide unprecedented insights into the species richness of ponds as providers of dietary energy and shed light on these frequently underestimated waterbodies which are ubiquitous.

Preliminary time schedule:

Spring to Summer 2020: formation of **EUROPONDS** team members;

Summer 2020: team assembly – pond selection – building emergence traps – preparation;

Autumn 2020: first sampling – pond netting and emergence trap: 1 week, trap will be emptied twice; Chl-a measurements; pond parameter recording; species identification;

Winter 2020: second sampling for those ponds that do not freeze;

Spring 2021: third sampling;

Summer 2021: fourth sampling;

Starting with Summer 2021: lipids/fatty acids analysis; data analysis (teams will be combined); preparation of data for conferences, workshops, presentations; preparation for publication of results; conference attendance. Specific project meeting to be held at SEFS-12 in Dublin, Ireland, from 25th to 30th July, 2021;

Along 2021: workshop with Simon Vitecek at Wasser Cluster Lunz on insect identification;

Autumn 2021 – Spring 2022: Data analyses;

Summer 2022: project will be finished; publications;

Requirements for participating students:

Anyone willing to join this project

- is at a Masters, PhD, or early Post-Doc level (max. 2 years after PhD completion at the application deadline);
- is already member/or will join one of the limnological societies federated within EFFS. The list of societies is available at: <http://www.freshwatersciences.eu/effs/index.asp?page=MEMBERS&Id=3>;
- has enough time for sampling: emergence traps will be left in the pond for one week per season, must be emptied every 3 days; pond netting will take a few hours; insect identification must be included in work effort calculations;
- will be encouraged to hold presentations and workshop as part of the citizen science effort to communicate the results to a broader audience and attend national/international conferences;
- will attend online meetings to discuss and provides written progress;
- teams have to consist of at least two people.

Advantages for participants:

Working in an international team and getting to know people from across Europe who work in freshwater sciences as well is a great opportunity especially for early career scientists. Participants will publish the results of this project, this will give us the opportunity to work through the publication process from the very beginning with help from the more experienced researchers. Also, team members will present parts of the **EUROPONDS project at national and international conferences**. Participants will present the results of the study at workshops and make presentations for schools and/or universities which gives the opportunity to learn how to communicate research, as well as practicing how to manage and develop a research project. The participation in workshops and use of protocols, including building and using emergence traps, proper pond-netting, calculation of species richness indices, will be beneficial for all participants especially for future research projects.

PARTICIPATION

If you are interested in participating to **EUROPONDS** please contact us:

europonds@gmx.net and tell us:

- your name and affiliation, including e-mail;
- the EFFS-federated scientific society to either which you belong (with a letter of statement from your society), or would like to join, when joining the **EUROPONDS** project;
- your scientific background and experience in freshwater sciences, as well as your experience, if any, working with insects;
- about potential ponds you would like to sample (size, location);
- if you have access to emergence traps/or could follow instructions to prepare them (universities may have such traps).

Natural pond



Please send us your message **before June 30**, and we will get back to you thereafter!

Many thanks for your interest and we look forward to hearing from you

For additional questions feel free to contact us: rimceska@gmail.com (Biljana)
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