

School Work
SHEETS



BLOCK 6:

**SPRING
MIGRATION**





Block 6: SPRING MIGRATION

Background: A washing line is put up in the classroom with names of spring months hung on it (panel hooks made with paper clips). On this spring time axis, graphical symbols of spring signs observed by children will appear.

DETAILED PROBLEMS	HOW TO RECOGNISE THAT SPRING IS COMING?	WHEN DO BIRDS COME BACK TO US? WHAT DANGERS THERE ARE FOR MIGRATING BIRDS? HOW DO BIRDS FLY?
Field activities	<p>The search of the first signs of spring can be turned into an adventure full of emotions. Mark one day of the week as the day of the Spring hunter (6/A/1-6/A/5). Every week on this day go for a walk with the children using the same route and carefully watch changes in the environment. Start the observations in the second half of February and carry them out until the end of April.</p> <p>During the walks pay attention to flowers - the first ones are the wind-pollinated flowers (on trees and shrubs, such as the common hazel or the birch), followed by (as the temperature rises) insect-pollinated ones. Along with the flowers, insects appear. This is the time when the first birds return.</p>	
		<p>While walking, pay attention to how birds fly. Maybe you will be able to see the gliding flight of a buzzard or a stork, or the active flight of swallows or pigeons.</p>
Observations and experiments	<p>Together with children, design and set up a spring class blog, where the children will publish their notes on spring observations.</p> <p>https://www.cyfrowynauczyciel.pl/szkolny-blog/</p>	<p style="text-align: center;">How do birds fly? (6/B/1-6/B/2)</p> <ul style="list-style-type: none"> • Present the project Spring Alive to the children, using the information available on the project's website. (Spring Alive is an international project that gathers young amateurs information of nature from Europe, Central Asia and Africa. Observers track the timing of the spring migration of the White Stork, the Cuckoo, the Barn Swallow, the Swift and the Bee-eater. They record their observations on the Project's website, creating a map of bird spring migration. • Together with children, decide the return of which species you will be waiting for. In a city, it will most likely be the Swift, while different species will typically be found in the suburbs (Barn Swallow) or rural areas (Lapwing, Skylark). • Draw a wanted notice (6/B/3) for the bird that you are waiting for. Put it up around the area. • Decide where in your neighbourhood you can expect this bird (for example by asking parents). • A calendar of bird returns (6/B/4)– find a place in the classroom to put the calendar of bird returns. • Together with children, enter your observations to the Project's database



School Work Sheets Block 6

Art and graphomotor tasks	Art tasks using colours that prevail in a given week, e.g. yellow, green, white or blue. This task will sensify the children to perception of colours in nature.	Game – find differences (6/B/5) between pictures (this task aims at drawing the children's attention to basic differences between the birds that return in spring.)
Language and writing tasks	Folk wisdom in proverbs (6/A/6) about birds. Competition on spring songs - you will find inspiration in the book: Ireland's Birds: Myths, Legends and Folklore By Niall Mac Coitir Collins Press	Searching for spring could also take place in the classroom. Collect a set of books, magazines and albums, and get a computer with access to the Internet. Together with the children, look for poems, stories, press notes, as well as paintings by known and less known painters, which show birds returning to their breeding grounds in the spring. Writing notes to be published in the blog.
Maths tasks		Ask the children to create math problems with feather counting.
Games and competitions		Play a game on the phone together Bird Migrations (S6 / B / 6).



SPRING HUNTERS

Invite children to play in the search for spring. Fun can take place between teams separated in a class / kindergarten group or between classes or pre-school groups.

The game is based on a systematic hunt for signs of spring in selected habitats. To aid in the task the participants will receive a Spring hunters handout containing a table of the most common organisms. There are three different badges to be earned:

BRONZE

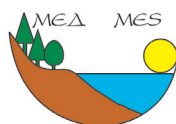
Badges are earned for the finding and documenting (photograph, drawing):
of 3 spring plants
1 insect
1 spring bird

SILVER

Badges are earned for the finding and documenting (photograph, drawing):
of 6 spring plants
3 insects (including 1 butterfly)
2 spring birds

GOLD

Badges are earned for the finding and documenting (photograph, drawing):
10 spring plants
5 insects (including 2 butterflies)
5 spring birds
Including at least 2 species found outside class/group classes.



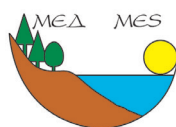


SPRING HUNTERS CHECKLIST

SPRING HUNTER

.....
You can use the pictures included in the spring hunter information sheets to complete the checklist..

DATE OF OBSERVATION	WEATHER	PLANTS	INSECTS	BIRDS



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Can spring be measured?

What you will need

- A ruler
- Notepaper, something to write with

Tasks and questions:

1. Find a plant in the area waking up for spring – e.g. A snowdrop
2. Note down the date, the weather conditions and measure the height of the plant (measure from the surface of the soil).

.....
 In how many days, in your opinion, will the plant start to bloom?

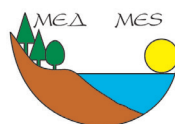
3. Continue to measure every 2-3 days or during the search for spring, until the flower blooms

.....

Were your predictions correct?

Think about:

- In your opinion what had the biggest influence on the plant's speed of growth?
- In the beginning, from where do you think the plant got its strength to grow?





THE SPRING DERBY

Questions and tasks:

1. Imagine that you are a spectator at the Spring Derby, whose competitors include:

- flowers without petals (wind-pollinated), such as hazel or birch
- colourful flowers with petals
- insects
- barn swallows
- swifts

2. Who do you think will finish in first place?

Number your answers from 1 to 5 in the boxes next to the competitors.

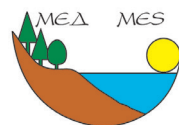
3. Conduct field research (from mid February to mid April) were your assumptions correct? Note down your observations below.

Day

Number of observations per player

Think about:

Why did the competitors finish in the order that they did?





SPRING HUNTERS PLANT SHEET

PLANTS



(iM)

HAZEL - FLOWERS



(iM)

WILLOW – FLOWERS



(iM)

SILVER BIRCH – FLOWERS



(iM)

MAPLE – FLOWERS



(iM)

SNOWDROPS



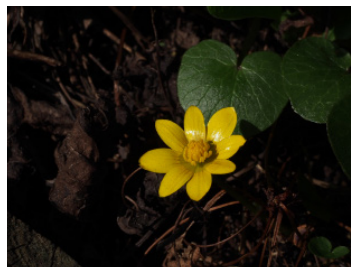
(iM)

SPRING SNOWFLAKE



(iM)

WINTER ACONITE



(iM)

FIG BUTTERCUP



(iM)

COLTSFOOT



(iM)

YELLOW STAR-OF-BETHLEHEM



(iM)

PRIMROSE



(iM)

MARSH MARIGOLD



SPRING HUNTERS PLANT SHEET

PLANTS



(iM)

SIBERIAN SQUILL



(iM)

LIVERWORT



(iM)

CROCUS



(iM)

HORSETAIL



(jM)

PINK BUTTERBUR



(jM)

WHITE ANEMONE



(CK)

DAFFODIL



(iM)

GRAPE HYACINTH



(iM)

STITCHWORT



(im)

WHITE NETTLE



(iM)

WOOD SORREL



SPRING HUNTERS
ANIMALS



BUMBLEBEE (RED TAILED) (mk)



CARABUS BEETLE (mk)



FIREBUG (mk)



BEE (mk)



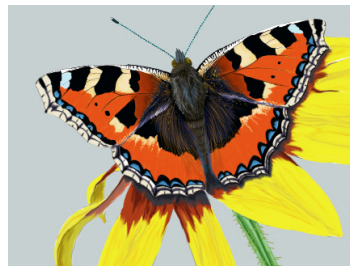
LADYBUG (mk)



BRIMSTONE BUTTERFLY (mk)



PEACOCK BUTTERFLY (mk)



SMALL TORTOISESHELL (mk)



ANGLEWING BUTTERFLY (mk)



SKYLARK (jv)



SWALLOW (jv)



ROOK (jv)



SPRING HUNTERS
ANIMALS



STARLING

(jv)



CRANE

(jv)



WHITE STORK

(jv)



LAPWING

(jv)



WHITE WAGTAIL

(jv)



COOT

(jv)



WILD GEESE

(jv)



ROBIN

(jv)



SWIFT

(jv)



COMMON FROG

(mk)



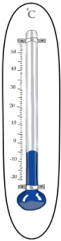
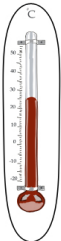


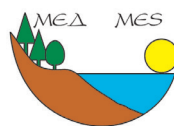
COMMON TOAD

(mk)



SPRING HUNTERS WEATHER NOTES

 SUN	 RAIN
 COLD	 WARM





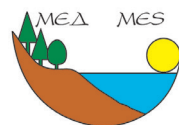
PROVERBS

Questions and tasks:

1. Read the following proverbs about birds.
 - Cé gur beag díol dreoilín caithfidh sé a sholáthar.
Little as a wren needs, it must gather it.
 - Má labhríonn an chuach ar chrann gan duiliúr díol do bhó agus ceanna igh arbhar.
If the cuckoo calls from a tree without leaves, sell your cow and buy corn.
 - One swallow does not a Summer make.
 - Swallows and bees on the wing are sure signs of spring.
2. Check whether your observations match the proverbs

Think about:

**Where do these proverbs come from?
Why are they not always true?**





I. IS SHAPE IMPORTANT?

What you'll need

- 3 identical sized pieces of paper (A4)

Questions and tasks:

1. How to prepare the paper for the experiment
 - a. Tightly screw up 1 piece of paper into a ball
 - b. Crumple 1 piece of paper
 - c. Leave 1 piece of paper untouched
2. Before you throw the pieces of paper, guess which will fall to the ground last.....
.....
3. How to conduct the experiment:
 - a. Three children stand side by side with each holding one piece of paper
 - b. It is important that each child holds their piece of paper at the same height
 - c. When the instructor gives the word the children let their pieces of paper fall
 - d. The remaining children note which piece of paper is the last to reach the ground.

Think about:

- Why did that particular piece of paper take the longest to fall?
- Do birds use a similar phenomenon in order to fly?
- What sort of object could you make in order to take advantage of this phenomenon?

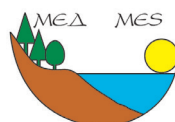
II. FLYING OBJECTS

In this experience you'll build various flying objects. Your goal is to build yourself an entry to win a flying competition.

What you'll need

Different sized pieces of paper, pieces of material, pieces of plastic, Styrofoam, etc.

- Plasticine
- Scissors
- Double sided tape





WHICH NATURAL PHENOMENON DO STORKS USE IN FLIGHT?

What you'll need

- A spiral cut from paper (use the template provided)
- String
- A stick (e.g. a wooden skewer)
- Heat source– a lamp with a bulb pointed upwards, an electric oven or a candle
- A fragment of the film Flight of the Stork. The Secrets of Nature) [from 4 minutes 55 seconds, until 5 minutes 12 seconds.] The film can be found at: https://www.youtube.com/watch?v=_SQej8At9Jk

WARNING! DO NOT ATTEMPT THIS EXPERIMENT WITHOUT THE SUPERVISION OF AN ADULT!

Questions and tasks:

1. Cut out the spiral
2. Fix the string to the designated end
3. Attach the other end of the string to the stick
4. Hold the spiral above the heat source and observe what happens.
5. Discuss the results of the experiment.
6. Formulate a theory and write it down:

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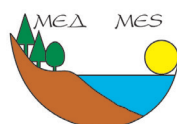
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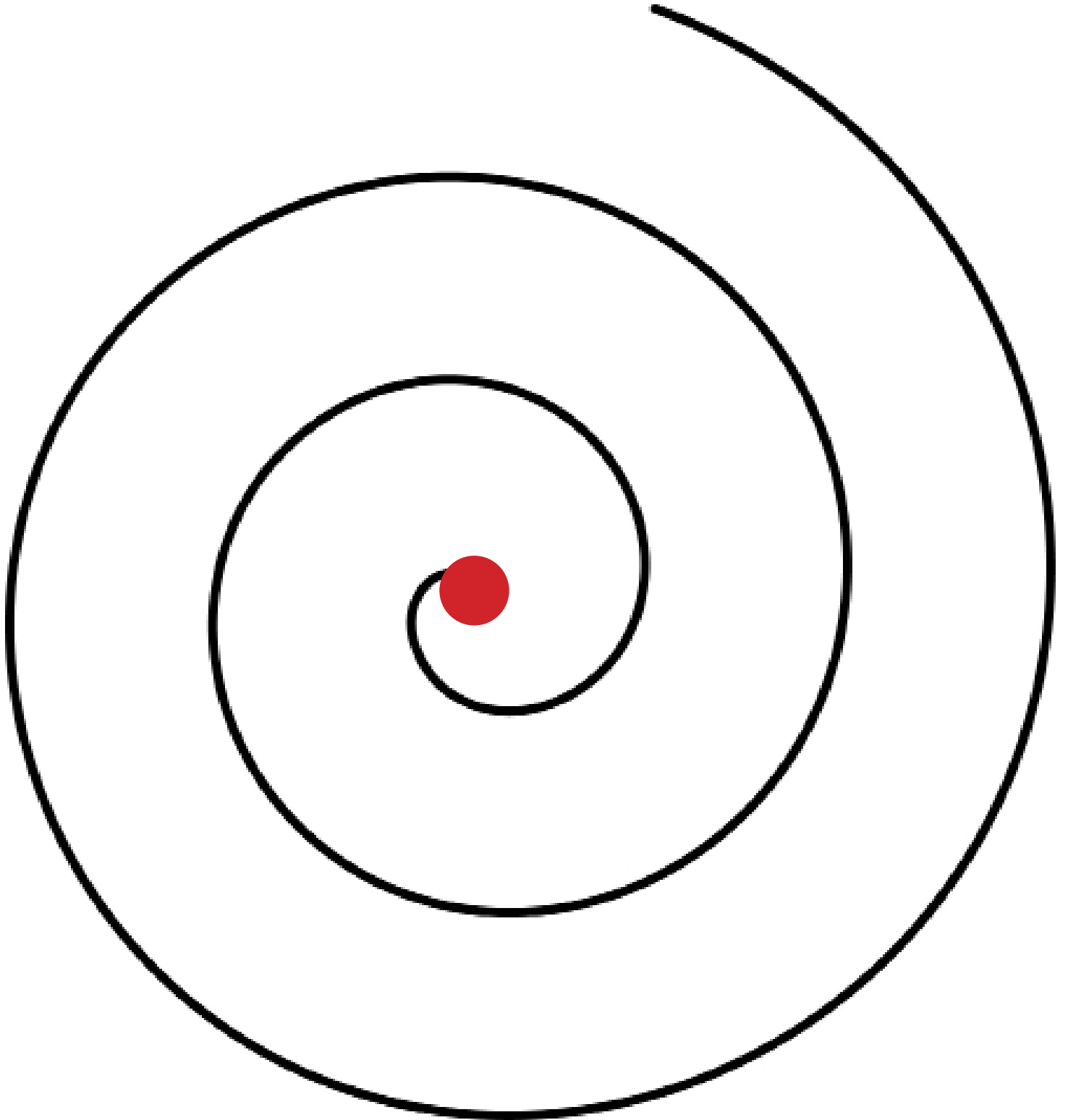
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7. Watch a fragment of the film FLIGHT OF THE STORK.

Think about:

- Why were you asked to carry out this experiment?
- What does this experiment have in common with the flight of a stork?







WANTED POSTER

Questions and tasks:

1. Prepare a WANTED poster for a bird returning from its spring migration include the following information.
2. Pin the poster on the notice board.

wanted

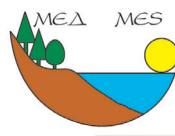
.....
Who are you looking for?

WANTED POSTER FOR.....
(name of bird)

BRIEF DESCRIPTION OF THE BIRD WHICH INCLUDES A DESCRIPTION OF ITS CHARACTERISTICS, ITS APPEARANCE (SIZE – REMEMBER ITS GOOD TO COMPARE THIS INFORMATION TO OTHER WELL KNOWN BIRDS FOR EXAMPLE: THE BIRD IS SPARROW-SIZED, DOMINANT PLUMAGE COLOUR, OTHER CHARACTERISTICS – LIKE. GREY HEAD CAP, SHAPE OF WINGS IN FLIGHT.)

.....
.....

.....
An explanation as to why the bird is wanted. Who to contact and how with any information concerning the wanted bird.





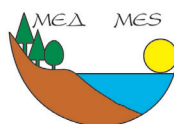
CALENDAR OF RETURNING MIGRATORY BIRDS

Spring is the time migratory birds return from their winter vacations. Some return in squawking loudly, others return largely unnoticed. Watch carefully and record your observations

DATE OF OBSERVATION	BIRD	WHERE SEEN?	BEHAVIOUR

Example observation:

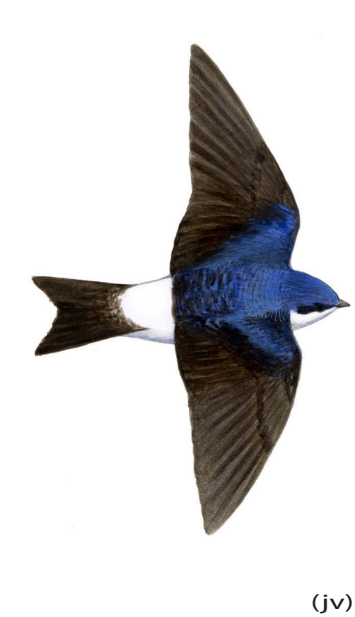
DATE OF OBSERVATION	BIRD	WHERE SEEN?	BEHAVIOUR
1st march	Wild geese	Whilst out walking	Flying in a V and honking



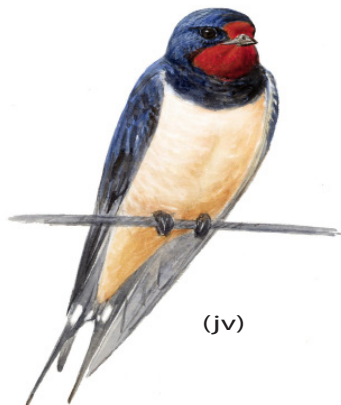


FIND DIFFERENCES BETWEEN SIMILAR SPECIES

Find 3 differences between the pictures:.



Find 3 differences between the pictures:





FIND DIFFERENCES BETWEEN SIMILAR SPECIES

Find 5 differences between the pictures:



(jv)



(jv)

Find 3 differences between the pictures..



(jv)



(jv)



FIND DIFFERENCES BETWEEN SIMILAR SPECIES

Find 5 differences between the pictures:



(jv)



(jv)

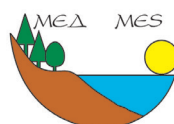
Find 5 differences between the pictures:



(jv)



(jv)





APPLICATION - MIGRATION OF BIRDS

Use the smartphone app to talk to children about bird migration and draw their attention to the dangers that are waiting for migrating birds.
The whole application is in English.

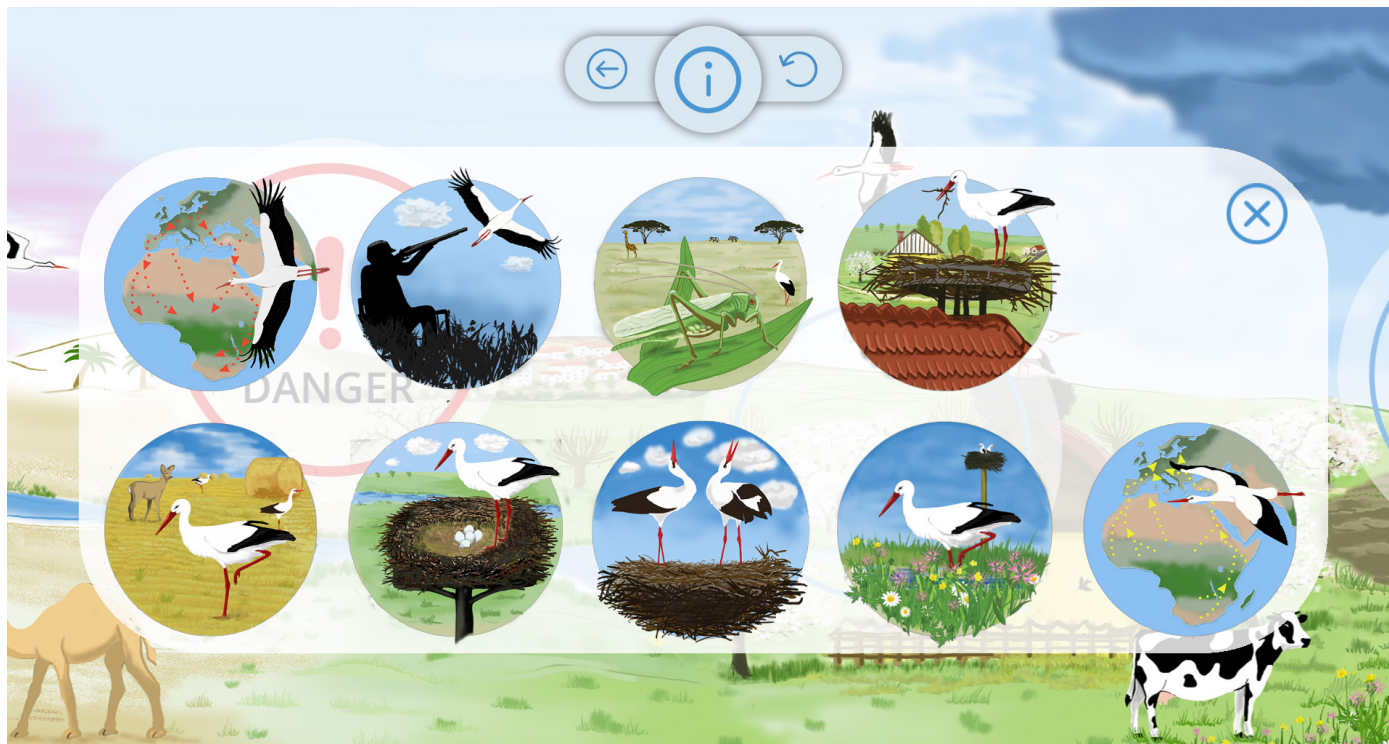
Step by step instructions:

1. Search on Google Play for Android phones or on the AppStore for IOS phones - Migration of Birds - application and install it.
2. 5 species of birds are visible on the start screen. You should choose one of them.
3. After selecting the genre, a window with instructions will appear. The game consists of setting them in the right sequence, consecutive stages in the life of the selected bird species. The life cycle has been divided into what happens during the bird's migration and what happens during the breeding season.

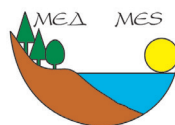
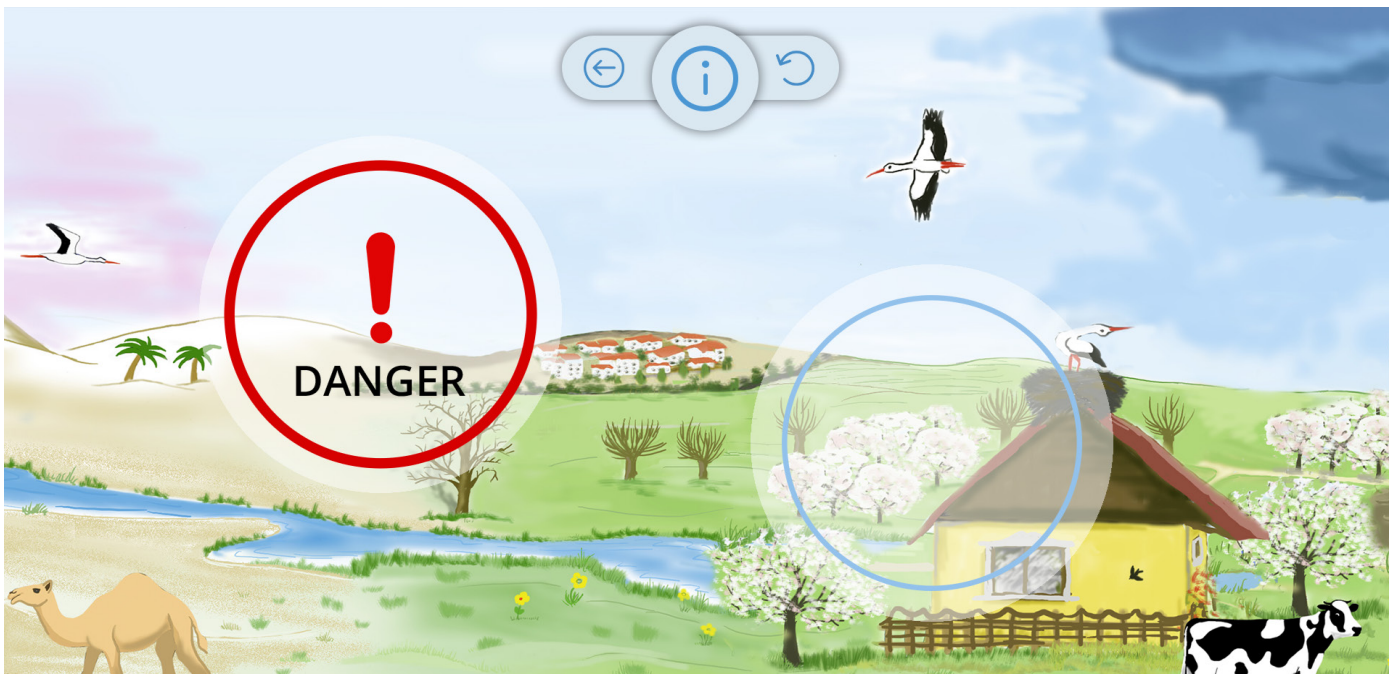


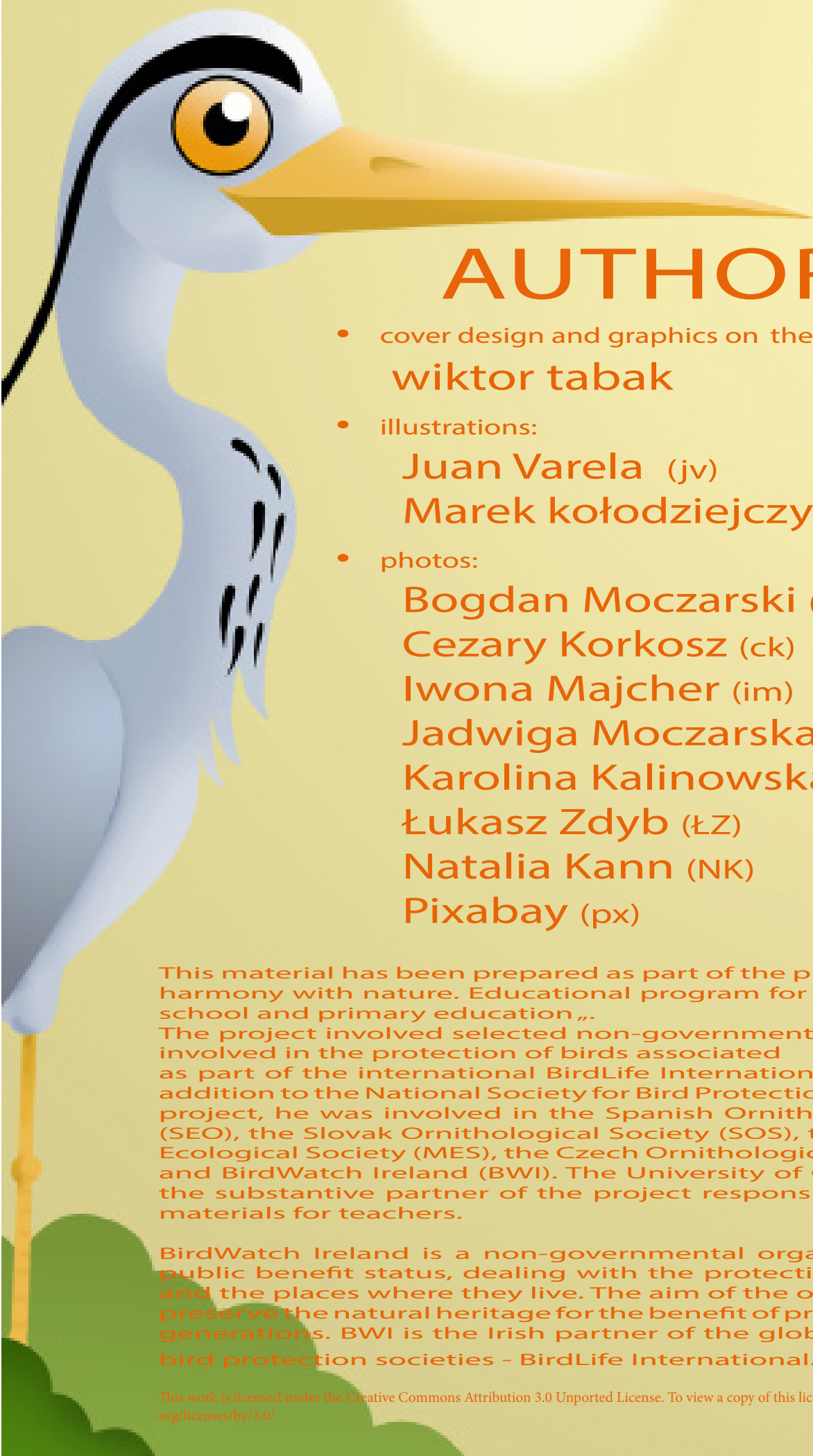


4. The player is tasked with arranging 9 stages of life of the selected species.



You can start with matching circles, of birds with their habitats place the danger circle where there is danger that threatens the species.





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This material has been prepared as part of the project „We live in harmony with nature. Educational program for teachers of pre-school and primary education „.

The project involved selected non-governmental organizations involved in the protection of birds associated as part of the international BirdLife International federation. In addition to the National Society for Bird Protection, which ran the project, he was involved in the Spanish Ornithological Society (SEO), the Slovak Ornithological Society (SOS), the Macedonian Ecological Society (MES), the Czech Ornithological Society (CSO) and BirdWatch Ireland (BWI). The University of Gdańsk became the substantive partner of the project responsible for creating materials for teachers.

BirdWatch Ireland is a non-governmental organization with a public benefit status, dealing with the protection of wild birds and the places where they live. The aim of the organisation is to preserve the natural heritage for the benefit of present and future generations. BWI is the Irish partner of the global federation of bird protection societies - BirdLife International.