

Biodiversa+ WS “towards a roadmap for implementation of novel biodiversity monitoring methods”

Zoom - 2 February 2022 from 9am to 12.30pm CET

Registration link: https://us02web.zoom.us/meeting/register/tZAtcOGprTMtGNE-ybDSJxqcRjI_X8VtLQHP

[Biodiversa+](#), the European Biodiversity Partnership, aims to support the deployment of novel technologies and approaches for biodiversity monitoring. In this context, Biodiversa+ aims to develop a roadmap for the enhanced operationalisation of such approaches in particular across Europe. The workshop is a first step in developing the roadmap - in the form of a Biodiversa+ report - to promote such operationalisation and will look into research gaps as well as barriers and opportunities. This roadmap will guide future Biodiversa+ work on biodiversity novel technologies and approaches (including the set-up of capacity building events and possible set-up of mobility schemes).

To develop this roadmap, the workshop will build on recent work performed by EuropaBON, a Biodiversa+ key collaborator. For biodiversity monitoring novel technologies, EuropaBON identified a need for standardisation throughout the methodological pipeline. Infrastructure to host and share data and the building of common reference databases (libraries) were identified as other key missing elements in the current landscape.

The workshop will present initiatives to meet these challenges and how work within specific domains may overcome these challenges and move from demonstration of novel methods to their large-scale application in biodiversity monitoring.

The workshop will bring expertise from researchers, Biodiversa+ partners, the EEA and other relevant stakeholders and policy makers to provide input for uptake and implementation including demonstrations with a focus of removing barriers and provide incentives and opportunities for wider implementation of novel monitoring methods.

The online workshop will be held on **2 February 2023 from 9am to 12.30pm CET** and will include a number of key presentations and discussions in thematic breakout groups.

Workshop agenda:

9.00 – 9.15: Welcome words and aims of the workshop *by Lars Dinesen, IFD and Hilde Eggermont, BeISPO, Biodiversa+ Chair & Coordinator*

9.15 – 10.30: Key presentations of 10 minutes each followed by 5 minutes of Q&A

Examples of opportunities and obstacles in implementation of novel monitoring methods

- Cher Chow, EuropaBON – lead author of report on novel technology for biodiversity monitoring¹.

¹<https://ec.europa.eu/research/participants/documents/downloadPublic?documentIds=080166e5f01af3c9&appId=PPGMS>

- Elaine van Ommen Kloeke – showcasing ARISE as a large national biodiversity technology infrastructure²
- Florian Leese, University of Duisburg-Essen and coordinator of DNAquaNET³ - developing standards for molecular biodiversity assessments in freshwater ecosystems
- Adrià López-Baucells and Charlotte Roemer - Acoustic monitoring of bats – a showcase of implementation
- Markus Erhard - European Environmental Agency – How to ensure FAIR data in the implementation of novel technologies and data streams for biodiversity monitoring?

10.30 - 10.45 Coffee break

10.45 – 12.10: Breakout in four thematic groups.

Discussion within themes with a key focus on uptake at European and national / local level.

Topics covered (those that need a field operator, those you can leave, and those from satellites)

- Group 1: Remote sensing (Satellites, Lidar, and drones for habitat status and condition)
- Group 2: Image-based approaches (Species monitoring such as camera trapping, drones and thermal cameras)
- Group 3: Acoustic sensors (Permanently deployed for birds, bats, some marine mammals and terrestrial insects)
- Group 4: Molecular methods (species and communities)

Potential cross-cutting topics which can be considered in the breakout groups:

- What are the barriers and opportunities for implementation
- Need for standardisation
- How to do this in practice (spatial and temporal sampling regimes)
- Need for reference libraries (e.g barcodes) and training data (images and acoustic)
- Make sure to capture synergies among technologies (e.g. wall-to-wall and field/lab tools)
- Link to EU monitoring requirements for business and financial sectors

Back to plenary

12.10 – 12.20: Plenary and wrap-up

12.20 - 12.30: Identify next steps and conclusion of the workshop

12.30 - End of workshop

²<https://www.arise-biodiversity.nl/>

³<https://dnaqua.net/>