



an Open Access Journal by MDPI

New Ways to Monitor and Analyse Biodiversity in the Marine Environment

Guest Editors:

Dr. Jon Barry

Division of Environment and Ecosystems, Centre for Environment, Fisheries and Aquaculture Science, Lowestoft, UK

Dr. Claire L. Szostek

Sustainable Fisheries and Aquaculture Group, Centre for Applied Marine Science, Bangor University, Wales, UK

Dr. Keith Cooper

Ecology Group, Centre for Environment, Fisheries and Aquaculture Science, Lowestoft, UK

Deadline for manuscript submissions:

closed (10 July 2021)

Message from the Guest Editors

Programs to monitor biodiversity directly are widespread in the marine environment, as are factors which may influence results. With the advent of new technological, statistical and computing techniques, the ways in which monitoring is achieved and the range of parameters that are being monitored have expanded. We welcome inputs on the following but will consider any new innovative techniques or analyses:

- Design of monitoring surveys from a statistical perspective;
- Integration of different sources of data to achieve successful monitoring programs;
- Incorporating statistical dependency into the analysis of monitoring data;
- Monitoring studies that measure aspects of sediment, biogeochemical and faunal parameters;
- Monitoring based on visual imagery such as video surveys or camera traps;
- Monitoring based around anthropogenic activities such as pollution, aggregate extraction and litter which may reduce biodiversity;
- Using machine learning to infer aspects of biodiversity;
- Automation in terms of data collection and/or analysis;
- Use of 'big data' for addressing environmental issues, with a focus on biodiversity monitoring;
- Monitoring using eDNA



mdpi.com/si/52165

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)