

## Lesson Summary

This lesson focuses on dolphins in captivity and discusses the captivity / amusement industry.

This lesson will take approx. 45 mins.



## Subjects relevant to

English, Geography, History, Science and Social Science.

## Learning objectives

From this lesson students will:

- Learn about dolphins in captivity.
- Learn about the consequences of captivity on dolphins.
- Discuss why captivity exists and whether it should continue.

## 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.
- Definitions of key terms have been provided at the end of the guide to assist with the learning process.
- Each lesson has case study options showing Sea Shepherd campaigns, including videos to provide students with a firsthand experience of ocean conservation in action.
- 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.

## Lesson plan

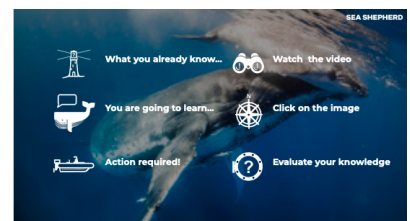
### Slide 1 Introduction

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. Dolphins are one species Sea Shepherd is helping 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 will focus on the dolphin captivity industry and the impact on a dolphin's life.

**INTERACTIVE JOIN** – ask students to go to [www.LessonUp.app](http://www.LessonUp.app)

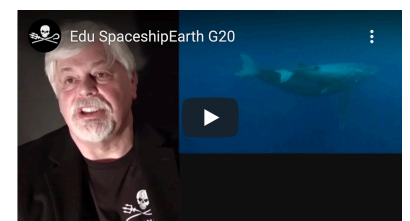


### Slide 4 Empty ocean by 2050

Scientists estimate that by 2050 the ocean ecosystem will be on the verge of collapse, empty of fish and marine wildlife, unless urgent action is taken on the issues impacting the ocean and marine wildlife.

Show this video (2.53min), which explains how important all species are to our planet.

<https://www.youtube.com/watch?v=TLcA31VRIRU>



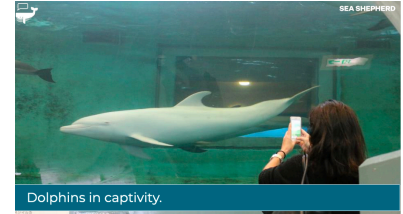
Discuss the video with the class and what it means.

## Slide 5 Dolphins in captivity

Since the 1800's dolphins, and beluga whales, have been taken from the wild for captivity. The first bottlenose dolphins were brought into captivity in 1938.

Dolphinariums or marine parks showing captive marine wildlife became even more popular after the TV show Flipper aired in the 1960's. Dolphins are even kept in hotel pools to entertain guests.

At these facilities the dolphins are trained to perform circus acts to entertain visitors.



## Slide 6 Dolphin captivity

Dolphins are highly intelligent, extraordinarily social and behaviorally complex.

The structure of the dolphin brain is very different from that of humans. Those parts that deal with sophisticated thought and cognition are more complex and have a relatively greater volume than similar tissues in humans.



The behavior of dolphins also implies high intelligence; for example, bottlenose dolphins are widely believed to possess individual, or signature, whistles. Which are thought to be important for individual recognition or keeping groups together. Animals in the wild will make their specific whistles, which will be copied by nearby dolphins. This is an example of dolphins "addressing each other individually."

## Slide 7 Dolphin captivity

Ask students to answer via [www.LessonUp.app](http://www.LessonUp.app) or discuss in classroom:

"Do you think captivity is a good or bad experience for the dolphins, and why?"

Discuss the responses.



## Slide 8 Are dolphins happy in captivity?

Many people mistakenly believe that dolphins are always smiling, so they must be happy and content.

In reality the expression on their face is formed by an anatomical characteristic of their jaws and is not a reflection of an emotion or feeling.

Option: Discuss with the class how facial appearance can hide what people and wildlife are really experiencing.





## Slide 9 Life in the ocean vs life in a pool

To better understand captivity let's compare a dolphin's life in the wild to life in captivity, by looking at each aspect of a dolphin's life. In this lesson we will focus on bottlenose dolphins and orcas.



## Slide 10 Capturing dolphins

Let us start by looking at how dolphins end up in dolphinariums.

There are two ways dolphins end up in captivity:

- Taken from the wild, or
- Born in captivity.

### Wild capture

There are a number of places around the world where dolphins are caught for captivity. One of those places is Taiji, Japan where dolphins are caught for both captivity as well as for their meat. Apart from bottlenosed dolphins, they also take striped, spotted, risso's, pacific white-sided dolphins as well as pilot whales.



To hunt the dolphins a small fleet of fishing vessels heads out to sea to find a pod of dolphins. Once located, the boats form a line and drive the dolphins into a cove. This is done by putting metal poles in the water and banging on them, in order to create a 'wall of noise'. The noise will drive the dolphins away from the fleet of vessels and will direct them into the cove. Once the dolphins are driven into this cove, it is closed off with a net and the dolphins are trapped.

Dolphin trainers then enter the water and select the dolphins most suitable to perform in their dolphinariums. The rest of the pod usually are killed for meat.

Imagine how traumatic this experience is for the dolphins:

- The noise from the boats.
- The fear of being trapped.
- Having a baby taken from you pod/family or being caught yourself.
- Hearing the rest of your pod being killed.
- Being placed in a confined pool.
- Then being transported in a box.

The pursuit, handling and disturbance dolphins endure when captured from the wild and whenever they are being transported from one location to another is highly traumatic.



Evidence shows that dolphins never become accustomed to these causes of stress, as seen in the greatly increased mortality rate immediately after every transport. The risk of dying increases six-fold in bottlenose dolphins during the first five days after a capture.

### Slide 11 Bred in captivity

Most dolphinariums have breeding programs, focusing on dolphin species most suited for keeping in captivity, and never the endangered species.

Dolphins bred in captivity are never released back into the wild. It is purely to supply the marine park with new dolphins to perform in their shows. Only one breeding program has attempted to help save an endangered species, the Baiji dolphin. They were unsuccessful in producing any young, and no dolphins have been released.



### Slide 12 Family bonds

Dolphins being mammals give birth to live young. A calf will stay with its mum for 18 months to 8 years, depending on the species.

There is a strong bond between the mum and the baby. So you can image the distress for the mum and calf when they are separated.

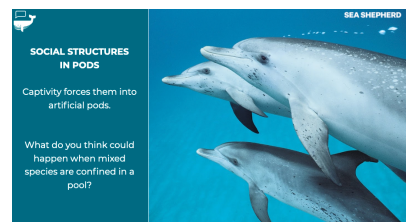


In captivity dolphins and calves are separated long before they would be in the wild.

### Slide 13 Social structures in pods

Within pods there are social structures or hierarchies in place.

In captivity dolphins are forced into artificial pods. These are pods that are made up of captured dolphins from different places and from different families. Adding new members to a captive group, such as young animals reaching maturity, or 'incompatible' animals, can upset the social structure and hierarchy, as can isolating individual animals or separating them from their family.



Imagine you are put into a confined space with people you have never met before, that may not even speak the same language as you, and you now have to live together for the rest of your lives. Remembering there is no way to escape your new 'family' members.

In the wild is when a dolphin gives birth, the aunties help the newborn calf to breathe by pushing it to the surface of the water. In captivity this support is not always provided.

Discuss with the class: 'What do you think might happen in these circumstances? What behavior might you see?'

This could lead to:

- Increased aggression between dolphins if they don't get along.
- Stress and illness in dolphins who are traumatised by being removed from families or can't cope with the social pressure within the new pod.
- Poor success in calf rearing.
- Death due to fighting or they kill themselves.

## Slide 14 Captive life

Ask students to answer via [www.LessonUp.app](http://www.LessonUp.app) or discuss in classroom.

"What other aspects of captivity might contribute to a dolphin becoming ill?"



## Slide 15 Captive environment

There are a number of features of the captive environment that differ to the wild that dolphins are not use to:

- Chemically treated water vs salt water in the ocean.
- Exposure to sun due to the lack of depth of the pool vs the ocean.
- Exposure to new environment and diseases – a pool in a tropical climate with mosquitoes vs the open ocean.



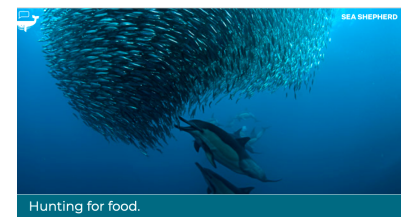
Discuss with the class what the impacts of these changes might be.

## Slide 16 Hunting for food

In the wild dolphins are a predator, they have to hunt for their food, fish, crustaceans and squid. They are not scavengers looking for an easy meal.

Dolphins are an intelligent species, they can work together as a team to hunt fish. If they find a school of fish they slowly encircle them, to group the fish together. If they are hunting close to shore they use their tails to kick up dirt from the seabed to make a circle of murky water around the fish. Then as the fish try to jump out of the water, over the dirty water, they catch them.

Dolphins have also been seen using tools to help them fish like using sea sponges on their rostrum (nose) to protect it while they dig around on the seabed looking for food. This protects them from pieces of rock or broken coral.



## Slide 17 Feeding in captivity

Dolphins new to captivity have to learn to eat dead fish rather than the live fish they are used to. If they refuse they will be forced by the trainers.

The dolphins receive regular vitamin and mineral pills in their ration of fish. This implies that their diet of a limited variety of frozen fish is deficient in some manner and the nutritional quality of frozen fish is, in fact, markedly lower than that of living fish. The constant administration of pills is often referred to as a benefit of captivity; the fact that wild animals do not require such supplements is never mentioned.

The lack of behavioral and physical stimulation (when foraging) is eliminated from the behavioral repertoire and the lack of dietary variety may contribute to behavioral disturbances and health problems.



## Slide 18 Training dolphins

Captive dolphins not only have to learn how to eat dead fish, but they also have to learn that if they want to eat they need to perform.

Show dolphins are often not fed much in the morning so that they will perform tricks for food. If they perform properly during the show they receive a fish, if they don't do it properly they don't get the fish. It is reported that dolphins are often only fed a proper meal at the end of the day once the shows are over.



## Slide 19 Hunting for food

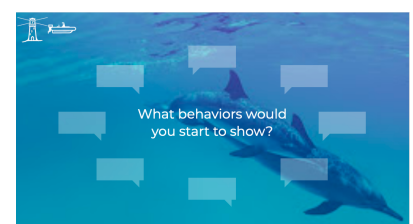
Ask students to answer via [www.LessonUp.app](http://www.LessonUp.app) or discuss in classroom.

All dolphins are predators and in captivity none are allowed to exercise that part of their behaviour that is related to hunting and foraging.

"Imagine you are a dolphin and you can no longer hunt for food when you are hungry, and have to perform tricks to receive some fish. What behaviours do you think you would start to show?"

Examples might:

- Stereotyped behaviour and aggression toward other dolphins and humans frequently arises when dolphins are denied their natural foraging behaviour.
- Boredom if you have nothing to do during the day, when you would normally be hunting for food. Leading to behavioral changes.
- Health problems without the right diet.





## Slide 20 Confined to a pool

Another aspect of captivity that adds to boredom is the size of the enclosure.

Even in the largest facilities, a captive dolphin's room to move is decreased enormously, allowing the animals access to less than one ten-thousandth of one percent of their normal habitat size! The reduction in their horizon represented by a tank, even a large one, is extreme. Neither their physical nor their social environment can be simulated or re-created.

Bottlenose dolphins and orcas, are wide-ranging, fast-moving, deep-diving predators. In the wild they may travel as many as 150 kilometers in a day, reach speeds as high as 50 kilometers an hour, and dive several hundred meters deep.

Show this video:

[https://www.youtube.com/watch?v=gcb-V-a\\_1Tg](https://www.youtube.com/watch?v=gcb-V-a_1Tg)

Discuss with students:

"What are the differences in the features of a pool enclosure compared to the ocean environment?"

Variations to discuss:

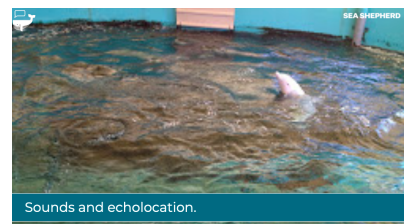
- Distance dolphins would travel in a day.
- How deep they can dive and the speed they can travel at.
- Seafloor features.
- Other marine wildlife.
- Riding ocean waves.
- Walls of a captivity pool / tank.
- Sounds

## Slide 21 Sounds / Echolocation

Echolocation means where animals emit a noise and then listen to the echoes that return. These echoes help them determine what objects are around them.

While we have been able to teach dolphins relatively sophisticated artificial languages, we have been unable to decode their many vocalizations. This makes you wonder which species is "smarter"; dolphins, who can learn what people want of them, or humans, who still have to understand what dolphins might be telling us.

Discuss with the class what they think the impact of being confined to a small pool with concrete or glass walls would be?



## Slide 22 Mirrored space

This image shows what it might look like for dolphins kept in glass tanks, where they see their reflection all day. Evidence for a high level of intelligence in dolphins is the demonstration that cetaceans are self-aware. Studies show that dolphins are able to recognise their image in a mirror and use that image to investigate their body.

Discuss how being confined to a small mirrored space would make students feel.



## Slide 23 Captivity – good or bad for dolphins?

Ask students to answer via [www.LessonUp.app](http://www.LessonUp.app) or discuss in classroom.

“Do you think captivity is a good or bad experience for the dolphins, and why?”

Ask who changed their mind and why?



## Slide 24 Question

Ask students to answer via [www.LessonUp.app](http://www.LessonUp.app) or discuss in classroom.

“Why do you think we keep marine wildlife in captivity?”

Why are dolphins in captivity:

- Entertainment – people enjoy watching dolphins perform.
- Businesses make money from capturing and showing dolphins.
- Research dolphin behaviours.
- Educating the public on marine wildlife.



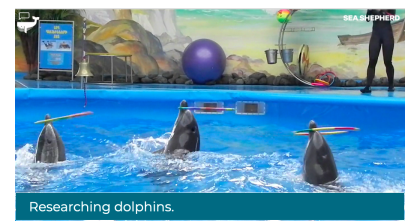
## Slide 25 Researching dolphins

Two reasons given for keeping dolphins in captivity are research and educational purposes. Research on dolphins can only be justified in circumstances where it is necessary to resolve critical questions that benefit the animals in captivity or in the wild.

Discuss with students:

- Which would be better: conducting research in an artificial environment or in the ocean?
- Which would be better for educational purposes: teaching the public dolphin behaviour in captivity or natural behaviour in the wild?

With the ability to conduct research in the ocean, dolphinariums are not essential to continue research on marine mammals.



## Slide 26 Conservation

Another argument used by dolphinariums to support the benefits of captivity is Conservation. They use a number of features of the natural world to highlight their 'conservation' work in protecting marine mammals.

**Dangers:** The first claim is that the rigors of the wild are dangerous and imply that the natural environment is an evil and to be avoided. Which infers that a captive environment, free from dangers is the preferred state for marine animals. This justification for the conditions of captivity is misleading and removes animals from their natural environment.

This misrepresentation of the natural environment as threatening to the health of these animals will not encourage people to protect, respect, or understand the animals' natural habitat.

**Strandings:** dolphin and whale strandings are taken as proof that the marine mammals' natural habitat is a dangerous place. Strandings however are not always a result of natural occurring's and can result from manmade events.

The public receives a distorted picture, in which an animal's natural environment is hostile and captivity is a benign alternative, a picture that is implicitly contrary to both conservation and welfare principles.

The claim that conservation is a primary purpose of the captivity industry is misleading. Fewer than 10 percent of zoos, dolphinariums, and aquaria are involved in substantial conservation programs, either in natural habitat or in captive setting. The amount spent on these programs is a mere fraction of the income generated by these facilities.

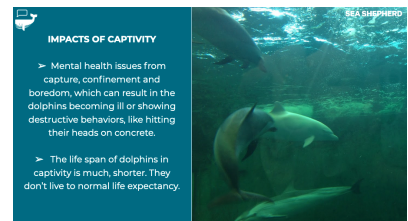
Many dolphinariums and aquaria state that they are actively involved in conservation and use this as a marketing tool or as a way to justify imports of animals.



## Slide 27 Impacts of captivity

There are two main impacts of captivity on dolphins we should be concerned about:

- Mental health issues from capture, confinement and boredom, which can result in the dolphins becoming ill or showing destructive behaviours, like hitting their heads on the concrete walls and floor of the pool they live in.
- The life span of dolphins in captivity is much, shorter. They don't live to normal life expectancy.





## Slide 28 Why captivity might be harmful to dolphins

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

“What are 4 reasons why captivity might be harmful to the well being of dolphins?”

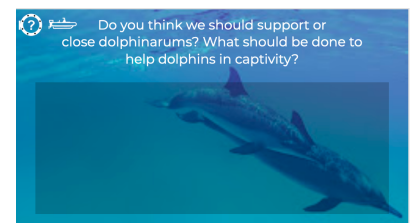


## Slide 29 Should we support captivity?

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

“Do you think we should support dolphinariums or should they be closed?”

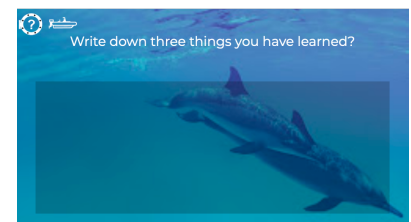
“What do you think should be done to help dolphins in captivity?”



## Slide 30 What did you learn?

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

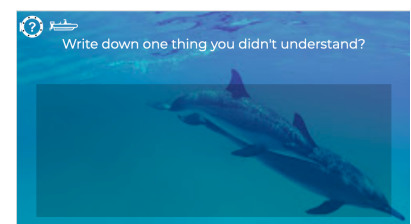
“Write down three things you have learned?”



## Slide 31 What don't you understand?

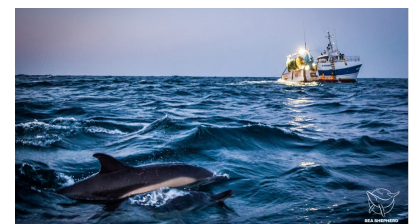
Ask students to answer the following question using [www.LessonUp.app](http://www.LessonUp.app) or discuss in the classroom.

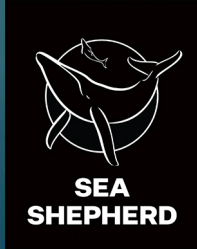
“Write down one thing you didn't understand?”



## Slide 32 Case Studies

Sea Shepherd Case Studies cover a number of Sea Shepherd campaigns and show video of some of our work to protect dolphins. These can be used to enhance the learning experience from these lessons.





# DOLPHIN CAPTIVITY

TEACHERS GUIDE: SEONDARY SCHOOL (Age 11 – 16)

[Slide 33 Close](#)



## Case Study Options

Case Study – Operation Albacore  
Case Study – Operation Dolphin By-Catch  
Case Study – Operation Milagro

## Key Definitions

Anatomical – relating to the bodily structure.

Captivity – being imprisoned or confined.

Dolphinariums – an aquarium in which dolphins are kept and trained for public entertainment.

Echolocation – the location of objects by reflected sound, used by animals such as dolphins and bats.

Marine park – a facility where marine wildlife are kept in captivity and displayed for public entertainment.

## 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).