

## Brief INFO to participants

Greetings (välkommen in Swedish),

This is a brief description of the experiment, which you'll also find on our webpage:

<https://www.slu.se/en/crayfish-edna-workshop>



## A very short description of the experiment

- We want to improve detection of crayfish species and crayfish plague from water sampling. To do this we need to make a joint effort between several different universities and firms in the Nordic countries and Europe.
- In the experiment, the different teams will use their own equipment (pumps, filters etc.) and protocols (sampling, filtrate handling, extraction, PCR). Some common strategies will be used in terms of sampling points (sampling from the same point) & disinfection of equipment.
- Each team will take 2 samples from each tank/pond/lake Mälaren (20 samples). Disinfection will be done when changing site (e.g. a different tank, pond & lake).
- We will of course help each other out when doing the sampling & disinfection. There is also a resource team who will help you out when needed 😊
- The main objective of this ring test is to compare the teams' different methods to the experiment's outcome. Therefore the teams will fill out a result sheet during the experiment. This sheet will lay the foundation to write a joint scientific article about the experiment.
- In the scientific article we will evaluate the experiment, hopefully optimize our own protocols to do eDNA-analyses, and possibly give recommendations for better detection of crayfish and crayfish plague.

## The different teams are:

1. Czech Republic: Adam, Martin & Pavel
2. Croatia/Slovenia: Ivana, Lucija & Teja
3. Estonia: Katrin, Lilian, Michael & Fabio
4. Finland: Terhi & Timo
5. France: Frédéric & Thomas
6. Germany: Kathrin & Jean-Yves
7. Ireland: Bogna
8. Norway: David
9. Spain: Javier & Laura
10. Sweden: Patrik, Anti, Kristofer & Ludvig
11. Switzerland: Armin, Alex & Simone
12. Resource team: John, Linda, & Birgitta

## Equipment to bring to the meeting

Special arrangements can be made! Talk to the organizers!

- Pump (different makes & looks)
- Hoses to the pump
- Filters (different sizes & brands)
- Filterholder (if using open filters)
- Buffert solution (including e.g. test tubes/bags/boxes) to transport the filtrates

## SLU will provide (for the experiment)

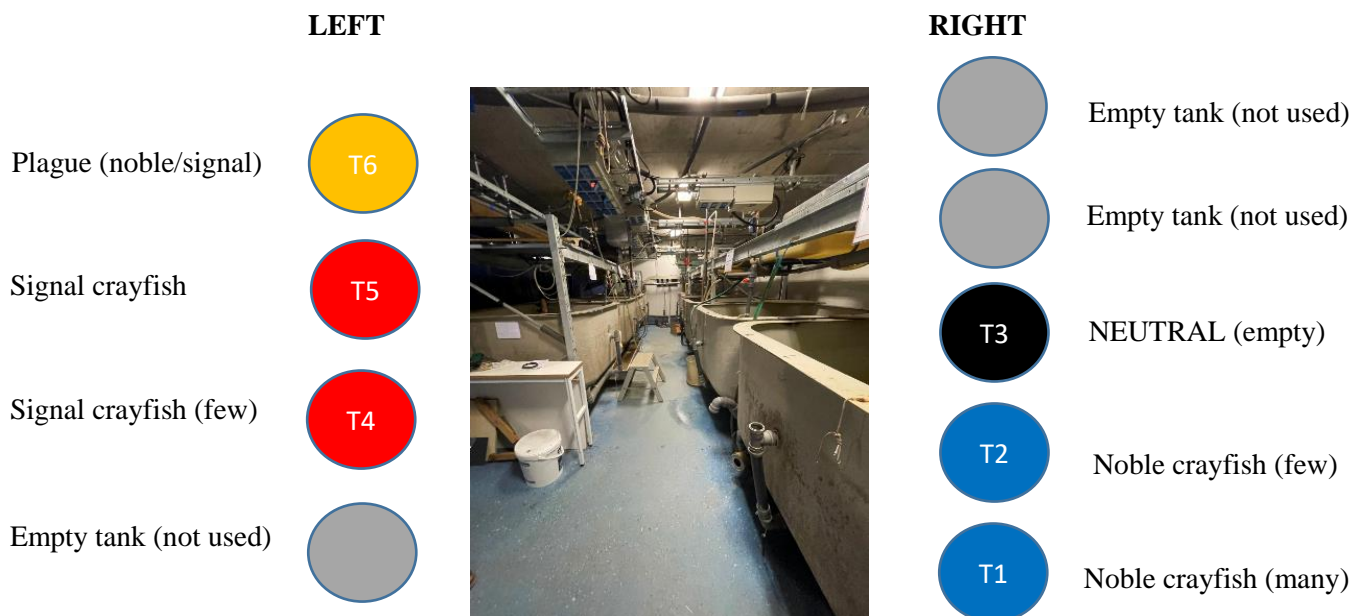
- Containers (for measuring & fetching water)
- Gloves, tweezers
- Disinfection areas with ready-mixed bleach, sodium thiosulfate & running water
- Help in different ways ☺

## Schedule for the sampling

Since we are so many teams we will be directed to different areas (close to the indoor tanks, ponds and lake). Then we will be able to sample simultaneously. There will be specific containers with ID-tags for fetching water (2 for each site). This is to minimize the disinfection procedure.

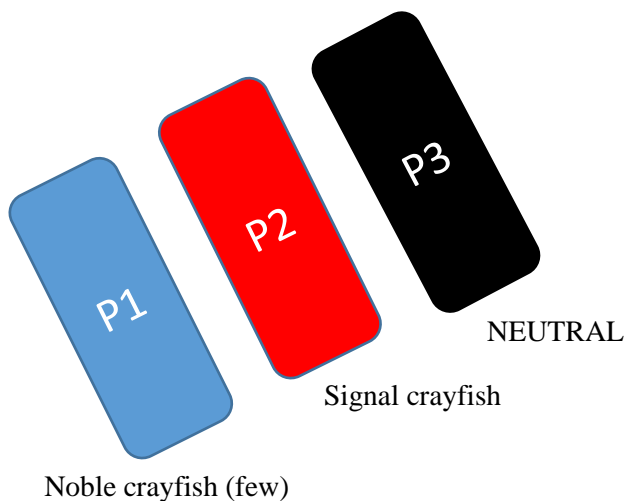
### Indoor tanks

We will sample from 6 deep tanks in one room (from a total of 9 tanks). This is a narrow space and it will be a bit crowded during sampling! So even more important to help each other out 😊



### Outdoor ponds

We sample from 3 of the ponds on our backyard. The 1<sup>st</sup> pond (P1) holds noble crayfish (n=80), the 2<sup>nd</sup> (P2) holds signal crayfish (n=80) and the 3<sup>rd</sup> (P3) is empty. There is a constant flow of water in the ponds. The common sampling point will be from the ponds' bridges.



## The Lake

We sample along the shoreline.



## Areas for sampling & disinfection

We'll divide our teams into **different areas** with a rolling schedule:

- 3 teams at the ponds
- 2 teams in the “fine laboratory”
- 4 teams in the “rough laboratory”
- 2 teams at the lake

In each area you will place your pumps & do the **sampling**. You will fetch water with the marked containers at each site (tank, pond, lake). You will also

**disinfect** your equipment in the areas mentioned above. There will be a specific amount of buckets and spray bottles in each area for disinfection. You will reuse the bleach and sodium thiosulfate that is placed in the different areas (& not throw it away). In the end we'll collect the bleach since it's harmful to the environment.



We recommend to put your filterholders and minor equipment (hoses, tweezers) in a bath of bleach for 5-10 minutes whenever you change sampling site (tank, pond or sample in the lake). Hoses need to be rinsed through with bleach and rest for a few minutes. All material will be disinfected in the following manner:

- 1) **Bleach:** spray or bath your equipment in 5-10 minutes
- 2) **Sodium thiosulfate:** rinse/spray with sodium thiosulfate to bind the chlorine.
- 3) **Water:** finally rinse with water.

We use commercial bleach diluted to a 10% effective solution and sodium thiosulfate to a 5% effective solution.

\*\*\*\*\*

See you in Stockholm and we'll have a really good time during the [Crayfish & eDNA workshop](#) here at the Institute of Freshwater Research.

// Patrik, Lennart, Anna & Kristofer

**SLU Aqua & SVA**