

Natasha Phillips

Project with Marine Protected Area authorities in Camogli, Italy

Thanks to generous funding from the Royal Society of Biology, I have spent the last two months completing my PhD field research in Camogli, Italy, a site internationally renowned for an incredible abundance of ocean sunfish. This rare access to reliably large numbers of sunfish has enabled me to deploy accelerometer data loggers on self-releasing harness systems and take tissues samples from a range of individuals, which will provide essential data to address my research objectives:

- 1) To determine the swimming costs of sunfish allometrically
- 2) To identify and quantify sunfish diet and habitat-use using non-lethal stable isotope analysis (SIA)

Such data are vital if we are to understand the habitat and dietary requirements of individuals as they grow, and the extent and drivers for their proposed ontogenetic shift between shallow inshore waters and the open-ocean. By understanding such life history processes we will be better placed to understand the ecological consequences of the current mass removal of sunfishes from the world's oceans and provide further insight into the biology of a vulnerable marine predator.

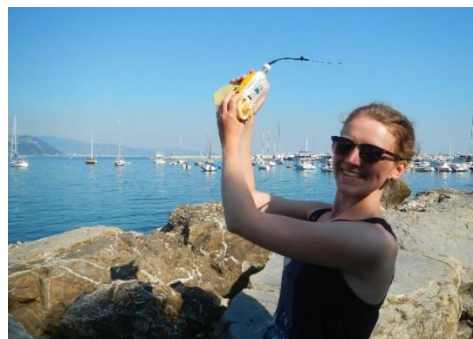


Left: Sunfish bycatch in the Tonnarella nets

Right: One of the first sunfish!

This field work has also provided huge benefits for my personal development, including first-hand experience deploying bio-logging equipment, handling fish, collecting SIA samples, tracking equipment at sea & working with a range of stakeholders. The data collected and the collaborations created have allowed us to support our Italian partners at the Portofino Marine Protected Area, where our research into diet and habitat-use will enable local fishermen to increase their efficiency by minimising bycatch. Additionally we will be well placed to assess whether potential sunfish fisheries in the region will have knock-on effects on other local species.

Following on from this project, we will aim to write up our study into papers suitable for peer-review publication and public dissemination using public talks and social media, specifically through twitter ([@sunfishresearch](https://twitter.com/sunfishresearch)) and blog posts (sunfishresearch.wordpress.com). The charismatic nature of sunfish has attracted international broadcasters and during this field season the Discovery Channel has been filming a mini-documentary on our work. This was a wonderful opportunity to engage with an international audience which we hope will be well received.



L-R: Tagging a sunfish, finding the tag and sunfish in the nets

We are extremely grateful for the support of the Royal Society of Biology for making this field season possible and would encourage anyone requiring travel scholarships to apply for this grant.