



Project Reference: P03758 - eBioAtlas - Freshwater

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Created in 1948, IUCN is now the world's largest and most diverse environmental network, harnessing the knowledge, resources and reach of more than 1,400 Member organisations and around 15,000 experts. It is a leading provider of conservation data, assessments and analysis. Its broad membership enables IUCN to fill the role of incubator and trusted repository of best practices, tools and international standards.

IUCN provides a neutral space in which diverse stakeholders including governments, NGOs, scientists, businesses, local communities, indigenous peoples' organisations and others can work together to forge and implement solutions to environmental challenges and achieve sustainable development.

Working with many partners and supporters, IUCN implements a large and diverse portfolio of conservation projects worldwide. Combining the latest science with the traditional knowledge of local communities, these projects work to reverse habitat loss, restore ecosystems and improve people's well-being.

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The eBioAtlas aims to establish a global map of freshwater biodiversity, harnessing the power of environmental DNA (eDNA) to provide species data from water samples collected by local stakeholders and citizen scientists around the world. Employing a globally standardised sampling and analysis protocol, the project will provide the baseline data urgently required to underpin effective biodiversity conservation, environmental management, and ecological impact assessment, especially in the developing world. Stakeholders buy-in will be facilitated at any geographic location and scale, enabling contribution of samples from governments, businesses, conservation organisations and local community initiatives worldwide. This will yield increased data resolution in the most important locations. There is potential to address a combined biodiversity and public health agenda, since water samples can

be screened for the presence of pathogens or zoonotic disease vectors at the same time as being analysed for biodiversity assessment.

The project aims to undertake 30,000 freshwater eDNA samples globally, including many from the Southeast Asian region. Financial support gratefully received from BNP Paribas/Fondation de France means that there is now an opportunity for IUCN and NatureMetrics to support freshwater eDNA sampling in Southeast Asia.

All sampling work will be undertaken in Southeast Asia, within selected countries to be agreed with IUCN and NatureMetrics. The Service Provider will collect 100 aquatic samples for vertebrate eDNA from approximately 100km of previously poorly surveyed water courses (localities to be agreed) before the end of December 31st, 2024, and similarly 100 aquatic samples for vertebrate eDNA from approximately 100km of previously poorly surveyed water courses (localities to be agreed) before the end of December 31st, 2025. NatureMetrics will supply aquatic eDNA sampling kits to the Service Provider in time to enable sampling trips and will additionally provide eDNA sampling training to approximately 20 members of staff/volunteers from the regional partner. IUCN, NatureMetrics and Consultant will collaborate to ensure suitable sampling permits are secured. Field samples of eDNA will be sent through to NatureMetrics for processing (by January 30th, 2025, and January 30th, 2026) and reporting to IUCN and the regional partner on the species recorded during sampling.

- Documentation evidence of ability to obtain permissions for eDNA sampling within the selected Southeast Asian countries (government and community where appropriate and required).
- Must have access to means of transport to visit often remote waterbodies in Southeast Asia.
- Ability to send eDNA samples internationally for receipt by NatureMetrics within an agreed timeframe.
- Full medical insurance for staff undertaking fieldwork at selected locations.

From July 30th, 2024 to January 30th, 2026