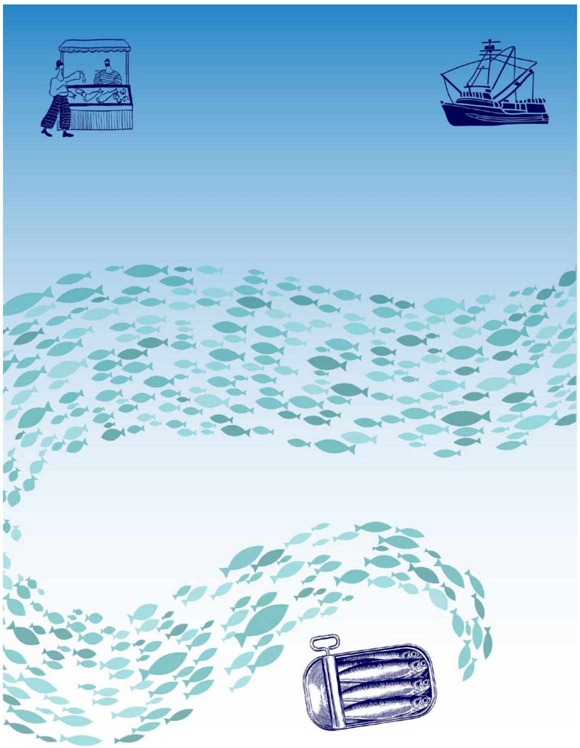
Call for papers

Topical Issue

Small pelagic fish in changing social-ecological systems

in Aquatic Living Resources



Background

Small pelagic fish play a key role in marine ecosystems and provide essential nutrients to human populations worldwide. Their populations are currently under threat from global change, as evidenced by decreases in size and body condition of individuals, with potential impacts on their associated social-ecological systems. Understanding the causes and consequences of these ongoing changes requires ecosystem-based observations combined with experiments under controlled conditions and modelling studies to assess cause-effect relationships across scales, from genes to ecosystems. Stock management should upgrade to account for the non-stationarity of vital rates under the influence of the biotic and abiotic environments within assessment models. In addition, the diversity of the fisheries, processing industries (ranging from canning to fishmeal and oil production), and consumption patterns require the involvement of all stakeholders to elucidate the structure and dynamics of the fishing industry and market. Ensuring the sustainability of small pelagic fish populations and fisheries calls for interdisciplinary research, that bring together oceanographers, ecologists, fisheries scientists, economists and sociologists, to develop solutions that enhance the resilience of the social-ecological systems.

Scope of the special issue

This topical issue aims to bring together recent advances in the study, management, and exploitation of small pelagic fish. We welcome contributions illustrating:

- Integrated approaches: Combining in-situ observations, experimental studies, and modeling at multiple scales (from gene to ecosystem) to overcome methodological limitations and improve understanding of their dynamics.
- Spatio-temporal variability: Investigating the mechanisms underlying fluctuations in abundance, recruitment, and life history traits, linked to environmental factors, fishing pressure, and the adaptive responses of fleets and markets.
- Ecological and socio-economic roles: Examining energy and nutrient transfer within food webs from plankton to top predators, as well as resource valorization, food security, consumer perceptions of seafood products, and industry adaptation to global changes.
- Sustainability challenges: Addressing stock management, fishery viability, product traceability, ecological transition, and scenarios for the sustainable evolution of the social-ecological system.

We expect contributions from the French Symposium TRANSPEL (https://colloquepp.sciencesconf.org/?lang=fr) but will also welcome any other contributions related to the topic.

Guest editors

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Submissions

The deadline for the submissions is 31 December 2025.