SemantyFish: Advancing Visibility, Interoperability and Exploitability of FishBase

SemantyFish aims to enhance the visibility, interoperability, and exploitability of FishBase by transforming it into a semantic web knowledge base. By leveraging semantic web technologies, the project will enable seamless data exchange, complex queries, and integration with global research infrastructures, advancing its role in open science and interdisciplinary research.

Challenge

FishBase is the world's most accessed database on marine and freshwater fishes. However, its interoperability and integration across different systems and domains can be enhanced to exploit its full potential for fisheries management, aquatic biodiversity, and interdisciplinary research.

Solution

Transform FishBase into a semantic web knowledge base to: (a) enhance data interoperability by structuring data with standard vocabularies and ontologies, (b) enable SPARQL query facilities. A dedicated API will be implemented providing access to the knowledge base and workflow supporting continuous evolution and maintenance.





ENVRI Environmental Sciences



LS RI Life Sciences

Scientific Impact

SemantyFish will significantly enhance FishBase's visibility, interoperability, and integration with other RIs, such as the Global Record of Stocks and Fisheries (GRSF), the World Register of Marine Species (WoRMS), and the EOSC.

Partners

- Institute of Computer Science (ICS) of the Foundation for Research and Technology - Hellas (FORTH)
- Quantitative Aquatics Inc.

https://www.oscars-project.eu/projects/semantyfish-advancing -visibility-interoperability-and-exploitability-fishbase



