

January 29, 2025

Global Biodiversity Goals: Researchers Call for Systematic Conservation Planning

In a recent study by the EU's Horizon Europe project MarinePlan, which is coordinated by the Thünen Institute of Sea Fisheries, the scientists emphasise that systematic conservation planning (SCP) in particular can stop the loss of biodiversity.

Bremerhaven (29 January 2025). Activists around the world are striving to stop the loss of biodiversity and restore ecosystems, as agreed by the international community in the Global Biodiversity Framework (GBF) of Kunming and Montreal. A study by the Horizon Europe project MarinePlan, which is coordinated by the Thünen Institute of Sea Fisheries in Bremerhaven, which has now been published in *Trends in Ecology and Evolution*, shows that in order to achieve the goals agreed in the GBF, such as the protection of 30 percent of the earth's surface and the restoration of 30 percent of the degraded ecosystems, decision-makers should implement Systematic Conservation Planning (SCP).

For their study, the researchers led by Dr. Sylvaine Giakoumi from the Sicily Marine Center in Palermo took a closer look at the application of the planning tool, compiled and evaluated qualitative reviews and expert knowledge. The result: In their estimation, SCP has become a key strategy in investment and spatial planning in the nature conservation sector over the past 30 years. Modern algorithms and other scientific tools support users in making decisions that best promote biodiversity conservation while being as cost-efficient as possible. According to the researchers, SCP is thus a science-based process with the help of which decision-makers can work in a targeted and flexible manner on the implementation of the GBF goals. "Decisions made in the next decade will have profound and lasting effects on ecosystems on land, in the water and in the sea," says co-author Dr. Vanessa Stelzenmüller from the Thünen Institute of Sea Fisheries. "They must therefore be based on effective, solid and transparent spatial planning."

Nevertheless, the researchers recommend a number of improvements that could promote the widespread implementation of SCP:

1. Planning uncertainties should be communicated in a standardised manner. This creates confidence in the approach.
2. Training programs support practical implementation.

3. Scientists, practitioners and advocacy groups should cooperate closely to align nature conservation with other societal and economic needs.

4. With further research, adaptive solutions can be developed and trade-offs can be made between competing goals.

If the principle is further developed, SCP offers great potential from the scientists' point of view to permanently solve the challenges resulting from the GBF in terms of nature and society.

Original publication:

Sylvaine Giakoumi et al. Advances in systematic conservation planning to meet global biodiversity goals, Trends in Ecology & Evolution, 2025, [DOI: 10.1016/j.tree.2024.12.002](https://doi.org/10.1016/j.tree.2024.12.002)

Further information:

[Horizon Europe-Projekt MarinePlan](#)

Contact:

Dr. Vanessa Stelzenmüller
Thünen Institute of Sea Fisheries, Bremerhaven
Email: vanessa.stelzenmueller@thuenen.de

Photos for download can be found in the newsroom.



© Thünen Institute/Kay Panten



© Thünen Institute/Birgit Suer