## CCMAR SEMINARS by IZASA SCIENTIFIC



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Fish farming is a growing industry worldwide. While ecologically sustainable directives and practices have been introduced in recent years, fish welfare has been overlooked. Here we present FishEthoBase, an open-access database assessing current and prospective welfare of farmed fish. For each species, we propose 10 critical questions covering ecological, behavioural and physiological criteria: home and depth range, migration, reproduction, aggregation, aggression, habitat type, stress, malformations and slaughter. These questions are answered using a protocol based on standardised risk analysis methods, that delivers a) a comparison between the wild behaviour and the fish welfare state under conventional farming conditions, b) the potential for improvement in welfare and c) the certainty of the findings. FishEthoBase ultimately aims to cover all farmed fish species, providing a freely available and powerful tool for fish farmers to improve the welfare of their fish, while identifying knowledge gaps for researchers, and creating awareness for consumers. This project may constitute a decisive step for a welfare certification in the near future.

## SHORT CV

João L. Saraiva is a researcher at the FishEthoBase project from Fair-Fish International in Zürich, Switzerland. His research interests involve the proximate and ultimate mechanisms underlying social behaviour if fish, chemical communication in teleosts and fish welfare.

João started his academic career at ISPA in Lisbon, working on behavioural neuroendcrinology of fish at the lab of Rui Oliveira. During his PhD, João focused on a integrative approach to courtship behaviour in two populations of a blenniid species. In 2010 he joined CCMAR as a post-doc at the lab of Adelino Canário, working initially on chemical communication and behaviour in sea bass and Mozambique tilapia. Later, João focused on behaviour and physiology of an exotic neotropical cichlid and what biological features allow this invasive species to become successful in river basins of the Algarve. In 2016 he joined the FishEthoBase project, working on ethology and welfare in farmed fish.

João Saraiva is the author of several research articles on high impact journals and nearly 20 ethological profiles of farmed fish species. He is an invited speaker at biology-related courses in several Universities as well as the author and host of a science dissemination radio show.







