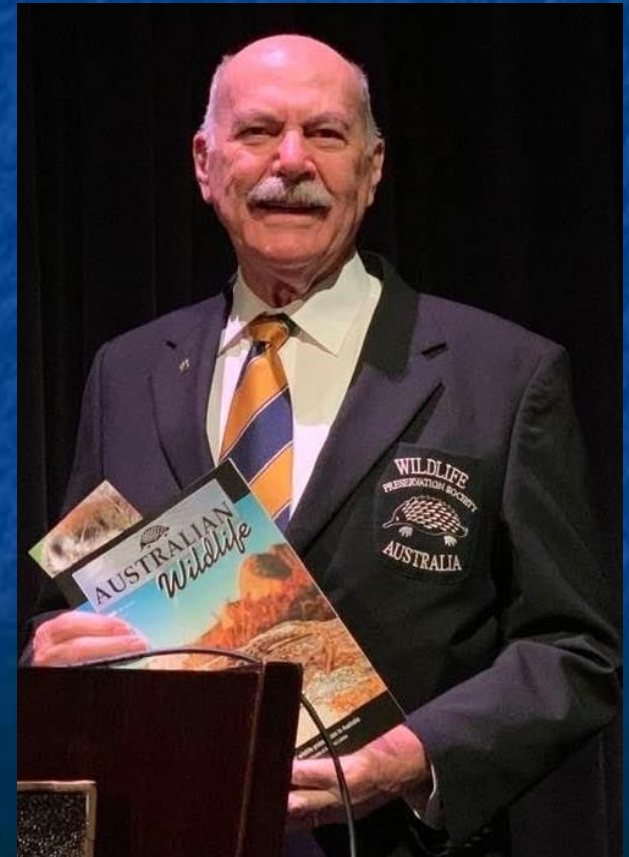


# **Sustainable Seafood**

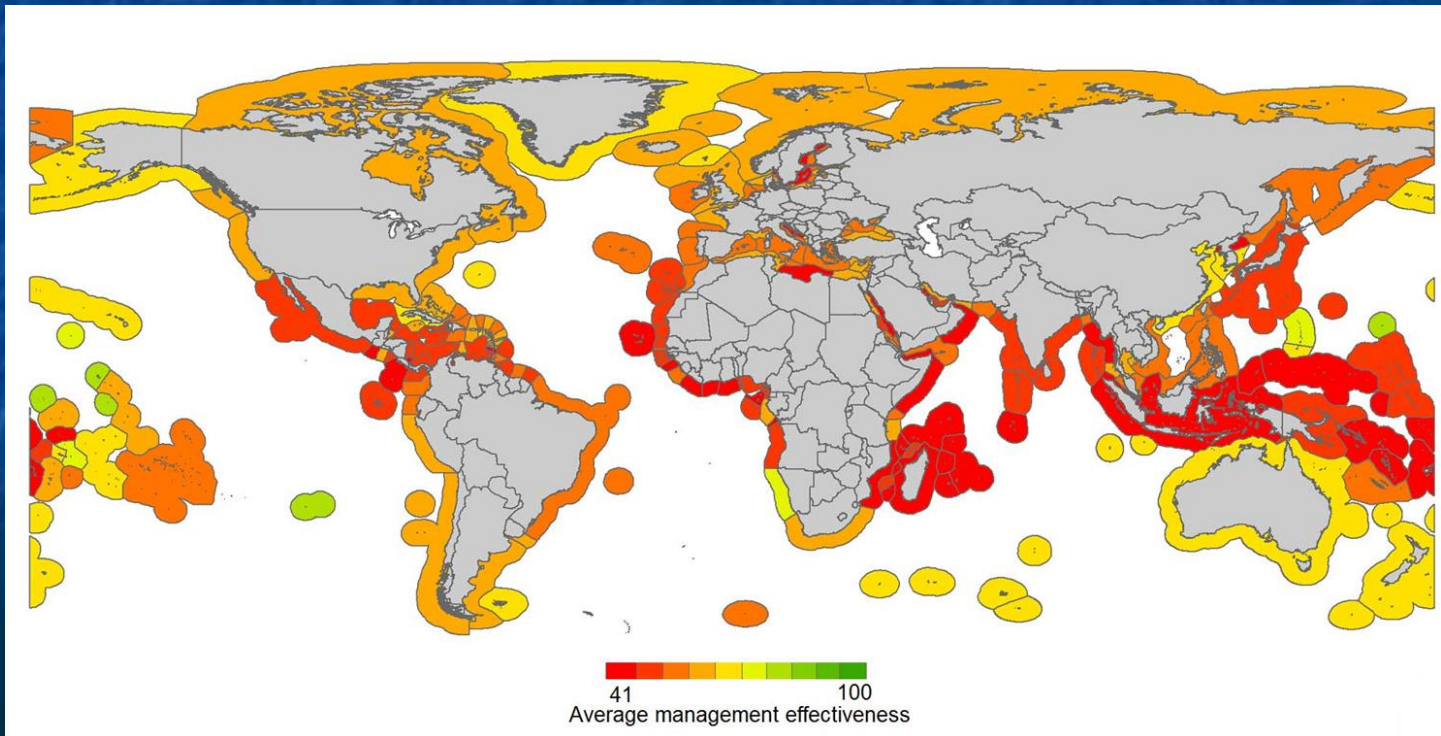
# Patrick W Medway AM

- CEO Australian Wildlife Society
- Former director Currumbin Wildlife Sanctuary
- Pest Animal Council
- Kangaroo Advisory Panel
- AWMS and AMS



# The World

- Millions of people work in the industry
- Seafood-related jobs generate financial security
- Valuable source of GDP





# Global Seafood Industry Value

- Export value US\$148 billion
- Valuable source of foreign exchange
- 54% seafood exports come from developing countries
- Net-export value higher than rice, coffee, sugar and tea
- 12% world's population rely on fisheries for their livelihoods

# Demand For Seafood

- There is not enough to meet demand
- Over 3/4 is over-exploited or fished to their limit
- Aquaculture, or farming seafood, is often considered the solution to the fishing crisis
- Continued requirement for wild caught fish to feed fish grown in captivity = cap on how much farmed produce can provide

# Illegal Fishing

- Fishing unlicensed and off-season
- Netting protected species
- Using banned equipment
- Exceeding catch quotas
- Trawling in prohibited waters



- Australian Fisheries Management Authority oversees the unloading of giant clams seized from an illegal foreign fishing vessel



# Overfishing

- Intensive fishing efforts by commercial and recreational fisheries
- Overfishing decreases stocks to dangerously low levels
- Some regions have low biological productivity
- Longline fishing
  - Controversial due to bycatch
  - Endangered species e.g. seabirds, turtles and sharks are tossed overboard







# LOGLINER IN OPERATION

## LOGLINE FISHING BOATS

Nobody knows exactly how many longline boats are out in the ocean but estimates indicate there are over 5000 longline vessels fishing for tuna and tuna like species in the world.

# OVER 5000 LOGLINE VESSELS



## LOGLINES + HOOKS

up to 150 km long



up to 3000 hooks

## MARINE ANIMALS DYING

300,000 sea turtles and at least 160,000 seabirds and millions of sharks die annually in longline fisheries.

300,000  
SEA TURTLES

160,000  
SEA BIRDS

MILLIONS  
SHARKS

## OVERFISHING



All target tuna species now either overfished, being overfished or depleted.

## SHARK FINNING

Sharks often targeted for their high value fins make up as much 50% of catches in some longline fisheries.



UP TO  
**50%**  
OF CATCHES CAN BE SHARKS

## PIRATE FISHING AND TRANSSHIPMENT

Many vessels transfer their catches at sea resulting in high amounts of unreported and illegal fishing.



## MISTREATMENT OF CREW

Vessels can stay at sea for several years keeping their crew in a captive environment.

1 YEAR | 2 YEARS | 3 YEARS



## SIZE

Longline fishing boats can be up to 60m long, however, most are so-called small scale vessels of less than 24m.



## SOLUTIONS

- Reduce fishing capacity and enforce sustainable catch limits
- Ban all at-sea transshipments
- proper monitoring and 100% observer coverage

## MITIGATE BY-CATCH BY:

- Not targeting sharks and banning shark finning
- Use circle hooks and other best practise mitigation methods

# Australian Seafood



# Australian Fisheries

- Less than 1% marine environment protected
- Many commercially-caught fish are exploited
- More species become threatened each year
- Key habitats e.g. coral reefs are under pressure from land clearing, climate change and development



# South Australia

- International reputation for producing premium, high-quality sustainable seafood
- Pristine waters home to some of the world's most sought-after seafood including
  - rock lobster / tuna / oysters / prawns
- In demand locally and in key global markets
  - Japan / Hong Kong / China



# Australia's Seafood

- Australia plays host to >5,000 species
  - Oysters
  - Wild-caught prawns
  - Wild-caught tuna
  - Wild-caught shark
  - Wild-caught crab
  - Farmed perch
  - Farmed Atlantic salmon
  - Farmed barramundi

# Farmed Barramundi

- Native to Australia and Southeast Asia
- Wild fisheries and aquaculture production
- Biggest supply of barramundi = Indonesia
- Can grow to 2.25 – 4.5 kgs
- Farmed barramundi is cost-effective





# King George Whiting

- Sustainable species found in WA, VIC and SA
- Premium species in SA
- Attracts highest price per unit weight for commercial fishers





# Sustainable Seafood

- Ask before you buy
  - Start a sustainable seafood conversation
  - Ask questions of fishmongers, supermarket assistants and waiters
  - By starting a conversation we are encouraging seafood suppliers to find out more about the product they supply
  - It is up to all of us to make sure our seafood is sustainable

# "How was it caught or farmed?"

- Did that method damage the environment or catch large amounts of marine wildlife?
- Choose seafood from fishing or farming methods that have low impacts on the marine environment, its species and habitats



# "Where is it from?"

- Local is not always more sustainable
- Knowing where seafood comes from is one of the key questions in helping make an informed seafood choice
- Not where it was processed – where it was actually caught or farmed

# "Is it deep sea, slow-growing or long-lived species?"

- Deep sea species generally slow-growing and long-lived
- Particularly vulnerable to fishing pressure
- Take longer to recover from impacts on their populations
- Give these species a break too



# "Is the species overfished or threatened?"

- Threatened fish are sold to consumers
- If it is threatened, then say "no thanks"
- Species that are listed as **Vulnerable, Endangered** or **Critically Endangered** are classified as **no take**

# Threatened Australian fish

- Eight species listed as 'conservation dependent' are commercially fished and sold despite being considered threatened

## Fishes that are Conservation dependent (8 EPBC species)

Genus, species (subspecies, population)	Common Name
<a href="#"><i>Centrophorus harrissoni</i></a>	Harrisson's Dogfish, Endeavour Dogfish, Dumb Gulper Shark, Harrison's Deepsea Dogfish
<a href="#"><i>Centrophorus zeehaani</i></a>	Southern Dogfish, Endeavour Dogfish, Little Gulper Shark
<a href="#"><i>Galeorhinus galeus</i></a>	School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark
<a href="#"><i>Hoplostethus atlanticus</i></a>	Orange Roughy, Deep-sea Perch, Red Roughy
<a href="#"><i>Rexea solandri</i> (eastern Australian population)</a>	Eastern Gemfish
<a href="#"><i>Seriolella brama</i></a>	Blue Warehou
<a href="#"><i>Sphyrna lewini</i></a>	Scalloped Hammerhead
<a href="#"><i>Thunnus maccoyii</i></a>	Southern Bluefin Tuna



# Why is this happening?

- Inclusion of 'conservation dependent' under the *EPBC Act* is one of a series of failures in the design and implementation of national environmental legislation that favours industry over wildlife



**Australian Government**

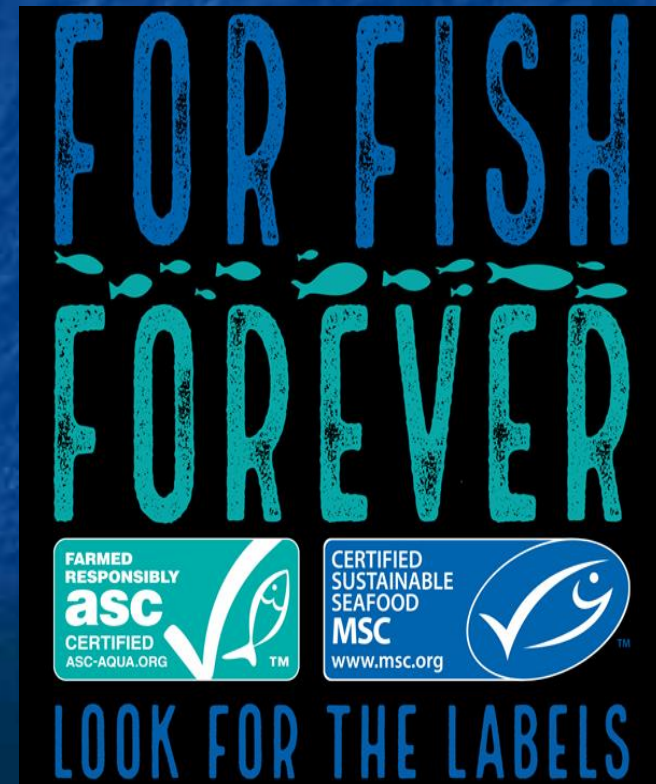
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**Department of Agriculture,  
Water and the Environment**

# **Sustainable Action**

# What you can do

- Choose seafood with the blue *Marine Stewardship Council* (MSC) label to support independently-certified and sustainable fisheries





WE ASKED

KIDS TO TRY



# At Coles

- At the deli: Banana Prawns
- Frozen: A variety of Hoki, Whiting & Cod as fillets and fish fingers
- Canned: John West Tuna & Alaskan Salmon



*Coles serves MSC certified Australian Banana Prawns*

# At Woolworths

- Frozen: A variety of Hoki, Whiting & Cod as fillets and fish fingers and Ocean Pearl Wild Caught Prawns
- Canned: John West Tuna and Alaskan Salmon, Woolworths Yellowfin Tuna In Chilli & Oil and Safcol Salmona



Woolies stocks a variety of frozen, crumbed and battered MSC certified fish in its frozen aisle

PLEASE  
TAKE



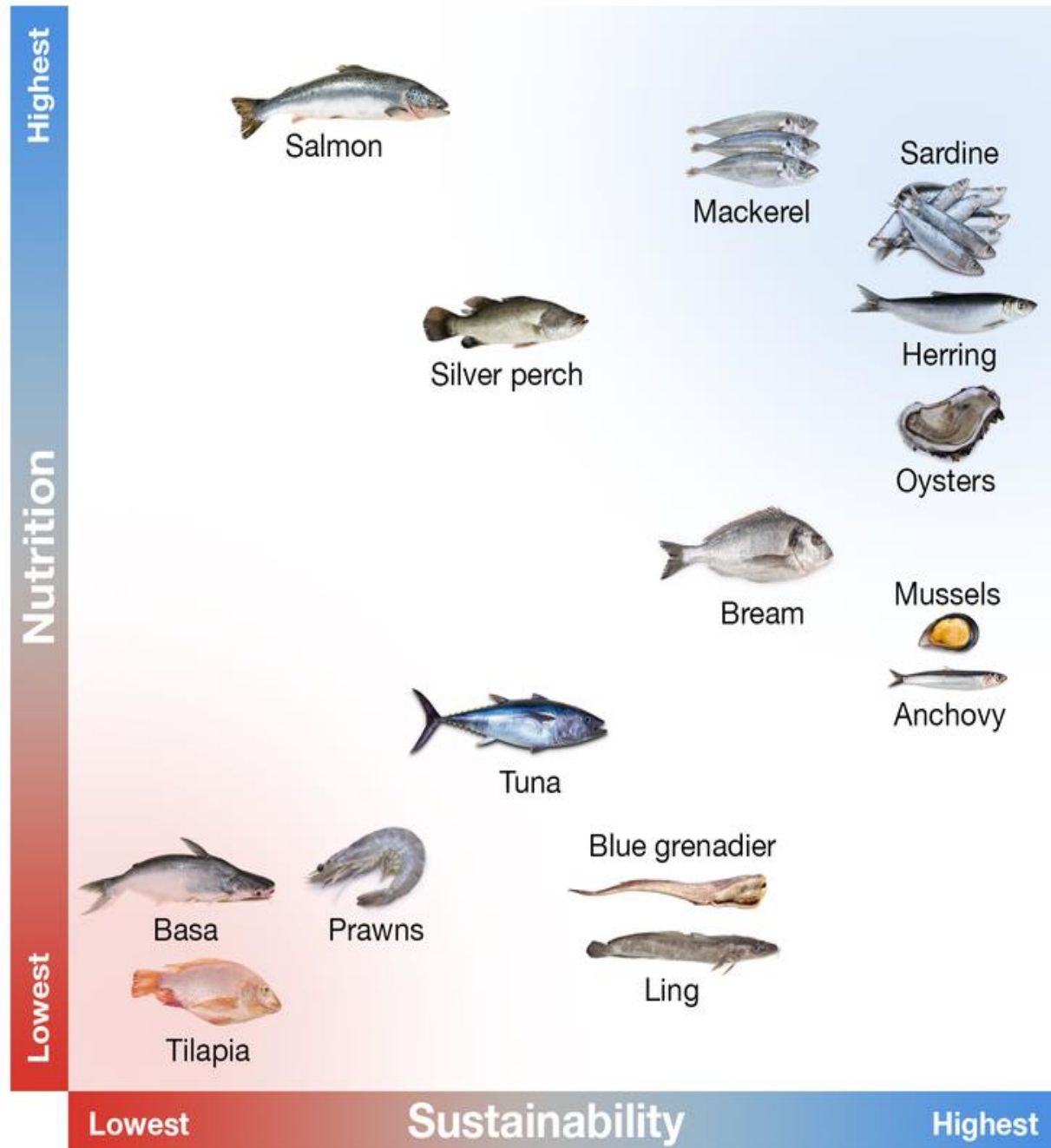
# At Aldi

- Canned: Mussels, Herring, Mackerel & Salmon
- Frozen: Hoki, Pollock, Sole & Flounder
- Chilled: Crumbed Pollock Fillet



*ALDI sells a variety of MSC certified smoked and marinated mussels*

# What seafood should you be eating most?



# Choose

- Small fast-growing
  - Mackerel
  - Sardines
  - Herring
  - Oysters
  - Mussels
  - Anchovy
  - Crab

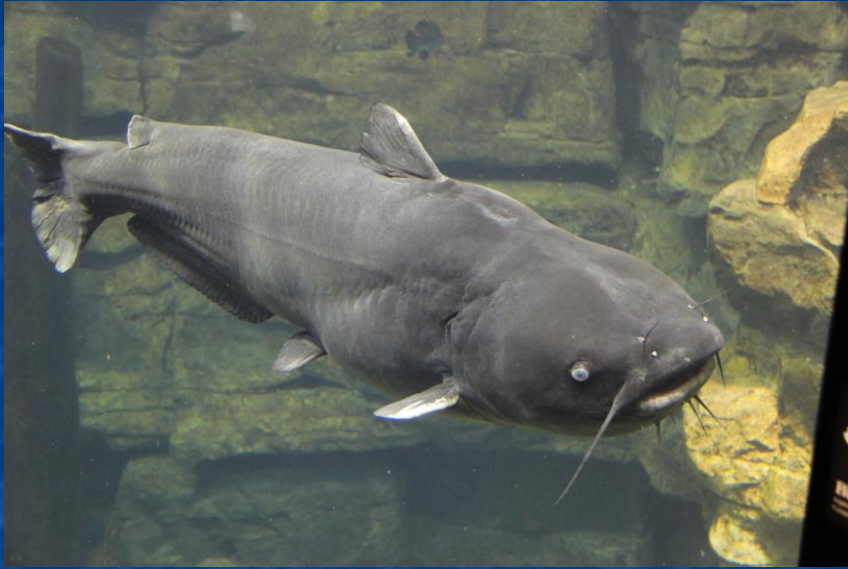
# Avoid

- Top predators
  - Shark ('flake')
  - Blue warehou (sea bream)
  - Eastern gemfish (hake)
  - Southern bluefin tuna



# Alternatives

Imported Catfish



Native Farmed Catfish

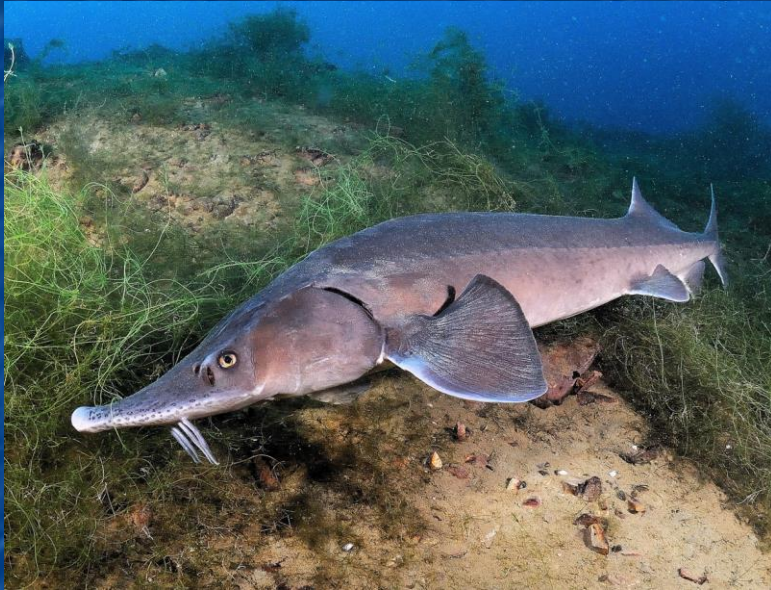


## Why

- 90% comes from Vietnam
- Use of antibiotics
- Substandard regulation/inspection

# Alternatives

## Sturgeon Caviar



## Sustainable Roe



## Why

- Sturgeon is susceptible to overfishing
- Sturgeon takes a long time to mature
- Threatened by dam building = pollutes water



# Alternatives

Atlantic Cod



Pacific Cod



## Why

- Stocks collapsed in mid-1990s
- Is listed as Vulnerable on IUCN Red List
- Threatened by dam building = pollutes water



# Alternatives

Eel



Squid



## Why

- Eels are listed as threatened in many areas
- Juveniles are sourced from the wild
- Eels require wild-caught fish in their feeds

# Alternatives

Imported Prawns



Locally Farmed Prawns



## Why

- 90% of prawns are imported
- Contain contaminants: antibiotics & chemicals
- Less than 2% is inspected before sale



# Alternatives

Atlantic Salmon



Australian Salmon



## Why

- Non-native sps. farmed in sea cages in TAS
- Significant environmental impacts
- Dependent on wild-caught fish for its feed



# Alternatives

Imported King Crab



Blue Swimmer Crab



Why

- 70% of king crab sold is imported
- Imported king crab is non-native
- Native stocks in NSW and SA are healthy

# Alternatives

Shark/Flake



No Shark/Flake



Why

- Top order/predatory fish
- Stock assessments for sharks is limited
- Uncertain impact of trawling on habitat



# Alternatives

Orange Roughy



Snapper



## Why

- Orange roughy is overfished
- High levels of mercury
- Takes 20-40 years to reach maturity



# Alternatives

## Bluefin Tuna



## Sustainable Tuna



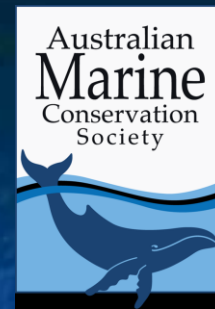
## Why

- Is listed as Endangered on IUCN Red List
- Top order/predatory fish
- Grows slowly. Doesn't reproduce until mature



**GoodFish**

Australia's Sustainable Seafood Guide



# What is GoodFish?



# Take-home Message

- Know your seafood and ask questions
- Select small fast-growing species
- Choose sustainable seafood
- Support those who implement sustainable action





**Thank you**