



Zuzana Obertová Faculty of Arts, Comenius University in Bratislava

Białowieża Primeval Forest – Biodiversity Treasure in Poland

Teaching lessons: 2 (90 minutes)

Correlation with the subjects: Selected Topics from Polish Culture, Geography of Poland

Target group: students of Polish Studies abroad, students of Central European Studies, students of Slavic Studies with knowledge of English

Learning objectives:

Students:

- know basic information about the Białowieża Forest
- know about the biodiversity of the Białowieża Forest
- are able to identify the main reasons for the protection of the Białowieża Forest
- can name several species of fauna and flora in the Białowieża Forest
- are able to identify ways of protecting biodiversity in the Białowieża Forest
- understand the difference between a forest of economic use and a protected forest
- are sensitised to the topic of biodiversity conservation
- are aware of the importance of biodiversity conservation in the environment
- strengthen their critical thinking

Methods:

- individual reading of literature
- group work
- individual work
- brainstorming

Teaching aids:

board, projector, computer for the teacher





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- students are provided with a computer or other device with internet access
- work sheet (see Appendix 1)
- quiz (see Appendix 2)

Sources:

Video on the basic principles of UNESCO World Heritage *World Heritage explained*: https://www.youtube.com/watch?v=lOzxUVCCSuq [accessed 25.01.2023]

The Białowieża forest description by UNESCO: https://whc.unesco.org/en/list/33/ [accessed 25.01.2023]

Documentary film *The Primeval Forest of Białowieża*, available online: https://www.youtube.com/watch?v=veVQQXfbe28 [accessed 25.01.2023]

Learning procedure:

1. Introduction into the topic – 20 minutes

At the beginning of the lesson, the teacher will start a conversation with the students about the UNESCO World Heritage List by asking stimulating questions: What is the UNESCO World Heritage List? What can be inscribed on this list? Do you know specific sites in your country or abroad? The teacher can write the key words on the board.

After the discussion/free exchange of ideas, the teacher will show the students a video on the basic principles of UNESCO *World Heritage explained*: https://www.youtube.com/watch?v=lOzxUVCCSug

The teacher hands out worksheets to the students. Based on the discussion and the video, the teacher asks the students to work in pairs to prepare a short description of the Białowieża Forest as a UNESCO World Heritage Site. They should present their hypotheses and assumptions and try to answer the following questions: What type of site is it? Why do you think it was included on the list? What might be the universal outstanding value? How do you think this site is protected? When do you think it was inscribed on the World Heritage List? Students write their answers on the worksheet in the space provided. Students then share their answers with the whole group. The teacher facilitates the discussion but does not correct any answers. At the end, the teacher reminds the students that they will be able to check the validity of their ideas in a moment.







2. Getting know the Białowieża Forest – 20 minutes

The teacher hands out a text about the Białowieża Forest by UNESCO to the students. Students work in pairs and search the text for answers to almost identical questions as before: What type of site is it? Why was it included on the list? What is the universal outstanding value? How is this site protected? When was it inscribed on the World Heritage List? They write their answers in the space provided on the worksheet. At the end, they evaluate whether their assumptions agree with the facts. They present the results to the group, the teacher facilitates the presentations and corrects the answers.

The teacher asks the students to read the text again and answer the other questions in the workbook: In which countries is the Białowieża Forest located? What is its area? What types of ecosystems are part of the forest (3)? Give an example of 3 animal and 3 plant species living in the forest. Students work independently, the answers to the questions are checked by the whole group together.

3. Biodiversity of the Białowieża Forest-35 minutes

One of the greatest values of the Białowieża Forest is its unique and tremendous biodiversity. In the text about the forest provided by UNESCO, the students have already been introduced to the fact that the Białowieża Forest contains several natural ecosystems with different vegetation and is home to 59 species of mammals, more than 250 species of birds, 13 species of amphibians, 7 species of reptiles and more than 12,000 species of invertebrates. To visualise this biodiversity, students will watch a Dutch-produced documentary with English subtitles *The Primeval Forest of Białowieża*: https://www.youtube.com/watch?v=veVQQXfbe28. Before starting the film, the teacher asks the students to write down as many animal and plant species as possible that will be mentioned or shown in the film. As the film is subtitled in English, students write down the names in English.

The following species are mentioned or shown in the film; animals: red deer, roe deer, swan, (moor) frog, common crane, jay, European bison, elk, tortoiseshell butterfly, beaver, crested tit, mouse, (ringed) snake, tundra vole, fox, badger, weasel, woodpecker, lynx, squirrel, wolf, seven-spot ladybird; plants: conifer (pine tree, spruce), coltsfoot, wood anemone, liverwort, oak tree.

It is necessary to update the information on the number of bison living in the forest, currently it is about 500 specimens.

After watching the film, the students check each other's list of the species they have written down. The teacher corrects and, if necessary, completes the answers. The teacher then asks the students to try to classify the animals according to the species they belong to (birds,







amphibians, reptiles, invertebrates, mammals) and to see if they have at least one example for each species.

A guarantee of biodiversity conservation is to leave natural processes free from human intervention. The teacher presents two photographs to the students. One shows the Białowieża forest¹, the other shows a standard forest of economic use². The teacher asks the students to indicate the differences between the photographs. Possible answers are: in the forest of economic use there is a road for cars, there are trees of one kind, the forest is sparse, there are no fallen old trees on the ground, while in the primeval forest there are no roads for cars or people, there are several kinds of trees and lower shrubs, there are many rotten trunks on the ground on which mushrooms grow. The teacher draws attention to particular details when necessary. Then he/she stimulates the students with further questions: Who takes care of the forest of economic use and who takes care of the protected forest? Where is there more biodiversity and why? What is the value of a dusty stump in the two types of forest?

4. Conclusion – 15 minutes

To review the knowledge, the teacher gives students a short quiz, which can be prepared in the Kahoot application even in the free version: kahoot.com. Students complete it online in class, and the quiz is automatically graded on an ongoing basis. If necessary, the teacher comments on the questions and answers.

Finally, the teacher gives students homework from the worksheet – students match the correct name to the photo of the animal or plant. The students are asked to look up the names of the plants and animals in their mother tongue or in another foreign language they are learning.

List of plants and animals in photos:

1. jay, 2. tortoiseshell butterfly, 3. weasel, 4. moor frog, 5. crested tit, 6. pine, 7. oak, 8. coltsfoot, 9. wood anemone, 10. liverwort (anemone hepatica), 11. lynx, 12. European bison

https://commons.wikimedia.org/wiki/File:Bialowieza_National_Park_2019i.jpg

https://commons.wikimedia.org/wiki/File:Hospod%C3%A1%C5%99sk%C3%BD les na severn%C3%ADm %C3%BAbo%C4%8D%C3%AD Veselsk%C3%A9ho vrchu - panoramio.jpg

¹ Creative Commons licenced photograph:

² Creative Commons licenced photograph:





Appendix 1

Białowieża Primeval Forest – Biodiversity Treasure in Poland Work sheet

The Białowieża Forest characteristics

- I. Watch a video on the basic principles of UNESCO World Heritage. Try to give your own answers to the questions.
- 1. What type of UNESCO site is it?
- 2. Why do you think it was included on the UNESCO World Heritage List?
- 3. What might be the universal outstanding value in your opinion?
- 4. How do you think this site is protected?
- 5. When do you think it was inscribed on the UNESCO World Heritage List?
- II. Read the official description of the Białowieża Forest on the UNESCO website and answer the questions. Compare the answers to the first 5 questions with the answers from Task I.
- 1. What type of UNESCO site is it?
- 2. Why was it included on the UNESCO World Heritage List?
- 3. What is the universal outstanding value of the Białowieża Forest?
- 4. How is this site protected?
- 5. When was it inscribed on the World Heritage List?
- 6. In what countries does the Białowieża Forest lie?
- 7. What is the size of the forest and what is the size of the national park?
- 8. What types of ecosystems are part of the forest? (List at least 3).
- 9. Give an example of 3 animal and 3 plant species living in the forest.





Biodiversity of the Białowieża forest

I. Watch the film <i>The Primeval Forest of Białowieża</i> and write down the names of the animals and plants that are mentioned or depicted in the film.
II. Divide the listed animals by species.
III. Compare the following photos. Photo 1 shows the Białowieża forest³, photo 2 show the forest of economic use⁴. What differences do you see between them?

https://commons.wikimedia.org/wiki/File:Bialowieza_National_Park_2019i.jpg

https://commons.wikimedia.org/wiki/File:Hospod%C3%A1%C5%99sk%C3%BD les na severn%C3%ADm %C3%BAbo%C4%8D%C3%AD Veselsk%C3%A9ho vrchu - panoramio.jpg

³ Creative Commons licenced photograph:

⁴ Creative Commons licenced photograph:





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The project is co-financed by the Governments of Czechia, Hungary, Poland and Slovakia through Visegrad Grants from International Visegrad Fund. The mission of the fund is to advance ideas for sustainable regional cooperation in Central Europe. This project was made possible through Strategic Grant No. 22020071 from the International Visegrad Fund.







IV. The plants and animals in the photographs⁵ are found in the Białowieża Forest. Write the names in English, your native language and possibly another language you are learning.













⁵ Creative Commons licensed photos from commons.wikimedia.org





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Appendix 2

Biodiversity of the Białowieża Forest

Quiz

- 1. The Białowieża Forest is located on the border of Poland and ...
- a. Lithuania
- b. Belarus
- c. Slovakia
- d. Ukraine
- 2. The greatest value of the Białowieża Forest is:
- a. preserved parts of the original primeval forest
- b. occurrence of lynx
- c. wetlands
- d. occurrence of lycopodium
- 3. It is one of the oldest national parks in Poland. When was it created?
- a. 1920
- b. 1938
- c. 1954
- d. 1988
- 4. Which animal is the symbol of the national park?
- a. otter
- b. deer
- c. lynx
- d. European bison
- 5. The area of the national park is approx.:
- a. 20 km²
- b. 80 km²
- c. 105 km²
- d. over 200 km²
- 6. When was the Białowieża Forest inscribed on the UNESCO World Heritage List?
- a. early 1970s
- b. in the late 1970s
- c. in the 1980s
- d. after 2000
- 7. How many European bisons live in the Białowieża Forest?
- a. around 200
- b. around 500





- c. around 1000
- d. over 1500

8. In which Polish voivodeship is the forest located?

- a. Masovian voivodeship
- b. Lublin voivodeship
- c. Pomeranian voivodeship
- d. Podlaskie voivodeship

9. Home to fungi, insects and plants at once, it is:

- a. rotten stump
- b. meadow
- c. lake
- d. hair of the European bison

10. Which animal is in the picture?6



- a. domestic cat
- b. wild cat
- c. lynx
- d. puma

Correct answers: 1b, 2a, 3b, 4d, 5c, 6b, 7b, 8d, 9a, 10c

⁶ Creative Commons licenced photograph: https://commons.wikimedia.org/wiki/File:Lynx_DSCF0523.jpg