
Lesson plan

Title: **The impact of climate change on the natural and cultural heritage of Kolárovo**

Grade: 13-15 years old

Objective:

- learn about the negative effects of climate change on Kolárovo's cultural and natural heritage
- to identify the main problems and outline possible solutions

Materials Needed:

- projector, laptop (+ access to the internet)
- Printed text about the impact of climate change on the natural and cultural heritage of Kolárovo
- work sheet with questions

Preparation: Four students prepare short Power Point presentations on Kolárovo's cultural and natural heritage

Topics:

- water mills on the Danube
- the Dögös nature reserve
- Traditional Pentecost Dance Procession in Kolárovo
- the memory of the great flood of 1965 and the memorial

Lesson Plan:

Introduction (5 minutes) Students are introduced to the topic of the lesson, and the concepts of cultural and natural heritage are explained. Students will collect sites of cultural and natural heritage of Kolárovo in a group competition.

Lesson Content

Part 1 (10 minutes)

Four students will give a short Power Point presentation on Kolárovo's cultural and natural heritage, highlighting the rich history of Kolárovo and the distinctive folk culture of the area.

Topics: water mills on the Danube, the Dögös nature reserve, traditional Pentecost Dance Procession in Kolárovo, the memory of the great flood of 1965 and the memorial

In the meantime, students take notes on the lecture they have heard and then briefly read out what new information they have learned about the cultural and natural heritage of Kolárovo.

Part 2 (15 minutes)

The impact of climate change on the natural and cultural heritage of Kolárovo

Reading and Discussion (15 minutes):

Students receive a pre-printed text on the negative effects of climate change on Kolárovo's cultural and natural heritage. They read the text silently. After they finish, ask them to share any new information they learned about the topic.

Group Activity (10 minutes):

Divide the students into small groups. Give each student the question sheet for the article and ask each group to work together on answering the questions. After the groups have completed the activity, go over the answers together as a class.

Conclusion (5 minutes):

Review the main points of the lesson and ask students if they have any questions. Emphasize the importance of protecting and preserving the region's cultural heritage.



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Climate and Threats
on Cultural Heritage (CATCH)
(2020-1-ES01-KA229-082560)

Italy Poland Serbia Slovakia Spain Turkey

Read the article below and answer the questions.

The impact of climate change on the natural and cultural heritage of Kolárovo

Kolárovo is located in the Csallóköz, the largest river island in Europe. It is bordered by rivers: the Danube to the south, the Little Danube to the north and the Váh to the east. This area is famous for its rare and protected birdlife. It is one of the most strictly protected landscape units in Slovakia. In 1993, the marshlands of the Csallóköz were declared a Ramsar site. The Ramsar Convention is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. Captain Cousteau, the famous explorer, also visited the area.

Kolárovo's cultural and natural heritage is also located in this protected area: the Dögös nature reserve and the main attraction of Kolárovo, the water mill. Unfortunately, climate change is negatively affecting their condition. In the Dögös nature reserve is the Little Danube estuary, which was a navigable, living river until the 19th century. In the 20th century, however, no care was taken to clean it, and it became completely silted up and unnavigable. The river was therefore diverted, turning this stretch of the river into a backwater, home to an incredible number of rare and strictly protected plant and animal species in the last century. Today, however, it is in danger of drying up before our very eyes, along with the two artificial lakes that run alongside it. Fish kills are common, and the number of animal species is declining, with fewer nesting birds and changes in behaviour. For example, storks do not fly to Africa, but stay here for the winter. The drastic decline in the number of swallows may have led to a previously rare mosquito invasion in the region.

Lots of organizations try to preserve this beautiful natural area. Enthusiastic volunteers also organise annual environmental days to clean up the area around the estuary from the huge amount of rubbish. Students from our school also take part in these activities every year. The Ornithological Society does a lot to save the bird species living in the area. There is also an ornithology workshop at the local leisure centre, which is attended by our students. They are involved in bird ringing and in the creation of bird habitats in the Dögös area.

The most beautiful attraction of our city is the water mill. It is situated in the DÖGÖS nature reserve. The mill is accessed by the longest completely wooden covered bridge in Europe. In the area of the mill there is a folklore open - air museum. Directly at the mill, a water milling museum was established which features exhibits including a unique machine for production of fishing nets, one of the first in the world. The boat mill is also among Slovakia's national cultural heritage sites.

The milling industry in Csallóköz is one of the ancient professions, the first structures were built sometime in the 8th - 9th century. Over time, hundreds of mills were functioning on the rivers of Csallóköz. As I speak now, only three of them remained. One is located in Gúta/Kolárovo. As time passed, the mills increasingly lost their significance, meanwhile the steam mills took their place. Later on engine-driven mills as well as electric ones appeared. The original mill was built in 1920 which was standing on a two parallel swimming, anchored boat. It was running until 1945, but it burned down under mysterious circumstances. People started rebuilding it in the 70s, the construction was finished in 1982. After all, the mill took its final place in 1995, ever since that, it's a part of the national cultural heritage. At the moment, it is functioning as a Mill Museum, but the reconstruction and maintenance cost a ton of money since it's permanently in water. In this manner, the timberwork quickly gets messed up. This year, the replacement of the mill - wheel cost 30,000 euros. The water mill association also arranges environmental programs for the student groups. The main mission for this association is to teach today's generation about organic education/ecology.

Beside lots of others, children can have the opportunity to know how our ancestors could use so many natural energies without polluting the nature. Ongoing climate change, affects each of us. Therefore, it is crucial to be able to identify problems and implement the right adaption and mitigation measures.



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Worksheet activity

1. What is the purpose of the Ramsar Convention?
2. Which famous researcher has visited the Csallóköz region?
3. What is the impact of climate change on the Dögös nature reserve?
4. What were the negative consequences of the swallows' drastic disappearance?
5. What activities does the Ornithological Society contribute to reducing the negative impacts of climate change?
6. Since what century did water mills operate?
7. How many water mills were there in the past on the rivers of the Csallóköz?
8. When did the water mills in the Csallóköz lose their importance?
9. How long did the original watermill on the Little Danube operate?
10. How does climate change affect the cultural and natural heritage of Kolárovo?