

'Save the Sharks' Lesson Plan



Suggested NSW Syllabus Outcomes

ST2-4LW-S compares features and characteristics of living and non-living things

GE2-2 describes the ways people, places and environments interact

GE3-2 explains interactions and connections between people, places and environments

Sustainability in Schools Organising Ideas: 2, 7, 9

Suggested NSW Syllabus Content

- describe how living things depend on each other and the environment to survive, for example: (ACSSU073)
- consideration of how a place can be cared for eg a park, farm, beach, bushland (ACHGK005)
- explanation of the importance of natural vegetation to animals and the functioning of the environment eg provision of habitats, production of oxygen (ACHASSK088)
- discussion of ways waste can be managed sustainably (ACHASSK090)
- identification of ways people influence places and contribute to sustainability eg roads and services, building development applications, local sustainability initiatives (ACHASSK112)

Goal

Read 'Save the Sharks' by Bethany Stahl and learn about the important role that sharks play in the oceans and the threats to their survival.

Resources

- 'Save the Sharks' by Bethany Stahl
 - [Watch on YouTube](#)
 - [Buy on Amazon \(Amazon Affiliate Link\)](#)
 - [Visit Bethany Stahl's website](#)

Background information

Sharks are a group of elasmobranch fishes that have lived in our oceans for over 420 million years. There are over 500 known species, with new species being discovered all the time. They range in size from 17 centimetres to over 12 metres. They can be found in every habitat in the ocean including coral reefs, the open ocean, the deep sea and even the polar seas. Some sharks can even survive in freshwater rivers and lakes and volcanoes. Because shark species live in such a diverse range of places and are all different sizes, they have different adaptations that allow them to survive and thrive in their environments. Shark species also feed on a wide variety of different things including seals, fish, turtles, snails, sea urchins and sea stars, just to name a few. Some sharks also feed on the carcasses of whales that have died and sunk to the sea floor and one species of shark even eats seagrass.

Because sharks are generally at the top (or near the top) of the food chain in marine ecosystems, they play a very important role in maintaining the health of the oceans. Sharks keep the populations of all of the species below them in check and ensure that they are not overeating. They also feed on the weak, old or unhealthy fish, which keeps the fish populations strong and disease-free. In fact, sharks have been responsible for shaping the evolution of the oceans and many species found within them.

Unfortunately, many species of sharks are endangered or threatened because of the impact of people on their environments. Some sharks get caught in the nets of fishermen and can drown as a result because some species of sharks need to keep swimming in order to breathe. Others may get caught by the fishermen in **unsustainable** ways. Because sharks take a long time to mature and reproduce, their populations are not able to keep up with the amount of sharks that are being taken out by fishing. Lastly, the destruction and pollution of mangrove habitats on the coasts means that shark pups (babies) have no safe place to live and grow older.

If too many sharks are removed from the oceans, the species lower down in the food chain can grow to unsustainable levels and eat too much, which will eventually lead to an ecosystem collapse. This is called a **trophic cascade**. It can have disastrous effects on the overall health of the oceans. This is a problem for people because the oceans play an important role in producing oxygen (over 70% of the oxygen we breathe comes from the ocean) and we also rely on the oceans for food, tourism and recreation.

In today's lesson, we are going to listen to a story about Frank, a shark who can't find any of his shark friends to help patrol the ocean. With the help of some of his friends, Frank learns about the ways that people can help save the sharks.

**** Read or watch the "Save the Sharks" story ****

As we saw in the story, there are lots of ways that people can help sharks, even if we don't live close to the oceans. In the story, we saw people replanting lost seagrass habitat, cleaning up pollution from the oceans and helping to protect mangroves. If you live close to the oceans or go there on holidays, you may be able to help with some of these different activities.

The WildLife Movement

Even if you don't live close to the ocean, there are still lots of ways to help sharks! By cleaning up any rubbish you find and disposing of it properly, you will stop that pollution from making it to the ocean. You can also make sure that the fish that you eat is sustainably harvested (see [The Sustainable Seafood Guide](#) for more information) and you should always say no to flake or shark fin soup. Lastly, you can write letters to your member of parliament or sign petitions to help protect sharks by changing fishing practices and protecting marine sanctuaries and habitat.

Activities

1. Discuss the importance of sharks in our oceans and the threats to their survival
 - The importance of sharks
 - What happens if there aren't enough sharks in the ocean?
 - What threatens the survival of sharks?
2. Read or watch "Save the Sharks" by Bethany Stahl
3. Brainstorm solutions to the threats that sharks face in the oceans
4. Answer the questions about "Save the Sharks" below

Literal Questions

1. What was Frank's important job on the reef?
Suggested answer: Frank's job was to patrol the ocean and remind sea turtles to stop eating the seagrass.
2. What happened because there weren't enough sharks to patrol the ocean?
Suggested answer: Some beds of seagrass had been completely eaten by the turtles because there weren't enough sharks to patrol the ocean.
3. Why did all of the other sharks disappear?
Suggested answer: The other sharks disappeared because they were accidentally caught in fisher's nets, their save mangrove homes vanished as buildings were put in their place and too many sharks were being fished every year.
4. What did the divers do to help the sharks?
Suggested answer: The divers helped the sharks by replanting seagrass and corals and by collecting pollution and old fishing gear from the oceans.
5. What were people on land doing to help the sharks?
Suggested answer: People on the land were protecting the mangroves and fishers were being more careful and kind to sharks.

The WildLife Movement

Inferential Questions

6. What habitat do baby sharks use to grow up?

Suggested answer: Baby sharks live in the mangroves, which provide a safe habitat for them to grow.

7. What would have happened to the seagrass as a result of sharks returning to the reefs?

Suggested answer: Once the sharks returned to the reefs, the seagrass would have regrown in the places where it was bare and the ecosystem would have been in balance again.

Applied Questions

8. Why did the boy and the other people use diving equipment to collect pollution underwater and to plant seagrass and corals?

Suggested answer: The boy and other people used the diving equipment to allow them to breathe underwater. This meant that they could collect even more rubbish and properly plant lots of seagrass and corals.

Extension Activities

* Note: These extension activities can help differentiate the lesson or provide students with additional activities to complete to lengthen this unit.

1. Brainstorm a list of ways that we can help sharks on land and in the oceans.
2. Use the 'Sustainable seafood guide' (<https://goodfish.org.au/sustainable-seafood-guide/>) to create a list of fish that are good to eat from Fish and Chip shops and in restaurants