

# UNSUSTAINABLE FISHING CARDS



## PROCEDURE

See Teacher Outline (1.4) Sustainable fishing and also slide set Sustainable fishing





# CARD SET 1: UNSUSTAINABLE FISHING CARDS

## [VERSION 1]



Image: [Dive SSI](#)

Shark finning



Bycatch



Ghost nets &  
thrown away  
fishing gear



Places [habitats]  
where special  
sea creatures  
live



## Endangered sea creatures

# CARD SET 1: UNSUSTAINABLE FISHING CARDS

## [VERSION 2]

Sharks are caught and their fins are cut off. The body of the shark is thrown back in to the sea.

Shark fins are used to make soup. People pay a lot of money for a bowl of shark fin soup!

### Shark finning



Image: [Dive SSI](#)

Other sea animals are sometimes caught by fishers by mistake. Sea birds try to eat the bait on hooks. Whales, dolphins sharks, turtles, fish and other animals can be caught by mistake in nets.

### Bycatch



Fishing gear (like nets and lines) sometimes gets lost or thrown away at sea. This fishing gear carries on catching fish and other sea animals. This is called 'ghost fishing' and these nets are called ghost nets. Ghost nets can carry on catching sea animals for a long time.

## Ghost fishing



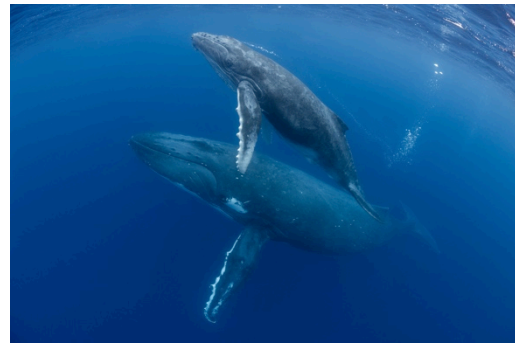
There are some very delicate sea creatures living on the seafloor and the places [called habitats] where these creatures live are special! Fishing can damage these special places [habitats].

## Places [habitats] where special sea creatures live



Endangered sea animals are animals in danger of becoming extinct. This means there will be none left alive in the sea. An animal is considered endangered or "threatened" when there are very few of them alive. If not done well, endangered animals can be caught during fishing by mistake.

## Endangered sea creatures



## CARD SET 2: UNSUSTAINABLE FISHING CARDS

### SHARK FINNING

HOW MANY TYPES  
[SPECIES] OF SHARK ARE  
THERE?



There are more than 1,000 types or species of sharks and rays, with new species still being discovered every year.

WHAT IS SHARK FINNING?



Shark finning is the removal of any fins of a shark and discarding the rest of the shark (often still living) in to the sea.





HOW MANY SHARKS ARE  
KILLED EACH YEAR FOR  
THEIR FINS?



We think that around 100 million sharks may be killed each year, many for their fins (WWF, 2020).

HOW HEALTHY ARE SHARK  
NUMBERS [POPULATIONS]?



Many (more than 30%) of all known shark and ray species are in danger of extinction [dying out].

More than half of some groups of sharks have disappeared because of shark fishing (Smithsonian, 2013).

## WHY ARE SHARKS SO SOUGHT AFTER?



Sharks are worth lots of money!

Past Chinese emperors valued shark fin soup as a medicine and it was also a symbol of power and status! Today a bowl of shark fin soup is worth a lot of money for the same reasons!

## ARE THE FINS OF ALL TYPES OF SHARK EQUALLY SOUGHT AFTER?



Shark fins are considered valuable.

The larger fins [like those from 'whale sharks', and 'basking sharks'] are especially sought after  
(SharkStewards.org).

## DOES THE OCEAN EVEN NEED SHARKS?



Yes! If there are less sharks then this affects the whole ocean community.

## HOW QUICKLY DO SHARKS RECOVER WHEN TOO MANY ARE CAUGHT?



Sharks are slow growing, have long life spans and are slow to reproduce [have babies]. This means that when too many sharks are caught it can take a long time for the number of sharks to get back to normal.



HOW IS THE MARINE  
STEWARDSHIP COUNCIL  
HELPING TO PUT AN END  
TO SHARK FINNING?



Those engaged in shark finning are not allowed to get the Marine Stewardship Council blue fish tick label!

## CARD SET 2: UNSUSTAINABLE FISHING CARDS

### ENDANGERED MARINE SPECIES

HOW CAN FISHING HARM  
ENDANGERED THREATENED &  
PROTECTED MARINE SPECIES?



Yes. Endangered, threatened and protected species can be caught accidentally along side fish [this is called bycatch]. Birds, turtles, sharks and marine mammals can be drawn to fishing boats, and caught by mistake on hooks or in nets.



## WHAT IS BYCATCH AND IS IT A BIG PROBLEM?



Bycatch is when sea creatures are caught by mistake sometimes in nets and by hooks. It is thought that over 300,000 small whales, dolphins, and porpoises die by getting caught in fishing nets each year (WWF, 2020a).

## HOW CAN ENDANGERED THREATENED AND PROTECTED SPECIES BE PROTECTED FROM BEING ACCIDENTALLY CAUGHT?



Changes can be made to fishing gear to make it less likely to catch birds, sharks and marine mammals. Many people are working all around the world to help protect endangered, threatened and protected species from being caught by fishers.



## WHAT DOES ETP MEAN AND WHY IS IT USED?



Endangered, Threatened and Protected (ETP) species is a term used by those who look after [manage] marine fisheries.

## HOW DOES THE MARINE STEWARDSHIP COUNCIL MAKE SURE THAT ENDANGERED SPECIES ARE LOOKED AFTER?



When a fishery is looked at by the Marine Stewardship Council, they look at how fishing in that fishery affects the whole marine environment including any Endangered, Threatened or Protected (ETP) species.

## CARD SET 2: UNSUSTAINABLE FISHING CARDS

### GHOST FISHING

WHAT ARE GHOST NETS?



Ghost nets are nets that have been lost or thrown away at sea.

DO GHOST NETS CONTINUE TO CATCH MARINE LIFE?



Yes. They continue to catch fish. They also get tangled with other animals such as turtles, dolphins, birds, sharks and seals. Hundreds of animals can be caught in just one net.

## WHAT HAPPENS TO GHOST NETS OVER TIME?



Some lost or thrown away fishing lines and nets can stay as they are for a very long time. Others can quickly turn in to tiny pieces of plastic. These bits of plastic can be wrongly seen as food by marine life.

## DO WE KNOW HOW MANY GHOST NETS THERE ARE IN THE SEA?



No. But in 2015, a 268 tons of nets, ropes, and other fishing material was found in just one very small bit of sea [called the Baltic] (WWF, 2020). We think that 640,000 tonnes of fishing gear is lost each year, and that fishing gear makes up 10% of all marine rubbish (FAO).





HOW MUCH OF THE OCEAN'S  
RUBBISH IS DISCARDED  
FISHING GEAR?




It has been said that almost half [46%] of all plastic found in the 'Great Pacific Garbage Patch' is thought to be fishing nets (Nature Journal).

WHY WEREN'T GHOST NETS  
SUCH A PROBLEM IN THE OLD  
DAYS?



Our ancestors fished less & nets were made from string, flax or natural fibers! Now most fishing gear is now made from plastic. Plastic monofilament fishing line can take 600 years to degrade (Marine Stewardship Council).



DOES THE MARINE  
STEWARDSHIP COUNCIL  
CONSIDER GHOST FISHING  
WHEN DECIDING IF A FISHERY  
CAN HAVE THE BLUE LABEL?



Yes. The effect of ghost gear is one of the things the Marine Stewardship Council looks at when deciding if a fishery can have the Marine Stewardship Council blue fish tick label.

WHAT ACTION WAS TAKEN BY  
MARINE STEWARDSHIP  
COUNCIL “BLUE LABEL”  
LOBSTER FISHERS TO REDUCE  
THE EFFECT OF GHOST GEAR?



Some European lobster fisheries have put the boat name and number on all lobster pots so any lost pots can be retraced back to the boat. They have also limited the number of replacement tags are available. This makes fishers not want to lose their pots.

WHAT ACTION WAS TAKEN BY MARINE STEWARDSHIP COUNCIL BLUE LABEL COD FISHERIES TO MANAGE AND REDUCE THE EFFECT OF GHOST GEAR?



In an Alaskan cod fishery, biodegradable escape panels [ones that will break down and stop working in a short time] were put in all fishing pots to reduce the problem of ghost fishing from lost pots.

## CARD SET 2: UNSUSTAINABLE FISHING CARDS

### ENDANGERED HABITATS

IF TOO MANY FISH ARE TAKEN OUT, WHAT CAN HAPPEN TO THE SEA?



WWF says “when too many fish are taken out of the ocean it creates an imbalance that can lead to a loss of other important marine life, including endangered species”



## HOW CAN DELICATE SEAFLOOR MARINE AREAS BE AFFECTED BY FISHING




Fishing gear can affect delicate seafloor habitats.

This can happen for example, during bottom or benthic trawling which involves the towing of a trawl or fishing net along the sea floor.

## WHAT ARE 'ENDANGERED' OR DELICATE MARINE HABITATS



Places on the sea floor with endangered or slow growing marine creatures such as sea pens and sponges, or delicate places that are breeding grounds for sea animals.



HOW DOES THE MARINE STEWARDSHIP COUNCIL MAKE SURE CERTIFIED FISHERIES DON'T BADLY AFFECT AREAS THAT ARE FISHED?



In order to receive the Marine Stewardship Council blue fish tick label, fisheries must show they do little harm to the areas where they fish. A fishery will not achieve the Marine Stewardship Council blue label if it causes much harm to the sea floor.

WHAT OTHER WAYS ARE ENDANGERED OR DELICATE PARTS OF THE SEA PROTECTED?



Many countries are now seeing the need to set aside or protect some parts of the sea floor from fishing. Changing the way fishing happens and reducing the amount of fishing can also help look after the seafloor.



HOW MUCH OF THE NEW  
ZEALAND SEAFLOOR IS  
PROTECTED?



More than a third of New Zealand  
waters are closed to bottom  
trawling and dredging.



## EXTENSION: UNSUSTAINABLE FISHING CARDS

Sharks	Fins	Soup	Chinese meal	Endangered
Highly valued \$	Seabirds	Whales & dolphins	Sharks	Fishing hooks
Fishing nets	Plastic	Lost nets	Thrown away	Danger!
Death!	Waste	Cruelty	Sad	Happy
Accidental!	Sea Floor	Delicate	Unseen	Deep
Broken	Clever Gear	Fish	Drifting	Entangled