

Project summary: “Torres Strait Finfish Fishery Spanish mackerel and coral trout biological sampling”

This handout is to share information about a PZJA Torres Strait research project that is commencing. The project will collect biological information (such as age and length) for Spanish mackerel and coral trout in 2021-22, 2022-23 and 2023-24 fishing seasons. It is a continuation of sampling that was started in 2019-20 for Spanish mackerel, as well as a continuing the collection of similar information from coral trout which started in 2020-21.

Timeframe

The project aims to run for three years from July 2021 to June 2024.

Project Objectives

The project aims to collect information on the ages and lengths of Spanish mackerel and coral trout caught by Torres Strait commercial fishers. This information will be used in the scientific stock assessments for these species. The stock assessment is the tool the PZJA uses to measure the size of the biomass (available fish that can be caught) and sets the amount of fish that are allowed to be caught each year by all commercial fishers across the fishery.

Will project staff be visiting areas of the Torres Strait during the COVID-19 period?

Project staff are aware of recent travel restrictions in place to prevent the spread of coronavirus (COVID-19). Project staff will not be visiting the Torres Strait during any restrictions. If travel advice allows opportunities to visit, then project staff will follow Government guidelines and will discuss any visit with each community before planning any travel.

What areas of the Torres Strait will we be visiting?

If travel into communities is allowed, project staff will aim to visit Erub and Mer communities to continue to work with fishers and representatives from fishing groups, discuss the project objectives and seek involvement by fishers and staff at community freezers to be involved in collecting data and fish samples. Pending the availability of additional funding the project may also visit other eastern and central Torres Strait communities including Ugar and Masig.

How will we do this project and are there any potential risks/ effects to communities?

The project will involve:

- Collecting samples (heads and frames) of Spanish mackerel and coral trout caught by Indigenous and non-Indigenous commercial fishers.
- Collecting length information from fishers, including other information such as date and general location that fish were caught (such as reef or island name).
- Engaging with Traditional Inhabitants in data collection and fish sampling, including working with fishers and staff at community freezers to help collect samples.
- Analysing samples of fish in the laboratories at the Northern Fisheries Centre (Cairns). The ear bones (otoliths) will be removed from the fish and be used to determine age of each fish.
- Catch and length-age frequency data collected will be securely delivered to AFMA for use in stock assessments.

The project will collect information on the fish that are caught during normal fishing days and will not affect the way or amount of fishing that occurs. Samples are collected from fish after they have been filleted. There will be a need to use a small amount of freezer space at community freezers to store the samples until they are freighted to the Cairns lab at intervals.

Project participation by fishers and staff at community freezers is completely voluntary but payment is available to cover costs of storage and transport of samples and in acknowledgement of the time taken to collect the samples.

How will we keep your private fishing information safe?

Sensitive data and information collected during the research on the fishing location, date, number of fish caught and composition of the catch will remain confidential. Only grouped data from multiple fishers will be presented and released publicly so that no data or information from any individual may be identified.

Project staff will adhere to the *Procedural Framework for Researchers in the Torres Strait* and the *TSRA Cultural Protocols Guide* when planning and conducting work with Traditional Inhabitants. Project staff will work with and seek advice from PZJA consultative committees that work within these cultural guidelines and have established relationships with key Torres Strait islander contacts.

Benefits this project will have for communities

This project need was put forward by the PZJA to help communities, managers and scientists better understand the health of Torres Strait finfish stocks which helps the long-term sustainability of the fishery. The project will help in providing:

- fish length and age data from different areas of the fishery which tells us how the structure of the stocks might be changing over time
- greater certainty in the information used to set sustainable levels for commercial catches
- advice on future monitoring options for both Torres Strait Spanish mackerel and coral trout.

This information is particularly important for the Spanish mackerel fishery, as catch rates have been declining in recent seasons indicating a drop in overall biomass. The biological information used in the stock assessment (such as estimates of mortality rate) have not been reviewed for several years, and there is an opportunity to include more up-to-date ageing and length-frequency data from fishery catches into the stock assessment.

Who will be undertaking this project?

Fisheries Queensland will work with TSRA and AFMA and engage with Indigenous members of island fishing communities (Erub, Ugar, Masig, Mer, Thursday Island) and non-Indigenous commercial fishers. Fisheries Queensland samples the length and age of Spanish mackerel in the Gulf of Carpentaria and the east coast of Queensland, which are separate stocks of the species, as well as coral trout on the east coast of Queensland.

More info on the Spanish mackerel and coral trout fisheries can be found on the PZJA website:

<https://www.pzja.gov.au/torres-strait-biological-sampling-program>

<https://www.pzja.gov.au/the-fisheries/torres-strait-spanish-mackerel-fishery>

<https://www.pzja.gov.au/the-fisheries/torres-strait-finfish-reef-line-fishery>