

Case Study Summary

This Case Study connects with our Lessons: Illegal, Unreported and Unregulated (IUU) Fishing 1 - 4. It focuses on our campaign Operation Backbone in Canada targeting the overfishing of herring.

This Case Study takes 20 minutes to complete.



Subjects relevant to

English, Geography, History, Science and Social Science.

Learning objectives

- Understand what overfishing activity is taking place in Canada.
- Determine the impacts it is having on marine species.
- Understand the causes of overfishing.

Preparation

- This case study has been designed to supplement our main lessons. It can be stopped at any time should you wish to include your own discussion/questions or incorporate the lesson activities.
- 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

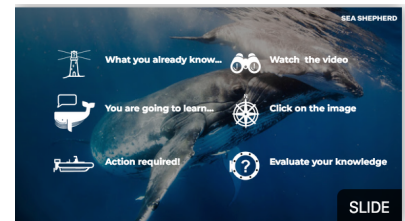
Slide 1 Introduction

This lesson is provided by Sea Shepherd. Sea Shepherd was founded in 1977 and is a marine conservation organisation working to protect the ocean and marine wildlife. Sea Shepherd works globally on a range of issues impacting the oceans, running numerous direct action campaigns each year. IUU and overfishing is one area Sea Shepherd is working in to help protect the marine ecosystem.



Slide 2 Lesson action icons

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



Slide 3 Introducing Operation Backbone

Operation Backbone is defending herring. The aim is to protect the last herring in the Salish Sea, on the west coast of British Columbia, Canada.

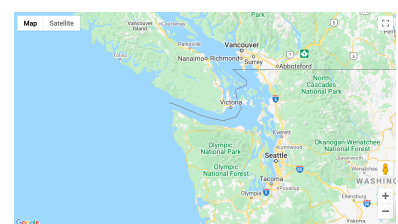
Department of Fisheries data in 2019 showed a 60% decline in herring numbers from 2016.

Herring were predicted to be approximately 122,291 tonnes in 2019, but only 85,700 tonnes actually returned. Despite declining numbers a commercial herring fishery is allowed to continue. The fishery not only targets herring, but herring roe.



Slide 4 Salish Sea, British Columbia

The map shows the Salish Sea off BC, Canada.





SEA SHEPHERD CASE STUDY: OPERATION BACKBONE

CASE STUDY GUIDE: SECONDARY SCHOOL (Age 11 – 16)

Slide 5 Supporting local ecosystem

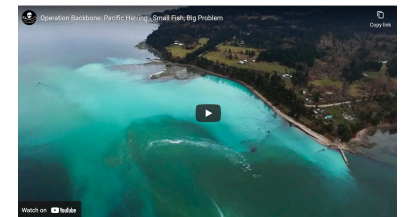
Herring are part of the local food chain, that supports local species, including Chinook Salmon and Southern Resident Killer Whales.



Slide 6 History of herring fisheries

Show this video (5.58min), which shows the history of the herring fisheries and the local food web it impacts:

https://www.youtube.com/watch?v=Wc4_2obn_6o



Slide 7 Operation Backbone

Show this video (3.18min), which explains Sea Shepherd's concerns for the herring:

<https://www.youtube.com/watch?v=nztNeDLyhDI>

Picture an inland sea where millions of tiny fish return each year providing nourishment to an entire ecosystem, without which salmon, orcas, birds and marine mammals of the Pacific Northwest coast would be doomed.



Slide 8 Call end to herring fishing

Show this video (2.27min), which explains the call to end herring fishing:

<https://www.youtube.com/watch?v=WEjq2SWzhFg>



Slide 9 Question

Ask students to complete their answers to the following question using the www.LessonUp.app or discuss in classroom.

“What wildlife species would be impacted by the collapse of herring numbers?”





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Slide 10 Question

Ask students to complete their answers to the following question using the www.LessonUp.app or discuss in classroom.

“Where are the herring and roe fisheries sending their catch?”
Discuss whether students believe that this is a justifiable use of herring compared to the needs of the ecosystem?



Slide 11 What did you learn?

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

“Write down three things you have learned?”



Slide 12 What don't you understand?

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

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



Slide 13 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.