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Learning about the White Stork





INTRODUCTION

In this plan, the students will be introduced to the White Stork through a letter that arrives at the school which is addressed to them and is written by a stork called “Long Beak”. Through that letter the students will learn about the reasons why the White Stork is under threat, all of which are told by the stork itself.

Even though White Storks face great threats resulting from human activities, this has not attracted much attention from the public and the media. That is why it is important that students conduct research to familiarize themselves with facts regarding the life of White Storks. To motivate students to engage into taking action, a relationship with a White Stork is established through exchanging letters: students read a letter by a stork describing the difficult situation it is in and then they undertake the responsibility to work on solutions and report back.

OBJECTIVES

- To raise awareness about the threats that storks face in terms of their habitat
- To develop a deeper understanding of the impact of human activity to the environment
- To focus on individual and social responsibility about this issue
- To promote sustainable development and thus behavioural change as a new worldview of life
- To focus on reasoning, argumentation and problem-solving strategies
- To empower students to use and improve science process skills and critical thinking skills.

DURATION

- 2 class periods for the beginning activity
- A couple of weeks for the implementation of the actions

MATERIALS

- A letter (**Resource 1**) written by Long Beak, the stork, (for both the teacher to read to the students and to the students to work on in pairs).
- White board and markers
- Cardboards, papers and markers (multicolored)
- Books related to environmental education (storks, agriculture, pesticides, human impact, wind turbines etc.)
- PC and Internet resources for webquest

Dear all,

I'm writing this letter to you from Africa, after finishing a long and tiring trip from Istanbul. When I left Istanbul, it was September, the days you've started the school year.

I think the weather is cold now there. Here, it's like an early summer. I would like to inform you about my trip. I passed through many countries with my friends. This year our trip took a bit longer than in previous years because some of my friends got ill when they ate some food that were full of pesticides and had difficulties to find safe food.

Some of them crashed on tall building windows, some others crashed on wind turbines and airplane fans. My friend White Wings was shot by a hunter. Her leg was broken and she couldn't fly. We had to leave her there and continue our flight.

We were very tired, so we started looking for somewhere to rest. I saw something like a line in the fog. I told my friends to land on that. But unfortunately the first one who landed was burnt because of the high voltage.

So my lovely friends, I hope you do well and have success in school. Don't forget to write back to me. You can find my address on the envelope. We will stay here until spring. Hope to see you playing in the school garden in April.

With love
Long Beak



Stage 1: Motivation of students Warm-up

The teacher starts by talking about Long Beak and reads to the students a letter written by the stork (**Resources 1**). He/she asks a few questions to the class:

- What kind of living creatures are the storks?
- Why do the storks migrate?
- Where was Long Beak when he wrote this letter to you?
- What kind of information do you get from this letter?

After a short question-answer activity, the teacher distributes the letter to the students to work in pairs. The students have to find and underline the reasons why white storks are under threat.

Then, the teacher asks the students what they have found out about the threats and write the answers on the white board.

Stage 2: Research

The teacher explains to the students that they are required to come up with a solution for one of the threats that the White Stork is facing. In order to do that, the students are divided into groups and each group is assigned to a different threat-topic.

Once the students have all been assigned to a group, the teacher makes suggestions about books and internet resources, or NGOs (e.g. Hellenic Ornithological Society http://www.ornithologiki.gr/page_in.php?tID=79677&slD=23) that provide informative material about the White Storks, and guides them on how to find information on the topic. At the end of this activity, the teacher asks them to prepare a drawing and present their work about the solutions they have come up with.

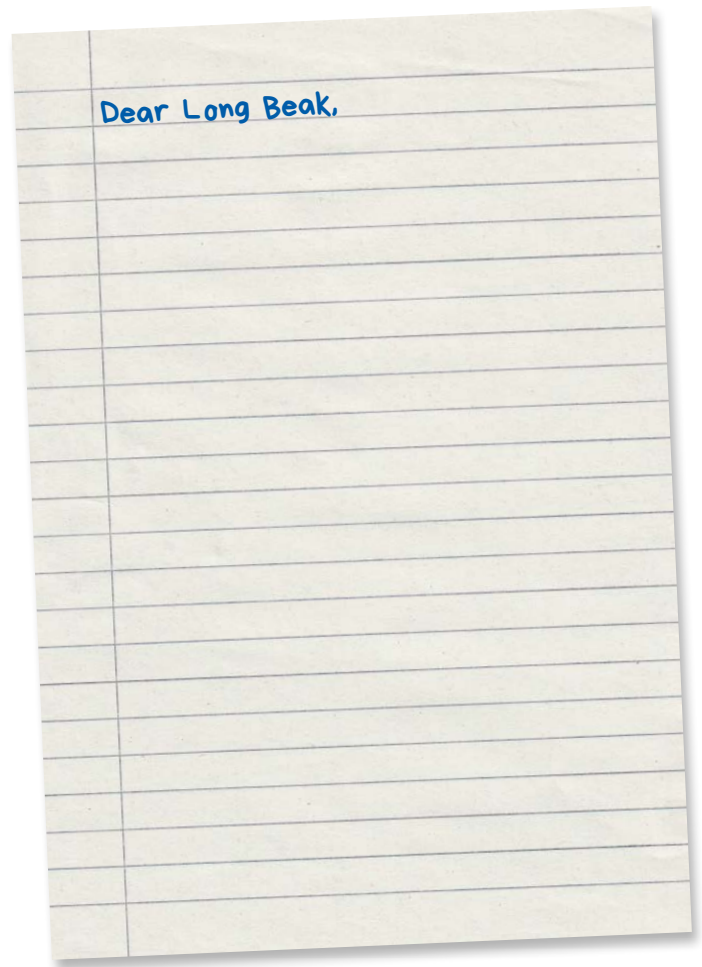


Stage 3: Presentation of research

In upcoming lessons, students will make action plans regarding their ideas and put them into practice during the process. Some possible actions can be:

- Visit an organic farm in order to discuss about agriculture/ security in food/food quality etc.
- Visit a conventional farm and ask them if they use pesticides, have discussions about the impacts of pesticides, tell them that it's harmful for the environment etc.
- Prepare a poster, a brochure, an animation film about the advantages of consuming organic products.
- Cooperation with municipalities, requirements for non-reflective glasses in the very tall buildings before giving building license, adding legislation or other measures on migratory paths of storks, holding a campaign to inform the school and the local community.

At the end, the students write a letter to Long Beak to inform him about the studies they've carried out and the actions taken. Instead of posting the letters, they could organize an exhibition that includes their work and inform the audience - other students, parents, other teachers, etc.



Game

Evaluation

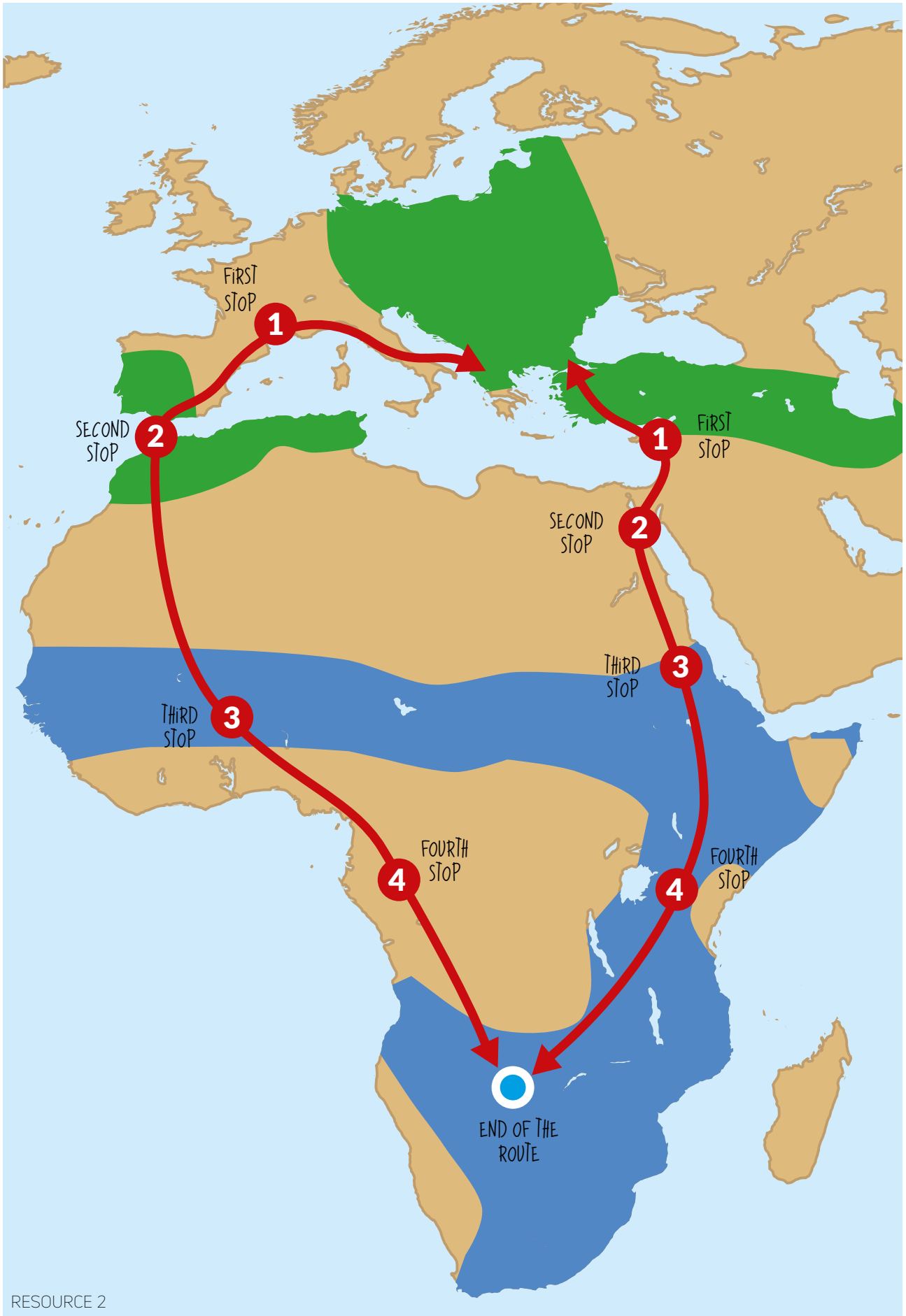
A game is an interesting way to assess students' understanding of the topic. This game could stand separately from the whole activity plan, or be incorporated in earlier stages of the plan.

INTRODUCTION

This is a multiple activity in the form of a board game where students undertake missions related to storks. They learn all about the context of the storks while developing various skills (communication, collaboration, creativity).

OBJECTIVES

- To raise students' awareness about *Ciconia ciconia*
- To create a positive attitude towards the conservation of endangered species
- To provide students with information about the physical appearance, nutrition, reproduction, habits of storks and assess the knowledge already gained
- To allow students to express themselves through various creative activities, as well as to strengthen cooperation and teamwork among students
- To relate to the 13th Sustainable Development Goal - Climate Action, to the National Curriculum
- To relate the 15th Sustainable Development Goal - Living on Earth, Preserving Biodiversity to the National Curriculum.



RESOURCE 2



DURATION

- 2-3 class periods to create the game
- 1 class period to play the game

MATERIALS

- Map with the route of the storks' migration from Marmara, Turkey to South Africa and from Pillipiada, the capital of storks in Greece and Europe, through the Gibraltar to southern Africa. In **Resource 2** you will find a map of migrating routes, in case you find it difficult to visualize it.
- Knowledge cards giving information about the life and behaviour of White Storks and the environmentally friendly behaviour of humans; 5 white/question and 5 green/answer cards. In **Resource 3** you will find examples of cards that you and your students can modify.
- Small pieces of wood, straw or pieces of coloured cardboard (**Resource 4**) and glue to construct a stork's nest.
- Aesop's fable "The fox and the stork"
- Paper and pencil to solve an acrostic puzzle
- A puzzle in four pieces displaying the picture of a stork. In **Resource 5** you will find an example of a white stork that you can cut in four pieces.

ANSWER

QUESTION

What do the white storks eat?

QUESTION

Where do they build their nests?

QUESTION

What materials do they need for their nests?

QUESTION

In which season do they return to their nests?

QUESTION

What kind of dangers do the White Storks face?

THE PLOT BEHIND THE GAME

Winter is coming and storks are preparing for their trip to South Africa. A group of storks, living near Marmara in Turkey, “the Anatolians”, are preparing for their migratory journey to southern Africa. Another group of storks, living in the west Greece in Phillipiada, “the Europeans” are also preparing for their migratory journey to the same destination.

These two groups follow a different route with the same destination, South Africa. The population of storks living in Eastern Europe and West Asia, «the Anatolians», migrates in the autumn to the southeast through Turkey, the Middle East and from there to Africa.

The Storks living in Western Europe, «the Europeans,» migrate to the southwest and arrive in Africa through Gibraltar. Different routes, same destination.

Over the last few years’ storks have faced many survival problems as the climate has changed dramatically in the places they live. Droughts are followed by heavy rainfall and floods, temperatures rise and the wetlands where storks live and feed are drying up resulting in the reduction of their food supply and habitat. In addition, pesticides used by farmers in the past few years have been poisoning their crops, and the storks themselves. In addition power lines often cause electrocution.

This year’s migratory trip to Africa will unfortunately include fewer storks. Many have been poisoned by pesticides and others are no longer able to follow the return journey and will be left behind facing a heavy winter. The storks, however, have prepared their journey knowing these difficulties. They will follow the path they have known for many years and will stop at 4 stations to rest.

Children will help storks by engaging in relevant activities to get to know them better and understand their value and contribution to maintaining the ecosystem.

They stop at four points:

- **1st stop (duration 15 minutes):**
Playing a knowledge quiz
- **2nd stop (duration 15 minutes):**
Building a nest
- **3rd stop (duration 15 minutes):**
Solve the acrostic puzzle / Make a list of words used for “stork” in different languages
- **4th stop (duration 15 minutes):**
Dramatization of the tale “The fox and the stork”

INSTRUCTIONS

Students are divided into two groups. The beginning of the trip, the four stations and the final destination have already been marked on the map. The two groups begin at the same time: The Anatolians from Marmara in Turkey and the Europeans from Greece in Philipiada. The two groups have to stop in 4 stations and have to carry out the same activities/missions. Once they finish an activity, they get a jigsaw puzzle piece to make the image of a white stork at the end, by the time they reach Africa.

The game starts: Fly and arrive to France/Cyprus for a rest. If you want to continue you have to answer five questions correctly.

1st Stop: Playing a knowledge quiz

- What do the White Storks eat?
- Where do they build their nests?
- What materials do they need for their nests?
- In which season do they return to their nests?
- What is the colour of the stork’s legs and feathers?
- Is the male or the female stork bigger?
- In which places do they live?
- What kind of dangers do the White Storks face?

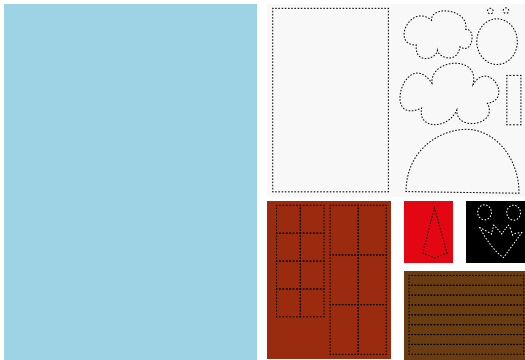
When the students answer correctly, they continue to the second station in Gibraltar/Egypt and they take a piece of the jigsaw puzzle.

2nd Stop: Building a nest

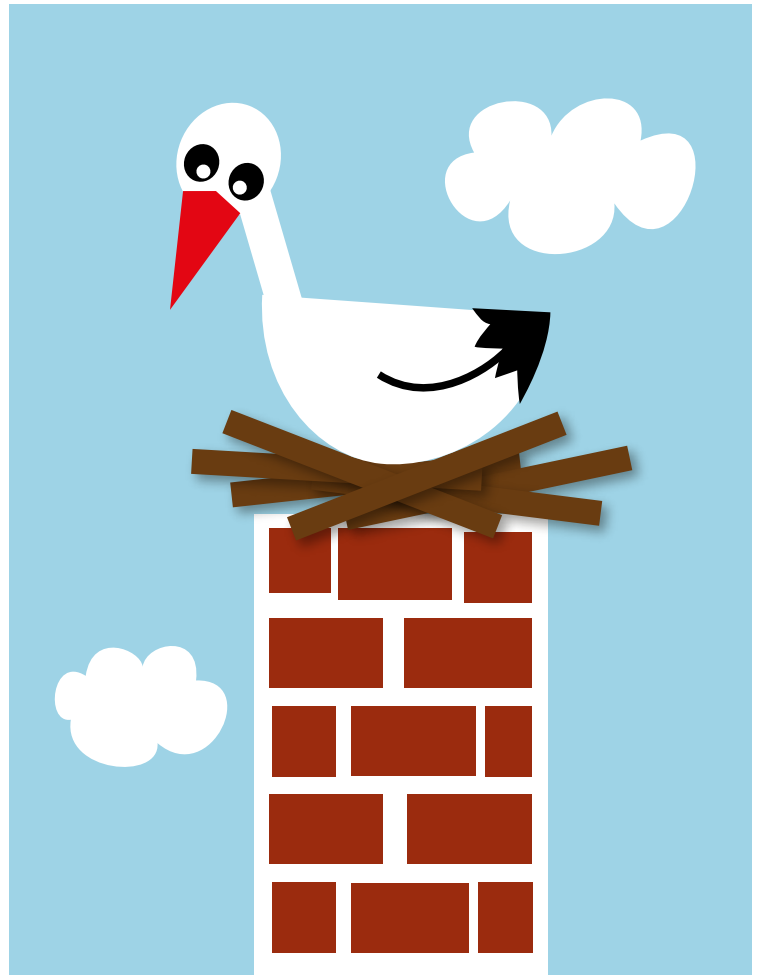
The students have to build a nest for the tired storks. They can use materials like small pieces of wood, straw, glue etc., or do a paperwork collage as shown below.

When the students complete the activity, they continue to the third stop (Ghana/Ethiopia) and they take a piece of the jigsaw puzzle.

At **Resource 4** you will find a file containing the shapes and colors of the pieces you have to cut and assemble in order to build the nest.



RESOURCE 4



3rd Stop: Language

A) Solve the acrostic puzzle:

1. The storks eat them.
2. They live in this country.
3. The storks migrate to Africa _____.
4. The storks build their nests on the _____ of houses, churches, mosques.
5. The storks are _____ birds.

1. **S** _____

2. **T** _____

3. **O** _____

4. **R** _____

5. **K** _____

Answers: 1. Snakes, 2. Turkey, 3. Overland, 4. Roofs, 5. Kind

Circle the names of the stork in English, Greek and Turkish.

πελαργός

leylek

lejlek

λελέκι

stork

stork

cicogna

cegonha

When the students complete the activity, they continue to the 4th stop Gabon/Kenya and they take a piece of the jigsaw puzzle.

4th Stop: Dramatization (The Fox and the Stork)

The students should read the story "The Fox and the Stork" from the book of Aesops' fables. Then they create a dramatization of the story and each group presents the play to the other.

Finally, all storks arrive to Africa, in Namibia, and talk about their journey, exchanging memories of the dangers that they have come across.

They take the last piece of jigsaw puzzle and finally, they construct the picture of a white stork with the four pieces of the jigsaw puzzle ([Resource 5](#)).





PROJECT PARTNERS

Hellenic Society for the Protection of Nature (HSPN)

Founded in 1951 in Greece, the HSPN is the oldest environmental organization in Greece and acts as a non-profit association. The HSPN represents in Greece the Foundation for Environmental Education (FEE), a global educational organization, and operates all five of its international Programmes for environmental education and sustainable management: “Eco-Schools”, “Young Reporters for the Environment”, “Learning about Forests”, “Blue Flag” and “Green Key”. At present, HSPN is active in five main areas: Environmental Interventions, Nature Conservation, Environmental Education, Sustainable Management in the Tourism Sector, Public Awareness Raising. For more information, visit: <http://eepf.gr/en>

Foundation for Environmental Education in Turkey (TÜRÇEV - Türkiye Çevre Eğitim Vakfı)

Founded in 1993, TÜRÇEV operates FEE's programmes in Turkey. TÜRÇEV initiated its action with the “Blue Flag” in 1993 and then joined other FEE Programmes: “Young Reporters for the Environment” and “Eco-Schools” in 1995, “Learning about Forests” in 2004 and “Green Key” in 2011. TÜRÇEV's central office is in Ankara and branch offices are in Antalya, Bodrum (Muğla) and İzmir. For more information, visit: <http://www.turcev.org.tr>

ABOUT THE PROJECT

YUNUS - Theoretical Approaches and Practical Implementations in Environmental Education

This project is implemented within the framework of “Civil Society Dialogue between EU and Turkey - Grant Scheme V” (CSD-V). The overall objective of the CSD Programme is to bring together civil society organizations from Turkey and the EU around common topics, so they can exchange knowledge and experience, and build a sustained dialogue between them. Specific objectives of the YUNUS project include the establishment of a sustainable network for cooperation of Greek and Turkish stakeholders in the field of Education, as well as the promotion of the EU legislation, policies and practices to the society of Turkey. The project includes the development of common environmental education programmes focusing on three iconic species

present in both countries: The **Mediterranean Monk Seal** (*Monachus monachus*); the **Loggerhead Sea Turtle** (*Caretta caretta*) and the **White Stork** (*Ciconia ciconia*). In addition, a website and three short movies will act complementarily, to provide necessary information and knowledge to teachers and other interested parties.

The HSPN is the coordinator of the project, responsible for the overall implementation. TÜRÇEV, as the second partner, is responsible for a number of activities within the project. The YUNUS project started on April 1st 2019 and has a duration of 24 months.

As part of the activities, teachers from both countries participated in a summer school held in Alonissos, Greece (July 10-15, 2019), the outcome of which was the creation of the three environmental education programmes to be implemented in both Greek and Turkish schools. The educational material was developed by the participants during the summer school. Firstly, there was pilot implementation at schools in Greece and Turkey during the 2019-2020 school year. After that, experts from HSPN and TÜRÇEV collected the feedback given by the participating teachers and finalised the educational material. This project will lead to continuous and widespread cooperation between the partners and contribute in making new generations more environmentally conscious.

ABOUT THE PROGRAMME

The “Civil Society Dialogue between EU and Turkey” Programme is implemented with the financial support of the EU. In 2006, it was established by the Directorate for EU Affairs and served as a platform for civil society organizations (NGOs) from EU member states and Turkey to meet for common issues and then societies to get to know each other, exchange information and establish a sustainable dialogue between them. The first implementation of the Programme, started in 2008. Civil Society Dialogue between EU and Turkey - Grant Scheme (CSD) was put into practice in the scope of IPA - Instrument for Pre-Accession Assistance. Through this Programme, a total amount of 42.5 million euros was provided to 350 dialogue projects run as partnerships between NGOs from Turkey and EU member or candidate countries. Accepted projects targeted gender equality, education, agriculture, health, food, environment etc. For more information visit <http://siviltoplumdiyalogu.org/>

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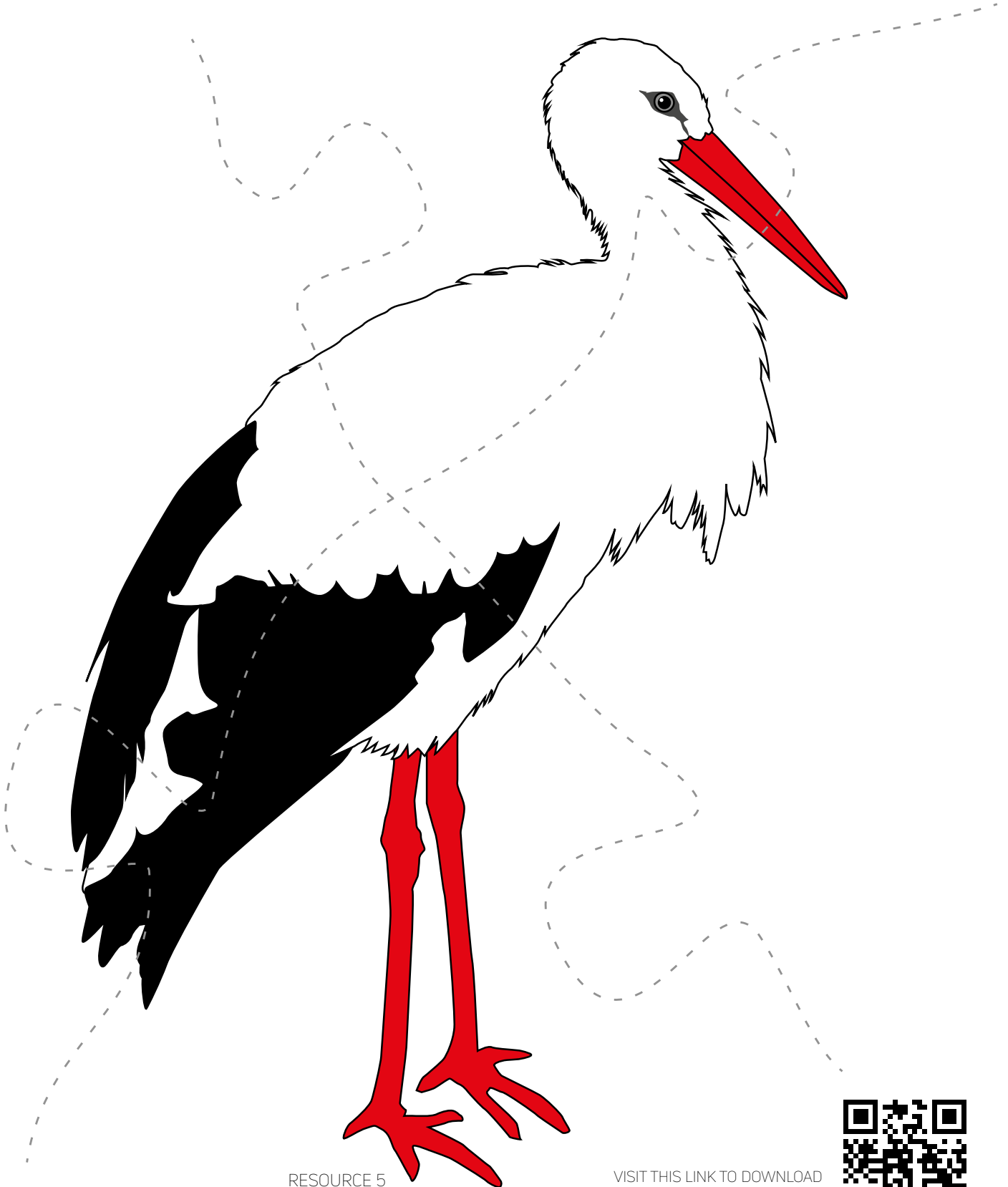
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The puzzle of the

White Stork



RESOURCE 5

VISIT THIS LINK TO DOWNLOAD
ALL THE RESOURCES:
<http://yunusproject.net>

