

SEEING THE WORLD THROUGH NATURE

SCHOOL WORK SHEETS

BLOCK 10:

FOREST BIRDS



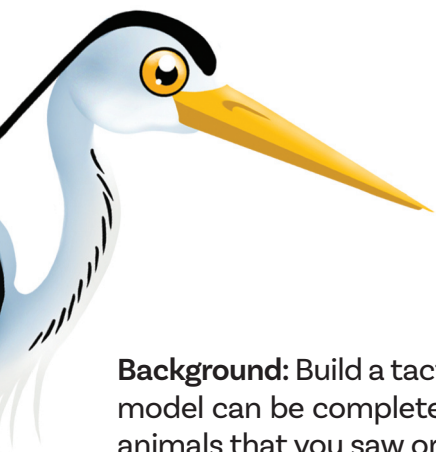


Download the project's app

To complete some of the tasks outlined in the school work sheets you will need our special smartphone app.
To download this app, please go to the online app store (App Store for iOS or Google Play for Android)
and enter the name "Meet the Birds" in the search field.



Co-funded by the
Erasmus+ Programme
of the European Union



BLOCK 10

FOREST BIRDS

Background: Build a tactile model of a forest in the classroom. After coming back from the field trip, the model can be completed (with the participation of the students) with the addition of birds and other animals that you saw or heard. You can also add any natural items that you collected in the forest.

DETAILED PROBLEMS	What is a forest?	What species of bird can you encounter in the forest? What animals (including birds) use the forest?	How are the organisms living in the forest interconnected?
Activities in the field	Go for a trip to a forest. Pay attention to the trees that are found there. Choose a tree and hug it. Be mindful, close your eyes and take a deep breath. Listen to the voices of nature. Can you see the diversity that surrounds you? Try to identify the trees that grow there using a field guide. Think about the type of forest that you are visiting. Is it a coniferous or a deciduous forest?	During the trip, try to identify the different birds that you see and hear. A guide to forest birds will be helpful here, as will sound recordings: both are available in our special smartphone app.	Dead wood plays a very important role in the forest. It is home to many organisms and is part of the circulation of elements and of forest regeneration. When in the forest with students, look for a dead tree (S10/C/1) and see if anything lives on or in it.
Indoor observations and experiments		Discuss a year in the life of a Barn Owl (S10/B/1).	
Artistic tasks	Use the items collected during your forest trip to create your own forest (S10/A/1).	During the trip, collect leaves to make leaf animals (S10/B/2), to illustrate forest inhabitants.	Make a poster for International Forest Day (March 21 st), showing the importance of old and dead trees.
Linguistic and written tasks	While in the forest, enhance the curiosity of the children and train their creativity by asking the forest a question (S10/A/2). Remember that in this task it is not the answer but enhancing mindfulness through asking questions that is most important.	Discuss a year in the life of a Barn Owl (S10/B/1). Write a short story based on the brief scenario descriptions (S10/C/2).	Discuss the impacts of humans on the forest when reading Scenario 4 (S10/C/2).
Mathematical tasks	There are many items collected in the forest that can be used in a forest maths exercise (S10/A/3).		
Games and competitions		Play the Woodpecker Game with the students (S10/B/3).	



OBSERVING THE FOREST

Guidelines for teachers: Split the students into pairs. Pair able-sighted students with visually impaired students to aid filling in the table. Give the students assistance while collecting forest items.

What you will need

- Shoebox or similar
- Observation card or voice recorder

Tasks and questions

- 1 Carefully observe the forest around you. Are there animals hidden between the plants? If so, write down your observations on the observation card or record them using the voice recorder.
- 2 Collect treasures of the forest and put them into your shoebox. **Warning!** Collect only specimens lying on the ground. Do not remove anything else.
- 3 Organise collections and observations by creating a mock-up of forest layers.

FOREST LAYER?	LOCATION?	WHAT ANIMALS DID YOU FIND?
Forest canopy	Deciduous tree	Squirrel
Ground layer	Mushroom	Snail



ASK A QUESTION OF THE FOREST

What you will need

- A group consisting of a minimum of five students.
- A forest object that you like very much. It can be a tree, trunk, shrub, holes in the ground, or whatever is interesting to you.
- Possibly something to sit on.

Tasks and questions

- 1 Sit around the chosen object and look at it for a moment.
- 2 Think about the question you can ask it. For example:
 - a. Are there any holes in this tree? If so, what does this mean?
 - b. How old is this tree? How can you work out the age of a tree?
 - c. If the tree is many years old, does it remember any significant historical events?
 - d. Did this hole occur naturally, or did something make it?
- 3 Speak the questions out loud so that others in the circle can hear. You can ask any questions you want. There are no bad questions here. Anyone can ask any number of questions. Follow what your imagination tells you.
- 4 You finish the fun when ideas run out.

Consider:

- Was this an easy task?
- Which question did you like best, and why?
- Do you know the answer to any of the questions?

Continued next page....



FOREST MATHEMATICS

I. Forest harvest

What you will need

- Various forest treasures (leaves, seeds, cones, fruits, sticks, etc)
- Plastic trays

Tasks and questions

- 1 Gather your forest treasures together.
- 2 How can you separate them?
- 3 What other collections can you come up with?



(PX)

II. Axis of symmetry and mirror reflection

Guidelines for teachers: Cut the leaves into halves for students, and help them glue them onto the card, if necessary. They should be tactile enough to make it possible to tell their shape by touch.

What you will need

- Leaves of different tree species – three leaves from each species
- Card
- Scissors
- Glue or double-sided tape
- Crayons

Tasks and questions

- 1 Look closely at the leaves. What shapes and colours are they?
- 2 Cut each leaf along the primary vein.
- 3 Glue half of the leaf to the paper and draw the missing piece as though the leaf was reflected in a mirror. Remember also to colour it in as accurately as possible.
- 4 What kind of trees did you draw the leaves of?
- 5 Which leaf was the easiest to draw, and which one was the most difficult?



III. Forest measurement

Guidelines for teachers: Ensure that the measurement process is tactile and universally accessible for all students.

What you will need

- Different types of measures
- An object in a forest: for example, a tree

Tasks and questions

- 1 Measure the object using a measuring tape.
- 2 Measure the object using something other than the measuring tape. You can use sticks, your feet, elbows and other things you can think of.
- 3 What did you use to measure it?
- 4 In how many ways did you measure the object?
- 5 Is the result for a thin tree smaller in every measurement than for a thick tree? What does this mean?

MEASUREMENT METHOD	THIN TREE	THICK TREE
Measure (cm)		



A YEAR IN THE LIFE OF A BARN OWL

Guidelines for teachers: The story text below needs to be printed in Braille or large text for visually impaired students, or read aloud to the class.

Story

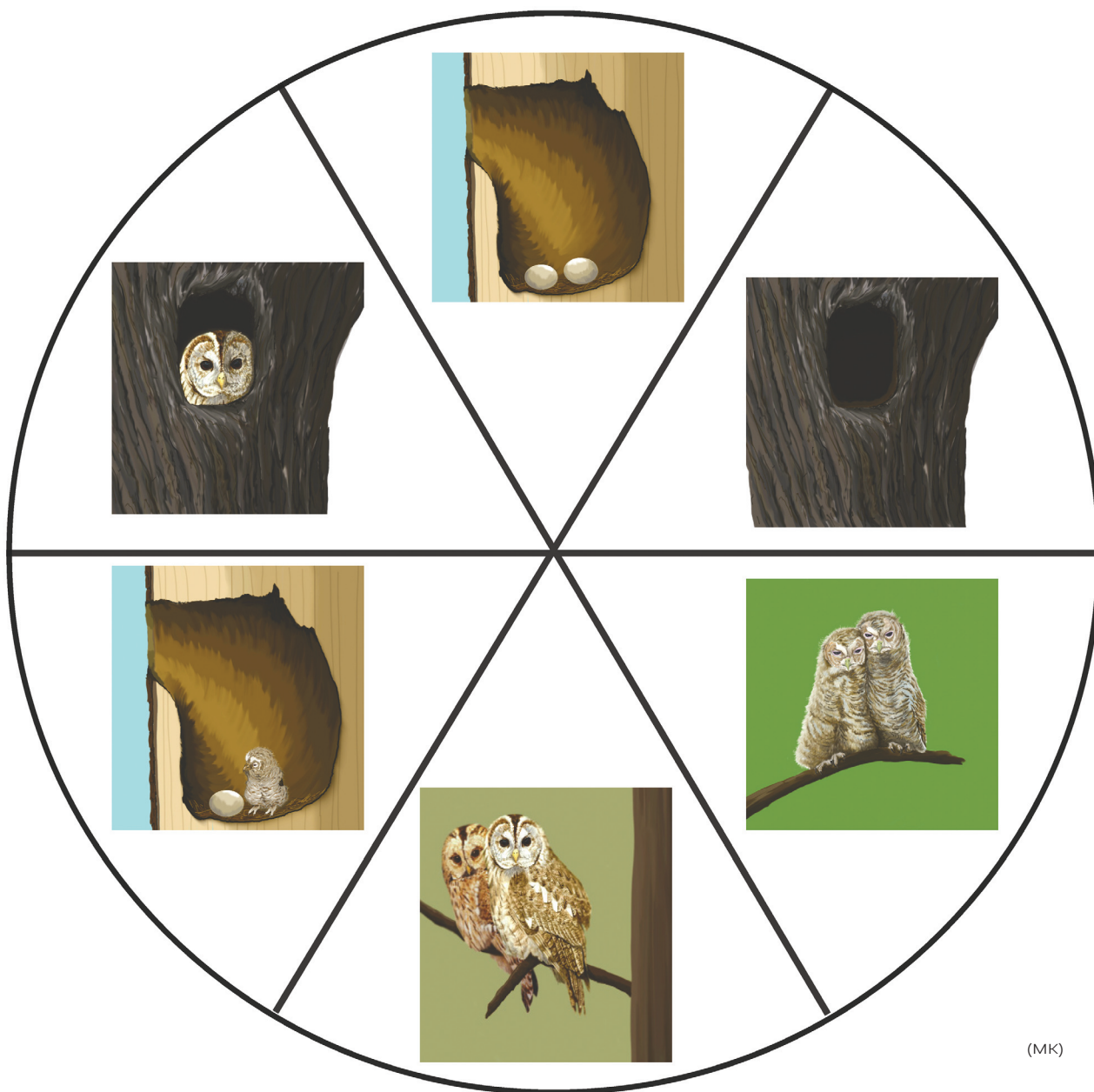
It was the beginning of May. Evening was approaching. I went to a tree, an old maple, in which an owl family lived. The silent voices of offspring suddenly died away when an adult female appeared and made discreet warning cries. Curious chicks began to look at me intensely, characteristically, in a circular manner, they took turns to view me. For a long time, the birds remained silent, and as soon as the female flew away to hunt, they began to call again with short shouts. Time after time the female came back with captured mice and fed the chicks. It got darker and night came: the time of night when all nocturnal hunting creatures, such as bats and Barn Owls are actively looking for food. A few bats flew out of the old barn. Two of them flew so close to an adult owl that it was no wonder that the bird jumped into a silent flight and flew in the other direction. The second bat, who had seen all this, made loud alarm sounds with tickling or smacking noises. Moments later, loud noises of excited chicks could be heard as the parent owl once again returned with a feast for her young.

Tasks and questions

- 1 Talk about what was happening in the owl family in May.
- 2 What happened before in the family of the forest trees? Arrange the following events in the life of the owl according to which happened first:
 - Baby owls take their first flight
 - Eggs are laid
 - Owls find a hole in a tree
 - Baby chicks grow
 - Baby chicks hatch
- 3 When do owls build nests?



A YEAR IN THE LIFE OF A TAWNY OWL



(MK)



MAKE LEAFY FOREST ANIMALS

Guidelines for teachers: Assist students with this task, as required.

What you will need

- Different leaves, fruits, seeds, sticks, twigs
- Sheet of paper
- Glue
- Scissors
- Marker
- Plasticine
- Googly eyes

Tasks and questions

- 1 Choose the materials you will make your favourite animals from.
- 2 You can cut, glue leaves together and glue your leaves to the paper to shape your favourite animal. Use your imagination.
- 3 What animal did you make?
- 4 What natural materials did you use?
- 5 Did you enjoy this exercise?





WOODPECKER GAME

Guidelines for teachers: Make sure to provide any necessary assistance to blind students with this task.

Location:

- Woods or forest, if possible, but parks would also be suitable.

What you will need

- Blindfolds
- A thick stick

Tasks and questions

- 1 Choose one student to be the woodpecker.
- 2 The woodpecker should then find a thick stick, which won't break when hit against a tree.
- 3 The rest of the group walks away and puts on the blindfolds (visually impaired students need not wear blindfolds).
- 4 When the students are ready, the woodpecker starts to peck a tree. The other students try to find the woodpecker by following the sounds he or she makes.
- 5 Decide on a signal that a child reaching the woodpecker will give, e.g., raising their arm.
- 6 Children who have finished the game can take their blindfolds off and watch the rest of the group still playing, trying not to disturb the others still taking a part.



Feathers of woodpecker



Great Spotted Woodpecker at nest hole



Tree holes made by a woodpecker

(LZ)



EXPLORING DEAD AND LIVING TREES

Guidelines for teachers: Bring some dead wood into the classroom, along with a fresh branch, and get the children to compare the feel of the bark on each.

What you will need

- Magnifying glass
- Storage containers, e.g., jars, plastic boxes, etc
- Observation card (see below)
- Pencil

Tasks and questions

- 1 Examine the dead wood carefully, answering questions from the table below.
- 2 Note down your observations in the table.
- 3 Do the same for the fresh wood.

Consider:

- 1 What is the difference between a dead tree and a living tree?
- 2 Can the same organisms be found on both trees?
- 3 Would both trees smell the same?
- 4 What does it mean if a tree is dead?
- 5 Are dead trees needed in the forest?

Observer's name:		
Date:		
THINGS TO INVESTIGATE	DEAD TREES	LIVING TREES
Is there a smell?		
Is it hard or soft?		
Is there something under the bark?		
What organisms live on the tree?		
Are there any signs that animals have fed on the bark?		
Do you have any questions?		



WRITE YOUR OWN STORY

Guidelines for teachers: Assign a scenario below to each student, describing the relevant scene to them verbally, if necessary. You may find an image corresponding to each description and give that to the students also. Get them to compose a short story based on their scenario.

Tasks and questions

- 1 Examine your card.
- 2 Invent your own story based on the description. Remember that every story is good because it was invented by you!
- 3 Present your story to other students.
- 4 If someone asks you a question about your story, try to answer it.

Sample scenarios

Scenario 1

A Red Squirrel is climbing the trunk of a tree. The squirrel has a big bushy tail, the tree trunk is covered in soft green moss, and there is a pile of acorns at the bottom of the trunk.

Scenario 2

A Blackbird sits on her nest of eggs; there are three bright blue eggs in the nest, which is hidden in between a branch and a tree trunk.

Scenario 3

A black-and-white Badger peeks out of its sett beneath a large tree, sniffing the air. It is getting dark.

Scenario 4

A person is cutting down a tree in the forest. They are holding a chainsaw. Birds are flying from the branches, while a deer is running away.

These materials for teachers working with blind and visually impaired children have been prepared within the project “Seeing the World Through Nature.” These are based on the educational resources that resulted from the project “Empowering Teachers and Pupils for a Better Life Through Nature,” and the suggestions contained therein have been adapted to work with children with impaired vision in order to enable them to learn as much as possible about nature through direct contact with it.

Non-governmental organisations involved in bird protection, partners in international federation BirdLife International, participated in the project. The Polish Society for the Protection of Birds (OTOP) was the leader of this educational initiative, which also involved the associations BirdWatch Ireland, BirdLife Malta and BirdLife Cyprus. The Polish Association for the Blind was the partner cooperating in the field of adaptation of source materials for the needs of teaching blind and visually impaired children.

Both projects were carried out with the financial support of the European Commission (Erasmus+ programme).

AUTHORS:

CONCEPT AND TEXT OF MATERIALS PREPARED WITHIN THE FRAMEWORK OF THE PROJECT, “EMPOWERING TEACHERS AND PUPILS FOR A BETTER LIFE THROUGH NATURE”:

Iwona Majcher
Katarzyna Rosińska
Ryta Suska-Wróbel

COVER DESIGN AND GRAPHICS ON THE COVER:

Wiktor Tabak

ILLUSTRATIONS:

Juan Varela (JV)
Marek Kołodziejczyk (MK)

PHOTOGRAPHS:

Bogdan Moczarski (BM)
Cezary Korkosz (CK)
Iwona Majcher (IM)
Jadwiga Moczarska (JM)
Karolina Kalinowska (KK)
Łukasz Zdyb (ŁZ)
Natalia Kann (NK)
Pixabay (px)

BIRDWATCH IRELAND is the largest independent conservation organisation in Ireland. A registered charity, its aim is the conservation of wild birds and their natural habitats. It has over 15,000 members and a network of 30 local branches. It manages nature reserves which protect threatened habitats and their wildlife, works to conserve Ireland's biodiversity, and carries out education, survey and research work. For more information, go to www.birdwatchireland.ie

