



# SEA SHEPHERD CASE STUDY: OPERATION JAIRO

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

## Case Study Summary

This Case Study connects with our Lesson Plan: Sea Turtle Poaching. It focuses on our campaign Operation Jairo working in a number of countries to protect sea turtles.

This Case Study takes 20 minutes to complete.



## Subjects relevant to

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

## Learning objectives

- Learn about sea turtle poaching taking place in countries like Costa Rica and Nicaragua.
- Learn about the work Sea Shepherd is doing to help protect sea turtles from poachers.

## 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](http://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.



# SEA SHEPHERD CASE STUDY: OPERATION JAIRO

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

## 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 Operation Jairo

In 2014 Operation Jairo commenced with patrols on beaches in Costa Rica.

The campaign is named after Jairo Mora Sandoval who was killed by poachers on the beaches of Costa Rica while protecting nesting sea turtles. He was a young Costa Rican environmentalist working with volunteers from around the world to protect the beaches.



Show this video (1.05min), which briefly explains why Operation Jairo commenced.

<https://www.youtube.com/watch?v=4K4lhfxzrM8&list=PLNmNu36NAjhYQH35oj2oR5WdoUQcr1H8&index=20>

### Slide 4 Costa Rica

Patrolling on the island of Pacuare and Moin Beach on the mainland of Costa Rica. On many nights Sea Shepherd crew stood their ground, coming between poachers and nesting turtles. Protecting the turtle and her eggs from the poachers.





# SEA SHEPHERD CASE STUDY: OPERATION JAIRO

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

## Slide 5 Standing up to poachers

Protecting turtles is dangerous, on one night patrol eleven members of Sea Shepherd crew were violently assaulted by armed poachers. Although the poachers mainly used tree branches during the attack, they were also armed with handguns and fired at Sea Shepherd's security guards.

Sea Shepherd remained undeterred in our mission. Less than a month later, just a few feet from where they had been attacked, our crew protected a nesting leatherback turtle from poachers and ensured that her 63 eggs were taken to a hatchery.



## Slide 6 Helping hatchlings

For the final four weeks of the campaign, the crew relocated to Limon on the mainland to patrol Moin Beach. Many poachers profit from stealing turtles and their eggs from this beach. 3,000 nests and turtles were saved from poachers in Costa Rica during this campaign.

Show this video (1.07 min), which shows the crew helping sea turtle hatchlings

<https://www.youtube.com/watch?v=rfJCxkCIWq0&list=PLNmnnNu36NAjhYQH35oj2oR5WdoUQcr1H8&index=18>



## Slide 7 Honduras

In Honduras, Sea Shepherd patrolled the beaches of Utila each night for 74 nights, our crew protected 32 nests, saving a total of 3,636 turtles!

No nests were raided by poachers while Sea Shepherd was on the scene.

Sea Shepherd worked alongside the Honduran Navy Bay Island Conservation Association, accompanying volunteers on patrols, ensuring the safety of the Sea Shepherd crew, as well as that of the turtles who use the shores of Honduras for safe nesting.



## Slide 8 Florida (USA)

In Florida Sea Shepherd worked with Sea Turtle Oversight Protection to protect nesting females coming ashore.

In Florida the hatchlings aren't threatened by poachers, as in other countries, but here they have the hazard of industrial lighting from local areas that disorients them. Making it difficult for them to find their way into the ocean. Upon hatching, sea turtles are normally guided toward the open ocean by the moonlight.







# SEA SHEPHERD CASE STUDY: OPERATION JAIRÓ

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

Artificial light causes them to head inland and away from the sea where they face dehydration on the beach or being crushed by vehicles on busy roadways.

Sea Shepherd crew helped guide the hatchlings on their way and documented disorientation events and any stranding or rescue of sick or injured turtles.

Sea Shepherd crews monitored hundreds of nests and observed more than 5,000 newly hatched turtles, with the majority disorienting, which were rescued and released safely to the sea!

Show this video (1.27 min), which shows the issue with lighting along the foreshore.

<https://www.youtube.com/watch?v=iu7OmXCqw-w&list=PLNmNnNu36NAjhYQH35oj2oR5WdoUQcr1H8&index=16>

## Slide 9 Caribbean – Day patrol identifying nests

In 2018 Operation Jairo was expanded to include the Caribbean and to Nicaragua, where turtles are also under threat from poachers.

Show this video (1.33min) which shows a day patrol in the Caribbean and how to identify nests.

<https://www.youtube.com/watch?v=lqqddYwyYto&list=PLNmNnNu36NAjhYQH35oj2oR5WdoUQcr1H8&index=6>

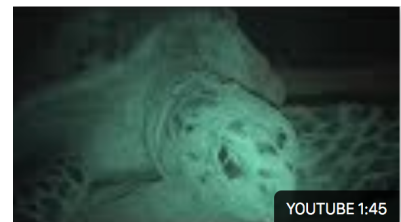


YOUTUBE 1:34

## Slide 10 Caribbean night patrol

Show this video (1.44min), which shows a night patrol in the Caribbean.

<https://www.youtube.com/watch?v=yfCx1OZXSSY&list=PLNmNnNu36NAjhYQH35oj2oR5WdoUQcr1H8&index=7>



YOUTUBE 1:45

## Slide 11 Caribbean – leatherback hatchlings

Show this video (1.58min), which shows leatherback turtle hatchlings in the Caribbean.

<https://www.youtube.com/watch?v=ZLzZPhEmOZQ&list=PLNmNnNu36NAjhYQH35oj2oR5WdoUQcr1H8&index=8>



YOUTUBE 1:59





# SEA SHEPHERD CASE STUDY: OPERATION JAIRO

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

## Slide 12 Nicaragua

In 2018-2019, Sea Shepherd went to Central America to protect sea turtle eggs, hatchlings, and nesting mothers.

Our crew patrolled for 84 nights along the beaches of Padre Ramos, Nicaragua, which is home to nesting sites for Pacific Hawksbill, Olive Ridley, Green, and occasionally Leatherback sea turtles.

In Nicaragua, it is illegal to kill sea turtles and poach their eggs, but unfortunately, the country's government does not have the necessary resources to stop the poaching completely. In areas such as Padre Ramos, there is no oversight, leaving the sea turtles completely unprotected.

Our crew was outnumbered twenty to one, as dozens of armed poachers hunted for nesting mothers each night. The crew identified poachers, protected nesting mothers, and brought eggs to a hatchery to incubate. This allowed the baby sea turtles to be safely born and then returned to the ocean.



## Slide 13 Nicaragua

Despite multiple attacks from poachers, the crew spent three months on the ground in Nicaragua. They found over 40 nests and saved over 3,900 eggs, giving these baby sea turtles a fighting chance at survival.

Show this video (2.07min), which shows Sea Shepherd crew protecting sea turtles.

<https://www.youtube.com/watch?v=L7FJEgPnrJs&list=PLNmnNu36NAjhYQH35oj2oR5WdoUQcr1H8&index=2>



## Slide 14 Question

Ask students to complete their answers to the following question using the [www.LessonUp.app](http://www.LessonUp.app) or discuss in classroom.

“In which countries does Operation Jairo operate in to protect Sea Turtles?”





# SEA SHEPHERD CASE STUDY: OPERATION JAIRO

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

## Slide 15 Question

Ask students to complete their answers to the following question using the [www.LessonUp.app](http://www.LessonUp.app) or discuss in classroom.

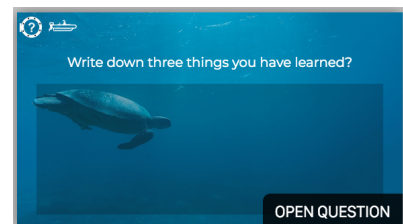
“What threatens sea turtle hatchlings in Florida?”



## Slide 16 What did you learn?

Ask students to answer the following question using [www.LessonUp.app](http://www.LessonUp.app) or discuss in the classroom.

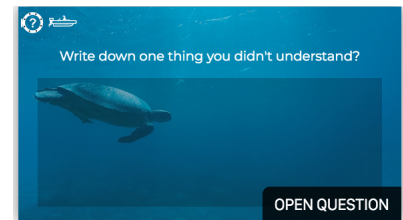
“Write down three things you have learned?”



## Slide 17 What don't you understand?

Ask students to answer the following question using [www.LessonUp.app](http://www.LessonUp.app) or discuss in the classroom.

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



## Slide 18 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](mailto:education@seashepherdglobal.org).