Foreign trawl fishing logbook data in Australian waters 1974 to 1990

**Description**

Details of foreign trawl fishing in Australian waters from 1974 to 1990. The data is sourced from daily fishing returns recorded by the foreign fishers while at sea. Weights are estimates only.

History

Foreign fishing for tropical snappers (Lutjanids) and emperors (Lethrinids), as well as a range of other tropical species, has occurred off the coast of Northern and Western Australia since the 1930’s. During the 1970’s and 1980’s Taiwanese and later Thai and Chinese fleets operated pair and stern trawlers targeting these species on the North West Shelf, the Arafura and Timor Seas, with the Taiwanese pair trawlers catching an estimated 50,000 tonnes of finfish during the late 1970’s.

These vessels operated under a variety of arrangements including direct fee fishing, and joint Australian and foreign venture agreements. In addition there were a small number of feasibility fishing ventures involving Korean, Norwegian, Russian and Polish trawlers. Under all these arrangements vessels had to fill out daily fishing logbooks detailing catch and effort. This dataset mainly contains data from the Taiwanese and later Thai and Chinese trawlers, but also contains some of the exploratory trawl data from the various feasibility surveys.

In particular this dataset includes exploratory trawl data from the M.T. Denebola (BT\_ID = 1244). She was an 88 metre Polish factory trawler that operated on an exploratory basis in southern Australian waters between Tasmania and the western GAB during the summer of 1979–1980 under a joint venture with the Polish company Dalmor. All other data is from northern and western waters.

Appropriate use and limitations of the data

The catch weight data in logbooks are estimates only which have been recorded by fishers while at sea. Fishers usually cannot accurately weigh fish at sea, so the estimated weights are mostly based on volume (for example, the size and number of boxes of fish caught). At this time, positions are also estimates as GPS navigation systems did not exist. While the dataset includes both pelagic and demersal trawling, limitations on data entry precluded identifying those shots that were pelagic from those that were demersal.

Disclaimer

The data provided by AFMA is raw (unprocessed) data and may contain errors or be incomplete. Errors are more likely in the species caught in low volumes. AFMA makes no warranty or representation that the data is accurate or complete. Those who choose to use this data should make their own enquiries as to its accuracy and completeness and AFMA assumes no liability for any errors or omissions in the data provided, or for any decision by a person who chooses to rely on the data.

**METADATA**

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**Date First Published:** September 2018

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**Update Frequency:** No updates

**Authoring Agency:** [Australian Fisheries Management Authority](http://www.afma.gov.au/)

**Subject:** Fisheries catch

**Agency Program:** [AFMA daily logbook records](http://www.afma.gov.au/fisheries-services/logbooks-and-catch-disposal/)

**Agency Jurisdiction:** Commonwealth

**Temporal Coverage:** Calendar years 1974 to 1990

**Spatial Coverage:** Australia’s EEZ

**Granularity:** Daily.

**Collection Mode:** Self reporting. Logbooks are completed by fishers.

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**Appropriate Use:** Self-reported catch details from daily fishing logbooks. Interpretation of these data should take into account that they are estimates.

**Limitations:** The catch weight data in logbooks are estimates only which have been recorded by fishers while at sea. Errors are possible in the identification of fish species and are more likely for species caught in low volumes.

**Table structure** - Below are the details of the two files that make up the dataset;

**Table:** FTR\_Operation.csv

|  |  |  |
| --- | --- | --- |
| **Field name** | **Type** | **Description** |
| Fishery Id | Character | FRT = Foreign Trawl. |
| Log Type | Character | Logbook used to report the fishing. |
| Boat Id | Integer | Unique identifier of the boat used for fishing. Together with the Fishing\_date and the Operation\_no, this provides the compound key that identifies each operation record. |
| Fishing date | Date | Date (Zulu) of the fishing operation. |
| Operation no | Integer | Sequential number of operation in that day. |
| Gear | Character | OTB = Single boat bottom otter trawls (ISSCPG: 03.1.2), PTB = Bottom pair trawls (ISSCPG: 03.1.3), TX = Trawls (nei) (ISSCPG: 03.9). |
| Start Latitude | Number | Latitude of the start of the operation (decimal degrees). |
| Start Longitude | Number | Longitude of the start of the operation (decimal degrees). |
| End Latitude | Number | Latitude of the end of the operation (decimal degrees). |
| End Longitude | Number | Longitude of the end of the operation (decimal degrees). |
| Position Precision | Number | The estimated precision of the location data expressed as the proportion of a degree. |
| Start Time | Date/Time | Date and time (Zulu) of the start of the fishing operation. |
| End Time | Date/Time | Date and time (Zulu) of the end of the fishing operation. |
| Fishing Time | Number | Number of hours trawled. |
| Bottom Depth Min | Integer | Minimum depth (metres) of water where fishing occurred. |
| Bottom Depth Max | Integer | Maximum depth (metres) of water where fishing occurred. |
| Fishing Depth | Integer | Deepest depth (metres) that the fishing gear worked. |
| Sea Surface Temp | Number | Reported sea surface temperature (°C) where fishing occurred. |
| Haul Wt | Integer | Total estimated catch of the haul of all species (kilograms). |
| Retained Wt | Integer | Total retained catch of the haul (kilograms). |
| Rubbish Wt | Integer | Total estimated catch of the haul of unwanted fish and benthos (kilograms). |
| Discard Wt | Integer | Total catch of the haul discarded (kilograms). |

**Table:** FTR\_Operation\_Catch.csv

|  |  |  |
| --- | --- | --- |
| **Field name** | **Type** | **Description** |
| Fishery Id | Character | FRT = Foreign Trawl. |
| Log Type | Character | Logbook used to report the fishing. |
| Boat Id | Integer | Unique identifier of the boat used for fishing. Together with the Fishing\_date and the Operation\_no, this provides the compound key that identifies each operation record. |
| Fishing date | Date | Date (Zulu) of the fishing operation. |
| Operation no | Integer | Sequential number of operation in that day. |
| Gear | Character | OTB = Single boat bottom otter trawls (ISSCPG: 03.1.2), PTB = Bottom pair trawls (ISSCPG: 03.1.3), TX = Trawls (nei) (ISSCPG: 03.9). |
| Start Latitude | Number | Latitude of the start of the operation (decimal degrees). |
| Start Longitude | Number | Longitude of the start of the operation (decimal degrees). |
| End Latitude | Number | Latitude of the end of the operation (decimal degrees). |
| End Longitude | Number | Longitude of the end of the operation (decimal degrees). |
| Position Precision | Number | The estimated precision of the location data expressed as the proportion of a degree. |
| Start Time | Date/Time | Date and time (Zulu) of the start of the fishing operation. |
| End Time | Date/Time | Date and time (Zulu) of the end of the fishing operation. |
| Fishing Time | Number | Number of hours trawled. |
| Bottom Depth Min | Integer | Minimum depth (metres) of water where fishing occurred |
| Bottom Depth Max | Integer | Maximum depth (metres) of water where fishing occurred |
| Fishing Depth | Integer | Deepest depth (metres) that the fishing gear worked. |
| Sea Surface Temp | Number | Reported sea surface temperature (°C) where fishing occurred. |
| CAAB | Integer | The species of fish caught. CAAB - Codes for Australian Aquatic Biota: CSIRO coding system for aquatic organisms (http://www.marine.csiro.au/caab/). |
| Grade | Character | Reported grade of the species. |
| Catch Wt | Integer | Retained catch of the species (kilograms). |

**Glossary:**

**ISSCFG** – [FAO International Standard Statistical Classification of Fishing Gear](http://www.fao.org/cwp-on-fishery-statistics/handbook/capture-fisheries-statistics/fishing-gear-classification/en/) (ISSCFG, 1980)

**Gear**: Descriptions and images of [fishing gear](http://www.afma.gov.au/species-gear/fishing-gear/) are available on the AFMA website.

**Daily fishing logbooks:** While at sea, Commonwealth fishers must record all catch and effort details (including gear and spatial position) in their AFMA daily fishing logbooks. The logbook forms are submitted to AFMA and the data is entered into the AFMA database. This information is used to inform stock assessments. The forms currently used for [AFMA logbooks](http://www.afma.gov.au/fisheries-services/logbooks-and-catch-disposal/) are available on the AFMA website.

**CAAB**: CAAB stands for Codes for Australian Aquatic Biota and is a coding system for aquatic organisms in the Australian region. It is maintained by CSIRO Division of Marine and Atmospheric Research, Australia (CMAR). Users can search the [CAAB database](http://www.marine.csiro.au/caab/) for information such as currently accepted scientific name, common name and approved marketing name for a fish species.

**Australian Fishing Zone** - Waters adjacent to Australia and its external territories (excluding Torres Strait and the Antarctic Territories) which extend from defined baselines to 200 nm seawards, but not including coastal and excepted waters. Agreed boundaries apply where these zones intersect the 200 nm zones of other nations. Within the AFZ, Australia exercises jurisdiction over all fishing by Australian and foreign boats.

**Keywords:** Catch, Commonwealth, Fish, Fishing, Foreign, Logbook, Snapper, Trawl.