



Erasmus+



Climate and Threats on  
Cultural Heritage  
(CATCH)

(2020-1-ES01-KA229-082560)

Italy Poland Serbia Slovakia Spain Turkey



## LESSON PLAN

<b>Name of the lesson</b>	<b>Animals in danger because of the Climate change</b>
<b>Grade</b>	13 - 14 years old
<b>Subject</b>	English language, Sciences
<b>Time</b>	1 lesson: 4 hours
<b>Objectives:</b>	<ul style="list-style-type: none"><li>• Students will be able to identify the main animal species in danger and explain the reasons of their extinction and the impacts of climate change on their habitat.</li><li>• To work in groups</li><li>• Being able to create a group presentation</li></ul>
<b>Materials Needed:</b>	<ul style="list-style-type: none"><li>• Whiteboard</li><li>• ICT laboratory</li><li>• Markers</li><li>• Printed handouts</li></ul>

### **STEP 1 Group work**

Students are divided into groups. In the ICT laboratory they research for some information about the species of animals that mostly are at risk of extinction.

### **STEP 2: Brainstorming**

Each group tells the teacher and the class the name of the animals that are mainly at risk nowadays.

**STEP 3:** The teacher invites each group to choose one animal, create and complete a chart, following this model:

<b>Animal name</b>	
<b>Species</b>	
<b>Habitat</b>	
<b>Height/Weight</b>	
<b>Physical characteristics</b>	
<b>Why endangered?</b>	
<b>Number of animals left</b>	

### **STEP 4: Group work**

Students prepare a PowerPoint presentation about the animals they have chosen, using the information from the chart, and adding photos and short videos. They create the presentation in the ICT laboratory.

### **STEP 5: Presentation to the class**

Each group shows their work to the class on the whiteboard and comments on the main characteristics of the animals at risk. They explain the reasons why they are in danger and focus on the threatens coming from the climate change.

At the end of this activity the class votes for the best presentation.

### **STEP 6: Individual work.**

The teacher invites the students to read an in-depth article about the cetacean species in danger in the Gulf of Taranto. Students read the text and answer the questions.

Read the article below and answer the questions

### Cetaceans of the Gulf of Taranto at risk of extinction

The species of cetaceans sighted in the Ionian Sea and, in particular in the Gulf of Taranto, do not have many differences from the species of cetaceans that, more generally, are present in the Mediterranean Sea. There are, however, differences in the distribution and abundance of species due to the different characteristics of the Ionian Sea compared to the Tyrrhenian Sea and the Adriatic Sea.

In the Mediterranean Sea there are 12 species of cetaceans. The species are divided in: **regular species** (regularly present in the Mediterranean area) and **occasional species** (which occasionally appear in the Mediterranean, especially in the western part).

The regular species are: Striped dolphin, Bottlenose dolphin, Short-beaked Common dolphin, Risso's dolphin, Sperm whale, Fin whale, Pilot whale, Cuvier's beaked whale.

The occasional species are: Common minke whale, Killer whale, False killer whale and Rough-toothed dolphin.

Each of these species has specific ecological needs, for example connected to the depth of the sea, the distance from the coast, the availability of their prey, etc. Researches have revealed the existence of significant differences in terms of depth of each species: Fin whales and Pilot whales mostly live in deep waters, generally above 2000 m; Sperm whales, Striped and Risso's dolphins are more frequent close to the continental slope; the Common dolphins generally live between the continental slope and continental shelf; Bottlenose dolphins are coastal animals with a marked preference for waters less than 100 m deep.

It is important to underline, however, how this situation has significantly changed in the last decades, with a drastic reduction of the available habitats for these species caused by human presence in their areas. In fact, all species of cetaceans in the Mediterranean Sea and in the Gulf of Taranto are subject to many threats due to men's activities and many dolphins are increasingly at risk of extinction. The most important threats to their survival are caused by chemical pollution of various nature and sound (especially the ones used for the search for hydrocarbons), accidents with boats and fishing equipment, over-exploitation of fish stocks and habitat degradation. In recent years the impact of plastic pollution is another cause of death of these species.

(Adapted from <https://www.joniandolphin.it/whale-watching/>)

#### QUESTIONS

1. How many species of cetaceans are there in the Ionian Sea?
2. How can the species be classified?
3. Write the names of 3 dolphins belonging to regular species and of 3 dolphins belonging to occasional species.
4. Do dolphins live at the same depth in water?
5. What are the main threats to cetaceans' survival due to men's activities?