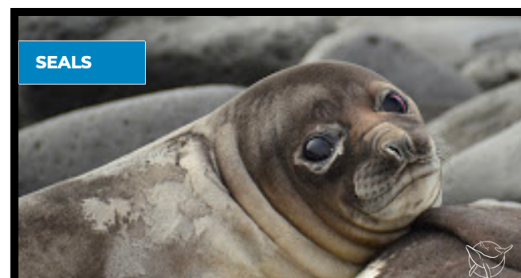




Lesson Summary

This lesson discusses seal species and why they are important to our ecosystem.

This lesson will take 30 minutes to complete.



Subjects relevant to

English, Geography, History, Science and Social Science.

Learning objectives

From this lesson students will:

- Learn about seals.
- Understand some of the issues impacting seals.
- Discuss ways we can protect seals.

Preparation

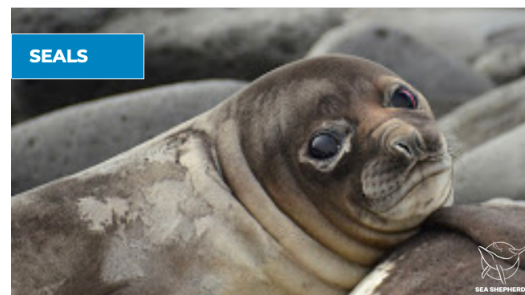
- This lesson has been designed to provide a complete lesson, but can be stopped at any time and split over multiple lessons, should you wish to include your own discussion/questions or incorporate the lesson activities.
- Each lesson has a lesson activity sheet with ideas on additional learning activities, which can be included in the lesson to enhance the learning experience.
- Depending on whether students are working in a classroom or remotely, you can choose to discuss questions in the class or use the online learning app.
- This digital lesson has an interactive option called student devices. If you choose this option ask the students to bring their mobile phones or tablets to the lesson.
- Should you choose the interactive option, it will run a quiz during the lesson. Recommendation: only use this interactive option in classes of up to 30 students.
- Students can sign up on their mobile device to the www.LessonUp.app. They will be asked for a PIN code (this will appear automatically on slide 3 and will also show at the bottom of the screen). Students who sign up under a false name may be removed by the teacher.
- Students who do not have a mobile device can join the quiz with another student.
- If student devices is turned ON, you can opt to turn the sound and the share screen ON or OFF. Further on you can choose if you want to 'show ranking after each quiz' question. Doing so will create a competitive element, but it can be distracting. Recommendation: turn the 'show ranking after each quiz' OFF.
- The abovementioned options will also show if you click on the PIN code at the bottom of the screen.



Lesson plan

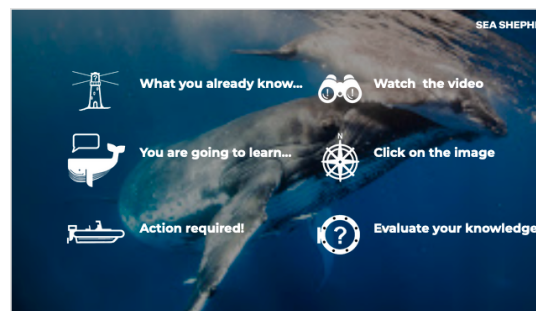
Slide 1 Introduction

This lesson is provided by Sea Shepherd. Sea Shepherd is a marine conservation organisation with a mission to protect the ocean and marine wildlife. Sea Shepherd works globally on a range of issues impacting the ocean, running numerous direct action campaigns each year. Seals are one species that Sea Shepherd is fighting to protect.



Slide 2 Lesson action icons

During the lesson we will use these icons to identify the learning actions.



Slide 3 Lesson summary

This lesson is about seals species, some of the issues harming seals and what everyone can do to help them.



Slide 4 Seals

There are around 33 species in the seal family, also known as pinnipeds.

Pinnipeds include seals, sea lions and walruses.

Some seal species have really low numbers and could disappear from the ocean if we don't help protect them.





Slide 5 Seals and sea lions

Difference between seals and sea lions

Seals and sea lions have different features.

Ask students to identify the differences from the images?

Seals:

- Have smaller front flippers.
- Wriggle on bellies when on land.
- Lack the ear flaps, have a visible ear hole.
- Their hind flippers point out.
- Fur covered long claws on hind flippers.
- Use hinder flippers when swimming.
- Are white to grey or black in colouring.

Sea lions:

- Can walk on land using large flippers.
- Are noisier – bark loudly.
- Have visible ear flaps.
- Their hind flippers rotate under body when on land.
- They use front flippers when swimming.
- Are brown colouring.



Slide 6 Largest and smallest seals and sea lions

Largest seal – southern elephant seal up to 3.7m(12.1feet) and can weight up to 4,000kg (8,818lbs).

Smallest seal – Baltic ringed seal in Finland up to 1.5m (5feet) and can weight up to 100kg (220.5lbs).

Largest sea lion – Stellers sea lion up to 3.4m (11feet) and can weight up to 1,134kg (2,500lbs).

Smallest sea lion – Galapagos sea lion measures up to 2.5m (8.2ft) and can weight up to 400kg (550lbs).



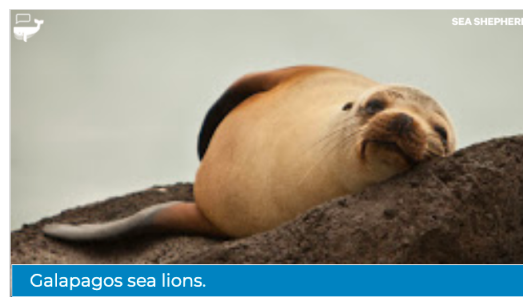
Slide 7 Galapagos sea lion

Galapagos sea lions are found mainly on the Galapagos Islands off Ecuador.

Males measure up to 250cm (8.2ft) and can weight up to 400kg (550lbs). They live up to between 15 - 20 years.

Galapagos sea lions can dive 600m deep and can stay under water for around 10 minutes at a time.

Status - Endangered





Slide 8 Saami seal

Saami seals are part of the arctic ringed seal family, but they became trapped in the Saami lake, in Finland, after the last ice age. Ice broke apart and moved, and the ringed seal family was split up across the region.

They measure up to 1.5m (5feet) and can weight up to 100kg (220.5lbs)

They are critically endangered with less than 300 of them left.



Saami seal.

Slide 9 Harp seals

Harp seals are found in the arctic region – from Canada, Greenland to Russia. They migrate each year to feed, with a round trip of 4,989km (3,100miles).

They can dive for 10 to 20 minutes at a time, up to 400 m (1,312 feet) deep.

They measure 1.8m (6feet) and weight around 136kg (300 lbs). They can live up to 30 years.

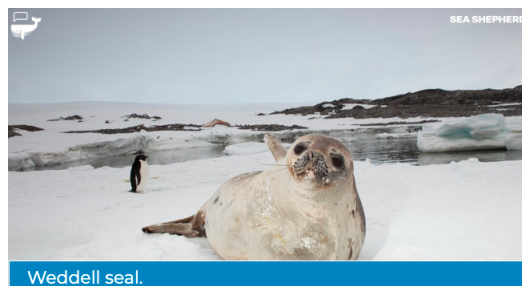


Harp seal.

Slide 10 Weddell seals

Weddell seals live in Antarctica (south pole). They measure up to 3.5m (11.5feet) and can weight up to 600kg (1,322.8lbs).

Weddell seals can dive to around 600m and have been timed to dive for up to 80 minutes. They can live up to 30 years.



Weddell seal.

Slide 11 Seal pups

What are seal babies called? – Pups.

When they are born many seal pups have fur. They have to stay on land until the fur is gone and their fur coat has become water proof.

Mum only feeds them for a few days or weeks, depending on species, and then they have to learn to swim and catch their own food.



Seal babies are called ?



Slide 12 What do seals eat?

Seals like to eat fish, squid and krill.

The leopard seal is different, it actually eats other seals and penguins.



Slide 13 How do seals breathe underwater?

Ask students: "How do seals breathe underwater?"

When we go under water, we hold our breath and use the oxygen in our lungs.

Seals actually exhale oxygen before diving, then they breathe slowly using the oxygen in their blood stream.

Seals may only dive for a few minutes at a time, but they can stay underwater for much longer. Elephant seals can stay under water for up to two hours.

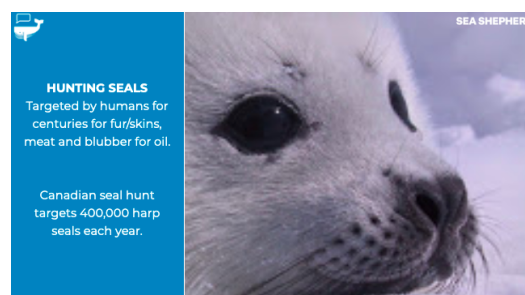


Slide 14 Hunted

Why are seals disappearing?

Seals have been the target of hunters for many centuries and it still continues in some countries.

Seals are hunted for their fur/skins, for meat and the blubber for seal oil. Seal oil is used in capsules and marketed as fish oil supplements.

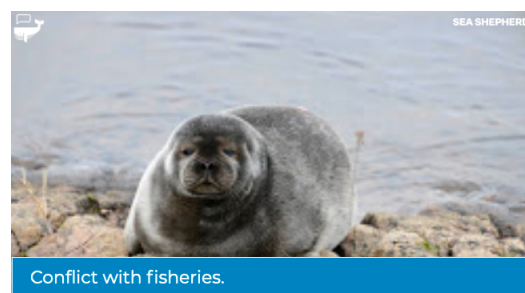


Slide 15 Conflict with fisheries

Seals feed on fish, as a main food source. Fishermen don't like seals taking fish that they want to catch and sell for us to eat. So the fishermen will sometimes kill the seals to stop them taking fish.

Ask students: Does that sound fair, the seal is just having its lunch of fish and fishermen chase them away or hurt them? Should the seal be allowed to eat the fish?

Fish is a seals food source, but globally domestic cats eat more fish than seals do.





Slide 16 By-catch

Seals can get caught in the nets of fishing vessels that are catching the fish people eat. The nets are so big and they catch/trap every animal in the way. Sometimes the seals don't get released in time and they die.

To help protect seals we have to make sure the fishing vessels do the right thing and watch out for them and release the seals quickly.

Longlines are more dangerous for seals. Baited hooks entice them into a free fed, soon finding themselves caught on the hook.

Ask students why they think seals get caught in nets?
Answer: The seals and fishermen want the same fish. The seals because that is what they eat, the fishermen because they want to sell it.



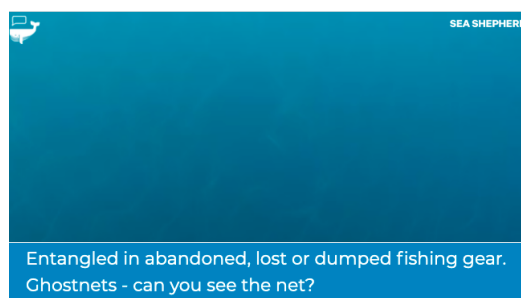
Slide 17 Entanglement

Each year a lot of fishing gear is lost or left behind in the ocean. These nets float in the ocean catching marine wildlife including seals.

Imagine the seal swimming along and all of a sudden getting caught in a fishing net or lines. They can't get free until someone helps them. Unfortunately, help is not always in time.

Ask students how we can help stop marine wildlife becoming entangled?

- By helping to clean up fishing gear from the ocean.
- Making the fishing vessels clean up their fishing gear.



Slide 18 A sea of trash

Every day somewhere in the world rubbish is finding its way into the ocean. It is estimated that this rubbish amounts to more than one garbage truck every 40 seconds dumping trash in the ocean - imagine all that rubbish floating in the ocean

All kinds of trash is left behind at beaches or in waterways to be washed out to sea, dumped at sea from boats or lost over board in storms from container ships.

Teacher's note: Over 12 million tonnes of trash is finding its way into the ocean each year. This amount is growing each year. It equates to one garbage truck every 40 seconds dumping in the ocean.

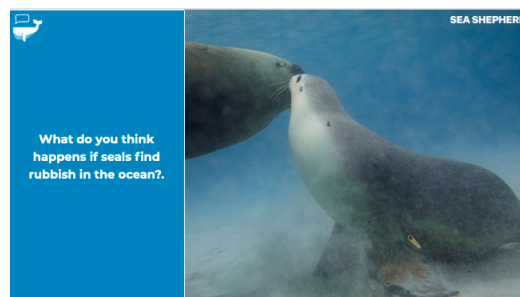




Slide 19 A sea of trash

Ask students: “What do you think happens if seals find rubbish in the ocean?”

Seals can’t always distinguish the difference between rubbish and food, and when they do it too late and they may have already swallowed it or caught up in it.



Slide 20 Stopping the trash

Ask students “What do you think we can do to stop this trash ending up in the ocean?”

Teacher’s note: You can discuss things like:

- Reducing single use plastics, so they don’t end up in the ocean.
- Using reusable products.
- How to properly dispose of rubbish.
- Recycling plastics.
- Doing clean ups.



Slide 21 What do you like most about seals or sea lions?

Ask students to answer the following question using www.LessonUp.app or write on paper:

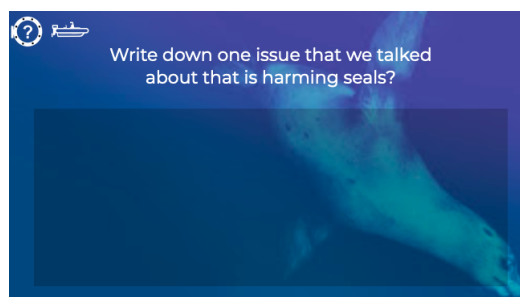
“What do you like most about seals or sea lions?”



Slide 22 What is one issue harming seals?

Ask students to answer the following question using www.LessonUp.app or write on paper:

“Write down one issue we talked about that is harming seals?”

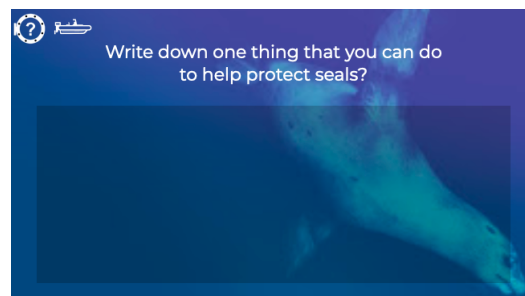




Slide 23 What can we do to help seals?

Ask students to answer the following question using www.LessonUp.app or write on paper:

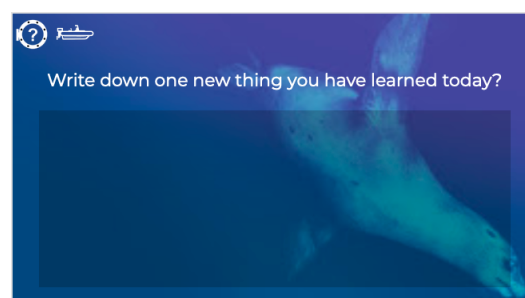
“Write down one thing that you can do to help protect seals?”



Slide 24 What did you learn?

Ask students to answer the following question using www.LessonUp.app or discuss in the classroom.

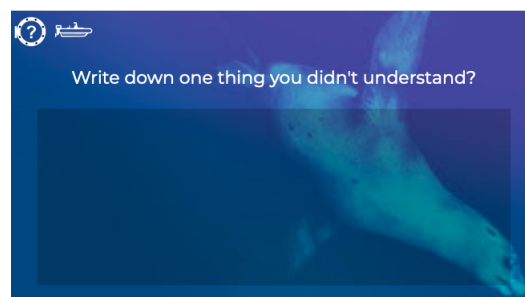
“Write down one new thing you have learned today?”



Slide 25 What don't you understand?

Ask students to answer the following question using www.LessonUp.app or write on paper:

“Write down one thing you didn't understand?”



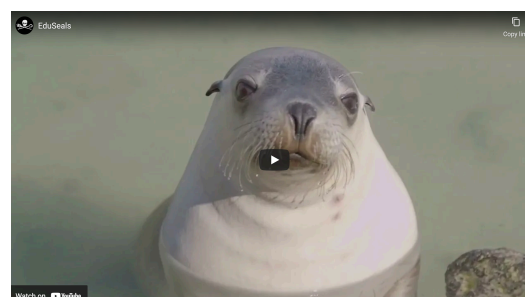
Slide 26 Learning activities

Sea Shepherd Lesson Activity Sheets provide additional lesson activities or discussion topics to expand the learning experience.

Optional fun video.

Show this video (1.00 mins), which shows seals playing:

<https://youtu.be/jG4aDgq7jUM>





SEALS

TEACHERS LESSON GUIDE

TEACHERS RESOURCES: JUNIOR SCHOOL (Age 5-8)



[Slide 27 Close](#)



YOUR FEEDBACK

We value your feedback and would be pleased to hear your thoughts about this lesson and activities. Any comments, suggestions or requests for further information can be sent to education@seashepherdglobal.org.