



# Trilateral Swimway Conference 2024

32nd symposium Waddenacademie

Applying scientific evidence to manage  
human impacts on fish life cycles

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Book of Abstracts





## **Gfl Fish Atlas showing all fish species in the trilateral Wadden Sea area**

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The Gfl Fish-Atlas, jointly published by the German Ichthyological Society (Gfl e.V.) and the Bremen University of Applied Sciences, now includes for the first time all marine fish species of the Trilateral Wadden Sea Cooperation between the Netherlands, Germany and Denmark. This includes 122 species, in addition to the marine and diadromous species considered "established", as well as rarer species such as stray visitors, first records or records from neighbouring areas. Worthy of mention are, for example, records of the Lipophrys pholis (first record in Germany), the bluefin tuna *Thunnus thynnus*, the slender driftfish *Cubiceps gracilis* (first record in the North Sea) or more recent occurrences of the shortnose seahorse *Hippocampus hippocampus*. The data come from literature research and selective database queries (GBIF, OBIS, PANGEA), as well as from distribution data entered directly into Atlas (Citizen Science). For all species, in addition to distribution data, further species information such as diagnostic characteristics, species descriptions, photos or references to further literature are available. Numerous links lead directly to the cited literature sources and thus facilitate further research. The atlas is freely available at < <https://biodiv-atlas.de/fische/#!/home>>. After registration, it is possible to enter your own distribution data via a user-friendly input mask both via PC and via smartphone (Android, iOS). The atlas was created using the Biodiversity Warehouse software of the Bremen University of Applied Sciences. It is hosted at the Alexander Koenig Research Museum in Bonn and is a use case in the NFDI4Biodiversity research project (National Research Data Infrastructure for Biodiversity). The work on the atlas is currently done exclusively on a voluntary basis. The current version of the atlas is in German. A translation into English and possibly other languages is being sought, as is the search for cooperation partners in the Wadden Sea area.



# GfI-Fishatlas

All marine fish species of the Trilateral Wadden Sea area

<https://biodiv-atlas.de/fische/#!/home>

## Looking for partners

*“Join us in exploring and preserving the rich biodiversity of the Trilateral Wadden Sea area. Discover, contribute, and make a difference.”*

The screenshot shows the main interface of the GfI-Fishatlas. On the left is a map of the Wadden Sea region with colored dots indicating species distribution. The top navigation bar includes 'Startseite', 'Helferseite', and 'Statistiken'. A search bar is prominently displayed. Below the map, there are three panels for different fish species: 'Gelber See-Ährenfisch', 'Gelber See-Ährenfisch', and 'Chromidenfisch'. A red callout bubble labeled 'Quick search' points to the search bar. Below the main map, there is a detailed view for 'Roter Thun, Atlantischer Blauflossenthun Thunnus thynnus (Linnaeus 1758)', including a gallery of photos, a 'Kurze Beschreibung' (short description), and a 'Diagnose' (diagnosis) section. Another red callout bubble labeled 'Detailed species information' points to this section. To the right, there is a 'Species' page for 'Cubiceps gracilis (Schänker Driftfisch)', showing a distribution map and a photo of the fish. A red callout bubble labeled 'Easy literature access' points to a citation: 'Boer, P. (1971). The Occurrence of Callionymus reticulatus in the Southern North Sea. ICES Journal of Marine Science., 33(1), 506-509.' Below this, there is a 'Verbreitung' (distribution) section with a map and a citation: 'Boer, 1971 (Ref.: 998)'. On the bottom left, there is a mobile app interface for 'Fund melden' (reporting a find), with a red callout bubble labeled 'Data entry via app and PC' pointing to it.

## Key Messages

Jointly published by the German Ichthyological Society (GfI e.V.) and the City University of Applied Sciences Bremen (Hochschule Bremen).

The atlas is integrated as a use case in the NFDI4Biodiversity research project:

“NFDI4Biodiversity is a consortium under the umbrella of the National Research Data Infrastructure (NFDI) dedicated to mobilising biodiversity and environmental data for collective use.”

Showing all marine fish species of the Trilateral Wadden Sea Cooperation between the Netherlands, Germany and Denmark:

“122 species, in addition to the marine and diadromous species considered ‘established’, as well as rarer species such as stray visitors, first records or records from neighbouring areas.”

The data are sourced from comprehensive literature research, targeted database queries (GBIF, OBIS, PANGEA), and direct contributions from citizen scientists into the Atlas.

For all species, in addition to distribution data, further species information such as diagnostic characteristics, species descriptions, photos or references to further literature are available.

Numerous links lead directly to the cited literature sources and thus facilitate further research.

The atlas is freely available online. Registered users can input their own distribution data conveniently via a user-friendly interface accessible on both PCs and smartphones (Android, iOS)

The atlas was created using the Biodiversity Warehouse software of the City University of Applied Sciences Bremen. It is hosted at the Alexander Koenig Research Museum in Bonn.





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