

# eDNA expeditions - phase 2: Survey for Marine sites

We're thrilled to announce the next phase of **eDNA Expeditions**! Building on the success of the first phase, we are now inviting sites, researchers, and communities to apply to join this exciting global initiative. To participate, you should be in a managing role in a marine protected area or in an otherwise important marine area where biodiversity monitoring is crucial and needed, and be able to organize sampling campaigns.

eDNA expeditions 2 is a continuation of the first phase of the project. In this phase our objective is to set up repeated sampling and provide the materials for that for 3 years. The project aims at collecting biodiversity information at 4 locations across each of the sites. You will be expected to sample approximately 6-9 times in total across the project duration. Citizens can be engaged at each sampling time, or one of your choosing.

**By joining the project, your site will become part of a global network exploring biodiversity through environmental DNA.** Participants will receive training, educational materials, and all necessary sampling kits and protocols. You'll gain access to a living dataset—a dynamic record of biodiversity that grows over time and can be explored through the eDNA dashboard. This project offers a chance to "listen to nature" from your own backyard, uncover the unseen diversity of your environment, and contribute directly to a global understanding of life in our oceans.

Please note: While we can only select up to 25 sites for this phase, we'd love to hear from everyone who is interested. This survey helps us understand your experience, interests, and capacity to engage. Selection will be made based on the needs of the region, and with an objective to get global coverage.

## Personal information

Name

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E-mail

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Country

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Role

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Marine site

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## Biodiversity monitoring at your marine site

Within this project we will provide eDNA sampling kits for sampling 4 times a year (every three months), across 4 locations. The objective is to provide data and indicators that answer management questions at the sites. We will work on finding those questions, and how eDNA can help with them together, and on a site-by-site basis. Engaging citizens in the sampling is possible, and should be for at least one of the sampling campaigns, but is not required for each sampling.

**Do you have existing regular monitoring efforts that eDNA sampling could be a part of?**

☐ Yes

☐ No

**Do you plan to work with citizen scientists or local communities as part of your eDNA sampling?**

- ☐ Yes
- ☐ No

**If yes, can you name the community you would like to work with? Or an example of the community at your site that could be involved?**

**Potential monitoring questions that eDNA sampling could help with for your site?**

**Is there an active scientific team at the site?**

- ☐ Yes
- ☐ No

**If yes, who is/are the main contacts?**

## **eDNA sampling**

For this project, eDNA is collected by filtering small molecules from water samples. Samples are filtered using a provided kit with a handheld pump, and preserved with a preservation liquid, before being sent back. It is important to work clean, to preserve the samples carefully and to send them to the analysis laboratory right after sampling (return postage is provided). The analysis will provide an overview of species that have left traces at the sampling site. By carefully choosing the sampling site, it is possible to search for target species; however sampling is opportunistic, and may not always reveal the expected species.

**Did you participate in the first phase of the eDNA Expeditions Project?**

- ☐ Yes
- ☐ No

**Do you have prior experience with eDNA sampling or analysis?**

This is not required to participate in the project

- ☐ Yes
- ☐ No

**Describe briefly your previous experience/expertise**

**Can your team commit to being part of the project for the next three years?**

We will provide sampling kits and training and educational support

- ☐ Yes
- ☐ No

**If no, please elaborate**

## Open data principles

The data in this project will be shared openly from raw sequences to the analysed species list based on the predefined [project data policy](#).

**Do you collaborate with an OBIS (Ocean Biodiversity Information System) node in your region?**

- ☐ Yes
- ☐ No

**Which node do you work with?**

**Do you agree to share all data collected through this project under the defined terms?**

- ☐ Yes
- ☐ No

**If no, please elaborate**

## Consent form for participation

A [consent form](#) will be required for participation. The consent form will detail the responsibilities of each party, and the agreement to sample. The site will agree to collect and share the data, and IOC-UNESCO agrees to provide kits, and training for sampling, as well as sample processing and analysis. All data remains in the ownership of the participating site, and sample analysis is only done for the purpose of describing species diversity. Both parties agree to abide by the FAIR principles.

**Do you agree to sign the consent form?**

☐ Yes

☐ No

If no, please elaborate

## Biobanking of samples

With eDNA sampling, the most valuable part of the process is the sampling campaigns - something that we rely on your engagement. By storing eDNA samples in the long term, the full value of the sampling is made possible. eDNA samples can be reanalysed even far into the future to get a deeper understanding of your biodiversity, to look for target species for monitoring, or to look at past communities. Remaining sampling material will be stored at a partner institution at the University of Western Australia.

An [agreement](#) between the participant and the biobank will be drawn that details the terms of sample storage. Samples remain owned by the sites, and the samples will only be used for research into biodiversity. Any reuse or reanalysis of the sampling material will require explicit agreement from your part.

Do you agree to biobanking of samples with these terms?

☐ Yes

☐ No

If no, please elaborate

## Participation in Coordination

Would you (or a member of your team) like to participate in the Coordination Group?

This includes virtual meetings approximately every 3 months, plus an all-hands community forum.

☐ Yes

☐ No

Who would be the **primary contact person** for your site?

Name

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Email

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**Role**

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## **Timing of sampling**

Can you estimate when (in which month/year) you would be able to organize the first sampling campaign?

## **Motivation letter**

**Why would you like your site to be part of this phase of eDNA Expeditions?**

Share your motivation, ideas, or vision!

Thank you for your interest! This project is made possible through collaboration and shared enthusiasm, and we look forward to reviewing your application.