



Catch

Recording catch

Fisheries management agencies require fishers to report catch and effort data. Data collected during commercial fishing is called **Fishery Dependent** data, and is used in stock assessments to keep track of how the fishery is going. [Fishery-dependent data](#) can be collected in fisheries logbooks and catch disposal records, by observers, VMS or onboard cameras. They each collect different information:

- **Daily fishing logbooks:**

- Time and Date
- Position
- Effort (e.g. hours spent fishing or number of shots)
- Gear type
- Catch by species – this is usually an estimate
- Interactions with TEPs

Australian Fisheries Management Authority
PO Box 376 Thursday Island QLD 4875

Torres Strait Finfish Log

Vessel Name: **Blue Lagoon** Dist. Symbol: **FWQT-9**

Extended Non-Fishing I did not work between **15/ 6 /02** **30/ 6 /02** Non-Fishing Code

TRIP CODE:	Date	1 / 7 / 02	2 / 7 / 02	2 / 7 / 02	3 / 7 / 02
8 - Start of trip more than 1 day	Non-Fishing Code				
C - Continuing Trip	Trip Code	S	C	C	
E - End of Trip	Port of Departure	Thursday Is			
D - Day Trip	Location: (position of Primary vessel)				
	Latitude (dd,mm)	0 9 5 3	0 9 5 1	0 9 5 5	1 1 4
	Longitude (ddd,mm)	1 4 3 3 5	1 4 3 3 6	1 4 3 4 0	1 4
Total No. of Hours Fishing: (Combined hours of each Vessel operating)		24	12	16	
Targeting: (Circle) (Mackerel or Reef fish)		Mack	Reef	Mack	Reef
Method Used: (Circle) Handline LTL - Trolling LDR - Longlining		LTL	LTL	LHL	
Total No. of Lines		8	8	4	
Catch Information (Mackerel)	Number	Number	Number	Number	N
Tender 1	Spanish	24	2		
	School				
	Spotted				
	Grey / Broad-barred				
	Salmon				
Tender 2	Spanish	18	3		
	School				
	Spotted				
	Grey / Broad-barred		1		
	Salmon				
Tender 3	Spanish	17	6		
	School				
	Spotted	1			
	Grey / Broad-barred				
	Salmon				

Canberra Mail Centre ACT 2610

Torres Strait Fisheries Catch Disposal Record

Has a TDB02 been completed for this fish by another Receiver?
If you are **certain** the answer is yes - do not complete another TDB02 for the same fish (Circle)

PART A MANDATORY

Fisher Details			
Fishing Licence Holder Name	Geoff Trout	Fishing Licence Number	3579
Fisher Type (Circle One)	TIB TVH <u>Sunset</u>	Boat Symbol	FTVW
Signature of Fisher /or agent:	Geoff Trout	Printed name of Fisher /or agent and Date:	Geoff Trout

Receiver Details	
Fish Receiver Name	Island Seafoods
Fish Receiver Address	Lot 987 Thursday Island QLD 4875

Details of Catch		
Species (see code list)	Processing Code (see code list)	Weight (kg)
SNM	W	200
SNM	GG	45
TCC	L	

- **Catch Disposal Records (CDRs):**

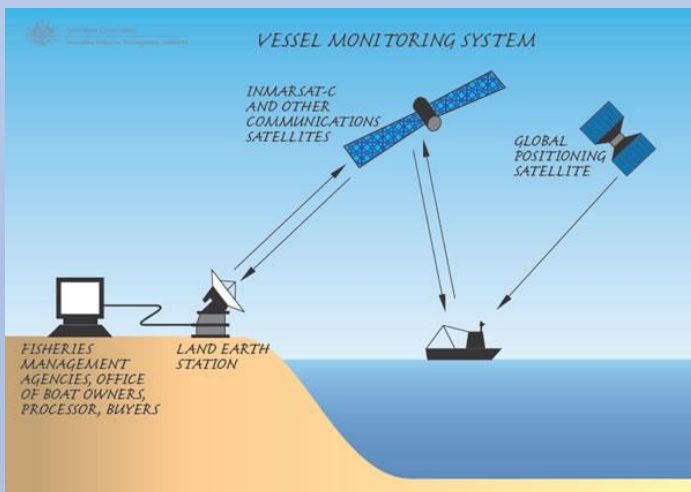
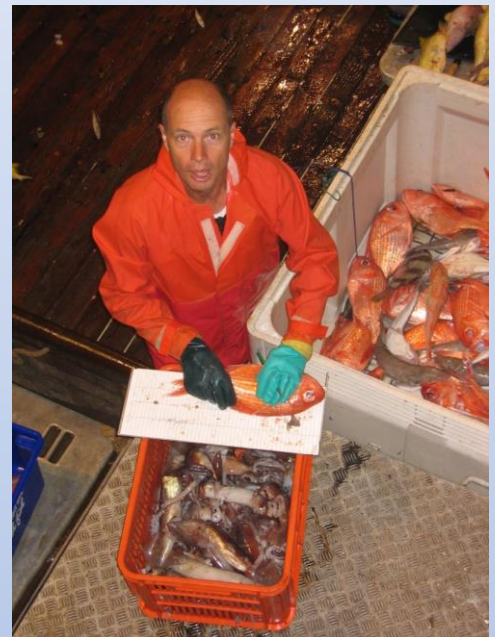
- Total retained catch for the trip by species (accurate weighed weight)
- The fish receiver

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- **Observers** are placed on boats to collect information needed to improve stock assessments and monitor compliance. Generally observers are required to observe only a small proportion of the total fishery effort, but they collect more information than the fishermen including:
 - Retained and [discarded](#) catch by species
 - Length frequency
 - Age structure (otoliths)
 - [TEP interactions](#) with fishing gear

- **Vessel Monitoring Systems** (VMS) are electronic devices placed on boats to collect information position and speed of the boat and time and date. They use satellites to send the signal back to the fisheries management agency.



- **Onboard video cameras** are increasingly being used to monitor interactions with TEPs, as well as to verify catches. Cameras record to a hard drive, and the footage analysed back on land.

Catch

Types of catch

Definition: The “**Catch**” refers to what is captured, taken or harvested by fishing.

There are different components to the catch:

Target species: the main species sought after by a particular fishery. This may include one or more species.

Bycatch: the species that are not intentionally taken by the fishery, and is returned to the water. Bycatch can include unwanted species, protected species, the wrong sex or undersized fish. Often bycatch is entangled, killed or injured by the fishing equipment. Some fishing gear will have **bycatch reduction devices** to allow non-target species like seals, turtles or small fish out of the nets. **Bycatch** can also refer to species that are affected by the fishing gear, but are not caught.

Byproduct: the other species retained for sale that are caught when fishing for a target species. They are sometimes referred to as **secondary species**.

Discarded catch or **Discards:** the catch that is returned to the water either dead or alive. The proportion of a species discarded is called the **discard rate**, and is calculated as:

$$\text{Discard rate} = D / (D + R)$$

where D is the weight of fish discarded and R is the weight of fish retained.

Incidental catch is a portion of the catch that was not the intended target of a fishing operation

Bycatch reduction is an important part of fishery management as it reduces the impact of the fishery on the environment. This can lead to increase fishery resilience, increase profits and a great community acceptance or **social licence** of the fishery. **Bycatch reduction** can be done through changing either the fishing gear or fishing practices.

Examples of **bycatch reduction** modifications include:

- Larger mesh sizes on nets and cages to let smaller fish escape
- Weights to sink hooked lines quickly to avoid ensnaring seabirds
- Turtle Excluder Devices that allow turtles to escape the net
- Fishing restrictions to certain times of day or specific seasons

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Types of catch

The catch may also include important species. A few ecological terms:

Keystone species are animals that have an important role in maintaining ecosystems. Removing keystone species can have unintended consequences and end up doing lasting damage to the environment.

Protected species: Also known as **Species of Conservation Interest** or **Threatened, Endangered and Protected Species**, these are species that are protected by local, federal or international legislation. Protected species generally fall into one (or more) of four categories:

1. a member of a listed **threatened species** or listed **threatened ecological community**. These are species with low population numbers, those that have had a reduction in habitat or distribution, are subject to an increase in other threats to the species survival, or communities where there is a significant reduction in its distribution across regions or a decline in ecological function.
2. a member of a listed **migratory species**. These are animals that migrate to Australia, or pass through or over Australian waters during their annual migrations.
3. a member of a listed **marine species**. These are native marine animals for which there is concern for the risk of population decline.
4. a **cetacean**. All whales and dolphins are protected.

Protected Species cannot be bought or sold, and in many fisheries, fishermen are required to report any **interaction** with one.

Interaction: can be defined as any physical contact that a person, boat or gear has with a protected species. This can include catching or colliding with a protected species.

