



SEA SHEPHERD CASE STUDY: OPERATION SOLA STELLA

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

Case Study Summary

This Case Study connects with our Lesson Plans: Illegal, Unreported and Unregulated (IUU) Fishing 1 - 3. It focuses on our campaign Operation Sola Stella supporting the government of Liberia to patrol their waters for illegal fishing activity.

This Case Study takes 20 minutes to complete.



Subjects relevant to

English, Geography, History, Math, Science and Social Science.

Learning objectives

- Understand what IUU fishing activity is taking place in Liberia.
- Determine the impacts it is having on marine species.
- Understand the causes of overfishing, by-catch and shark poaching.

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.



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Lesson plan

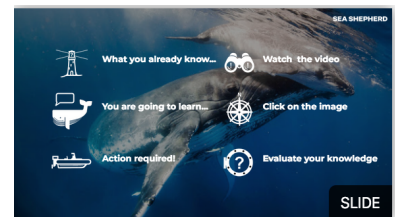
Slide 1 Introduction

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



Slide 2 Lesson action icons

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



Slide 3 Introducing Operation Sola Stella

In January 2017 the Bob Barker started a secret mission to protect the waters of Liberia from illegal poachers. Working with the Liberian Ministry of National Defence we set out on Operation Sola Stella to search for vessels operating illegally.

Show video (2.20 min) introducing Operation Sola Stella:
https://www.youtube.com/watch?v=RklzhZyK_Yo&list=PLx1pnhQVtbbCvG-aU-car7H5sOSeMuTeP&index=23



Slide 4 Liberia

The map shows the location of Liberia.





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Slide 5 IUU

It is believed the IUU activity in these waters could be as high as 40% of the catch. These vessels conduct IUU activity by operating without a license, either to fish in the area or for the target species, or they are fishing in prohibited areas.



Slide 6 Artisanal fishing

Liberia is unique and has a 6 nautical mile exclusion zone for artisanal fishing. This area is set aside for fishing exclusively by the local people, by means of small scale traditional fishing in small boats, for local markets. Illegal fishing is impacting on coastal communities that rely on the oceans, putting at risk the food security for some communities, as the illegal operators continue to violate these areas and strip out the fish.



Slide 7 Arresting illegal poachers

The campaign had immediate success with the arrest of illegal poachers. Since then Sea Shepherd has helped to detain and arrest 15 ships conducting IUU operations.

Examples

One vessel detained was a refrigerated cargo ship, which was held on identity fraud and IUU activity. It had transmitted a false identity to Liberian port authorities, where it planned to unload 460 tons of illegal fish cargo.



Show video (2.50min) which shows the first arrests during this campaign and how boarding and inspections take place.

<https://www.youtube.com/watch?v=2IOhWEOJ3t8&list=PLx1pnhQVtbbCvG-aU-car7H5sOSseMuTeP&index=22>

Slide 8 Arresting illegal poachers

Three other vessels were arrested for other activities such as fishing without a license, illegal shipping of catch and trying to bribe law enforcement officers.

After a couple of months patrolling, the waters of Liberia became quiet as the word spread of Sea Shepherd's presence and the arrests of illegal vessels.

Show video (2.38min) Boarding and inspection of shrimp trawling vessel.

<https://www.youtube.com/watch?v=51jFYw3n3Tg&list=PLx1pnhQVtbbCvG-aU-car7H5sOSseMuTeP&index=21>



Slide 9 Shark poachers

The Labiko 2 was arrested in November 2017, this vessel had previously been moved on from European waters. Part of fleet of 50 vessels in the 1990's they used illegal gillnets to catch deep-water sharks in the North East Atlantic Ocean. Aboard the vessel they found shark liver oil production facilities were found, indicating the fleet has moved to West Africa.



Slide 10 Labiko 2 arrest

The video shows inspectors aboard the Labiko 2 and the illegal shark liver oil operation they found. The Labiko 2 was responsible for killing around 500,000 deep sea sharks every year.

Show video (3.06 min)

<https://www.youtube.com/watch?v=pj4t0hE0xCg&list=PLx1pnhQVtbbCvG-aU-car7H5sOSeMuTeP&index=12>



Slide 11 Overfishing and by-catch

One cause of overfishing and by-catch is the purse seine fishing industry, which uses massive nets up to 2 kilometres long.

Show video (2.09), which explains Purse seine fishing and the issue of by-catch.

<https://www.youtube.com/watch?v=SfbHCmsawHM&list=PLx1pnhQVtbbCvG-aU-car7H5sOSeMuTeP&index=8>



Slide 12 Global impact

Sea Shepherd's work is helping to bring fish back to the waters of Liberia, for the local people and for the ocean.

Show the video (3.15 min) hear from Sea Shepherd crew on board the Sam Simon why they joined the fight and the difference it is making in Liberia.

<https://www.youtube.com/watch?v=sZjszi2ISY&list=PLx1pnhQVtbbCvG-aU-car7H5sOSeMuTeP&index=2>



Slide 13 Question

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

"How many sharks was the Labiko 2 potentially killing each year?"





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Slide 14 Question

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

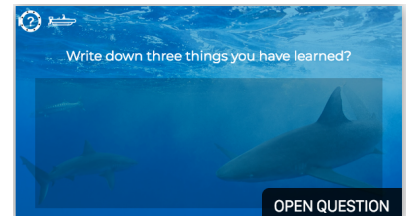
“What other illegal activity was detected on board the illegal vessels?”



Slide 15 What did you learn?

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

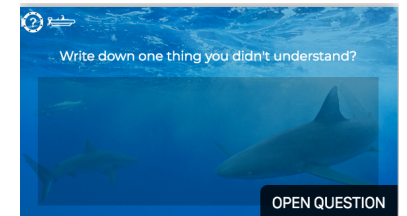
“Write down three things you have learned?”



Slide 16 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 17 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.