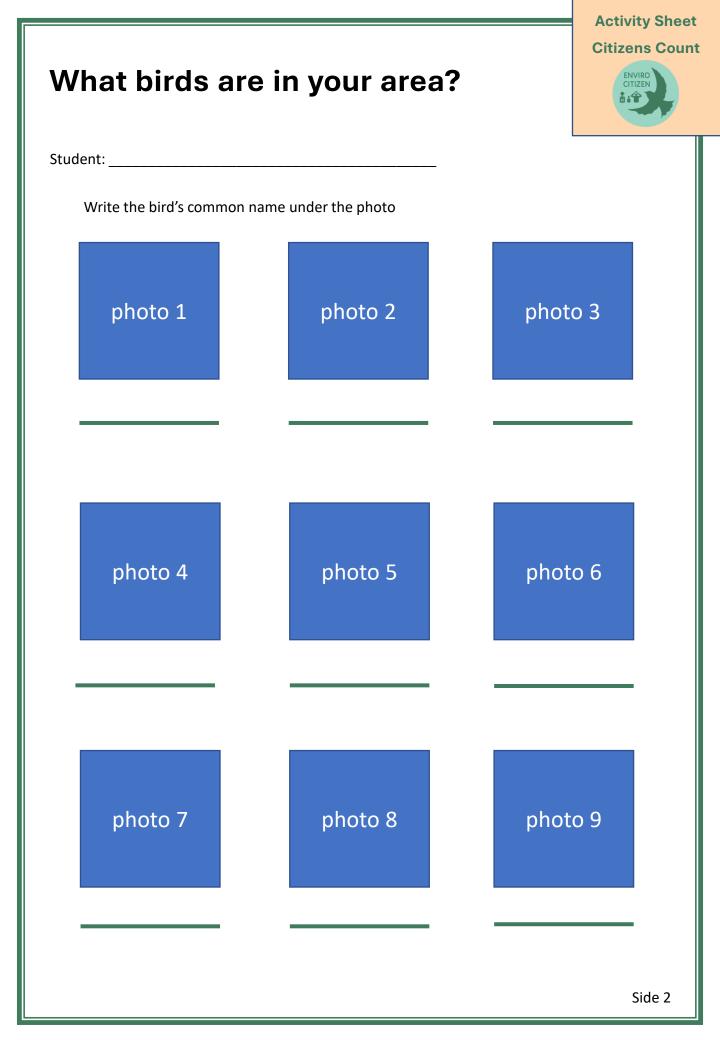
# What birds are in your area?

ENVIRO CITIZEN

Student: \_\_\_\_\_\_

Use a bird guide or go online to find information about birds you would see in your neighborhood.

Scientific name	Common name	Where would I see it?





**Observing birds** 

Student: \_\_\_\_\_

**Goal:** Learn more about which birds live where we live. Communicate feelings and impressions. Become a mindful observer.

**Time:** 30 minutes outdoors, 15 minutes indoors audio/text/visual production. In pairs or small groups

#### Activity:

**Part 1:** Go for a walk near school (park, lake, coast, woods). Notice which bushes and trees are attractive for birds. Can you guess why? For each bird you notice, draw or write a short description about the birds colour, shape, size or charactericstics. Use a bird-app or a Handbook to identify the birds. Ask the teacher and the bird guide for help. Try to remember the size (sparrow-like, blackbird-like or crow-like), the color of the beak, colour of feet, colour of feathers, maybe you even remember the song?

**Part 2**: Back at school: Make a mind map/a list of birds/an audio or use a photo or a drawing. Talk about it to classmates. Include information on how you w identified the birds (or not). What was difficult/easy, ? Why?





Pictures: Ann E L Cardozo, UiS

# Identifying bird song

Student: \_\_\_\_

**1. Introduction to birdsong.** Take a multiple choice quiz to learn fun facts about birdsong:

https://www.bbc.co.uk/programmes/articles/4svLYkz1gBKdf57 X8wZChL3/quiz-how-well-do-you-know-birdsong Why do birds sing? How do they sing? How does singing work?

What types of birdsong are there?

**2. Basic training.** At home, use apps like Avefy (Spain) or the RSPB Bird Song Identifier to learn to recognize birdsongs:

https://www.rspb.org.uk/birds-and-wildlife/birdsongs/what-bird-is-that/

We can practice by guessing bird song in class.

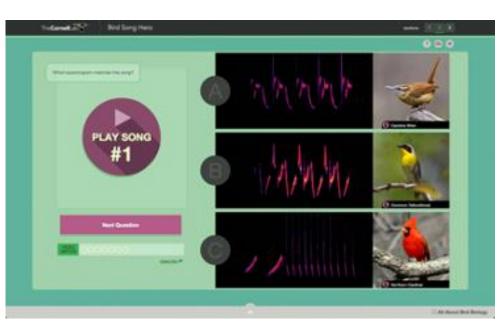


Picture: Adobe Stock

# Identifying bird song

Student: \_\_\_\_\_

**3. Spectrograms.** Play the grame 'Birdsong Hero' to visualize cardinal songs and their spectograms. Prick the correct song for each species and learn to draw spectograms.



https://academy.allaboutbirds.org/bird-song-hero/

Picture: Bird Academy

**4. Field trip.** Take a walk around your garden, playground, or neighborhood and try to identify five different local species by listening to them.

Activity Sheet Citizens Count





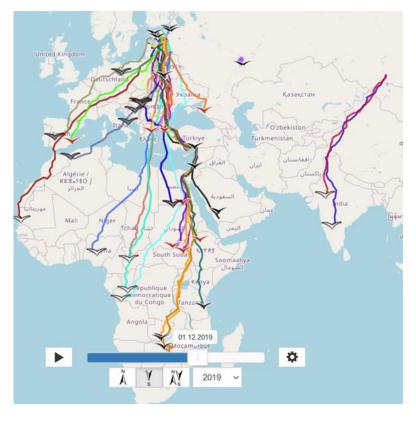
# Where do birds go?

Student: \_\_\_

Go to the Bird Migration Map (<u>https://birdmap.5dvision.ee/EN</u>). On this interactive map, students can choose a number of birds and watch their migration.

1) go to website. On the map you can see several migrating birds. By moving the slide at the bottom of the screen to the right, you can see how far the birds have gotten this year. You can also click on '2022' and pick a different year.

You'll notice that a lot of bird start flying south near the end of summer. Why do you think they do that?



The map showing migration on 1 december 2019

Where do birds go?	Citi
Student:	

2) Pick any year you want from the menu at the bottom of the map. On the left, you see a list of bird species shown. Look up their names in your language. Then, pick one of the species, and click the downwards arrow to see a list of names of individual birds. By clicking on their name you can read a little story about them (you can use google translate to translate it), and below that you can select several years to see how this bird traveled. Did this bird travel the same route each year, or did it change its route year from year?

3) Now that you've picked one of the birds, use a birding book or website to look up information on the following:

- what does this bird species eat?

- what sort of habitat does this bird species like? (forest, city, etc.)

4) Make a list of the countries it visited. Do you think the bird can find the habitat and food it likes in these countries?

5) Look at the trip this bird makes each year. What are possible dangers that this bird encounters along the way? Make a list and think about how they might deal with these dangers. ivity Sheet zens Count

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## Where do birds go?

Student: \_\_\_\_

Go to the <u>Bird Migration Map</u> and select different bird species and watch them migrate. Write down the names of the birds, the countries where the birds start from and their migration routes.

How would you describe the environmental connections between those places? What might be the threats to birds along the route?

Migration Routes (countries)	Possible threats to birds along their migration?



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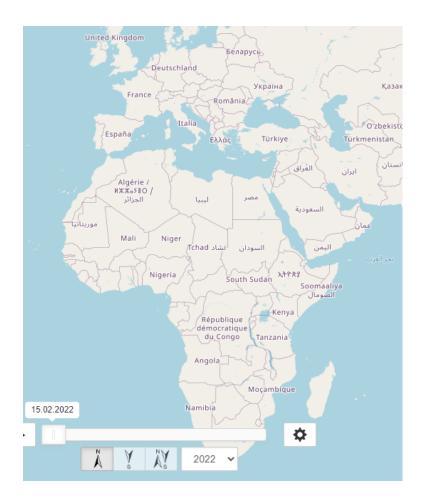
### Where do birds go?

Student:

Go to the <u>Bird Migration Map</u> and select different bird species and watch them migrate. Write down the names of the birds, the countries where the birds start from and their migration routes.

Choose three bird species of your interest and on the map below illustrate the migration routes they follow.

What countries do they visit during their migration? How would you describe the environmental connections between those places? What might be the threats to birds along the route?







### Where do birds go?

Student: \_\_\_\_

Go to the <u>DataZone Birdlife international website</u>, and select the migratory species type on the search criteria. Write down the names of the birds that are marked with red, orange and yellow color according to Global IUCN Red List Category.

#### Where are these bird species found?

Why do you think these species are threatened with extinction or are undergoing extinction? Along their migration routes, what threats might birds face? What can be done (locally, nationally, globally) to increase people's environmental awareness about this issue, and how can these actions contribute to nature conservation?

Scientific name	Migration Routes (countries)	Possible threats to birds along their migration?

Activity Sheet			
Citizens Count	Whe	re do birds go?	CYCERE
Student:			
Local acti Environn Citizens	nental	National actions of Environmental Citizenship	Global actions of Environmental Citizenship

# Can we find birds in culture?

Activity Sheet Citizens Count

ENVIRO



any countries have a notional bird. The notional bird is often doe

Many countries have a national bird. The national bird is often deeply rooted in the local culture (although sometimes it is chosen for reasons of nature conservation, for example).

Do you know the national bird of your country?

Can you find examples of your country's national birds depicted in folktales, literature or art? Describe briefly your findings. Reflect upon the reasons how this bird species has been depicted? Is your country's national bird an endangered or common species?

There is a very famous snowy owl depicted in a book and a movie. Do you know who it is? What are the characteristics of this bird and why is it so important to its human friend? Its popularity even unintentionally endangered owls, due to a surge in public interest in keeping them as pets.



This bird used to deliver mail for its friend. Do you know which bird species has been used for carrying messages for thousands of years, and has even been important on military purposes, although they also symbolize peace? Do you know this species in your hometown?

Owls as mysterious creatures have left a deep imprint in culture all over the world. Try to find some evidence about their traces in art, literature or music from world culture and from your own homeland.

Do you know of any equally compelling literary text, a children's or young adult book about any bird species in your language? Tell about it.

Can we find birds in culture?	Activity Sheet Citizens Count
Student:	
Birdsong in music	
1. Birdsong has always inspired musicians .	
Do the students know which birds have borrowed	
their song or calls to the famous composers?	
Here is a good	
example: * https://insidetheorchestra.org/2020/09/05	5/mus
ical-bird-songs/	

Listen and try to identify:

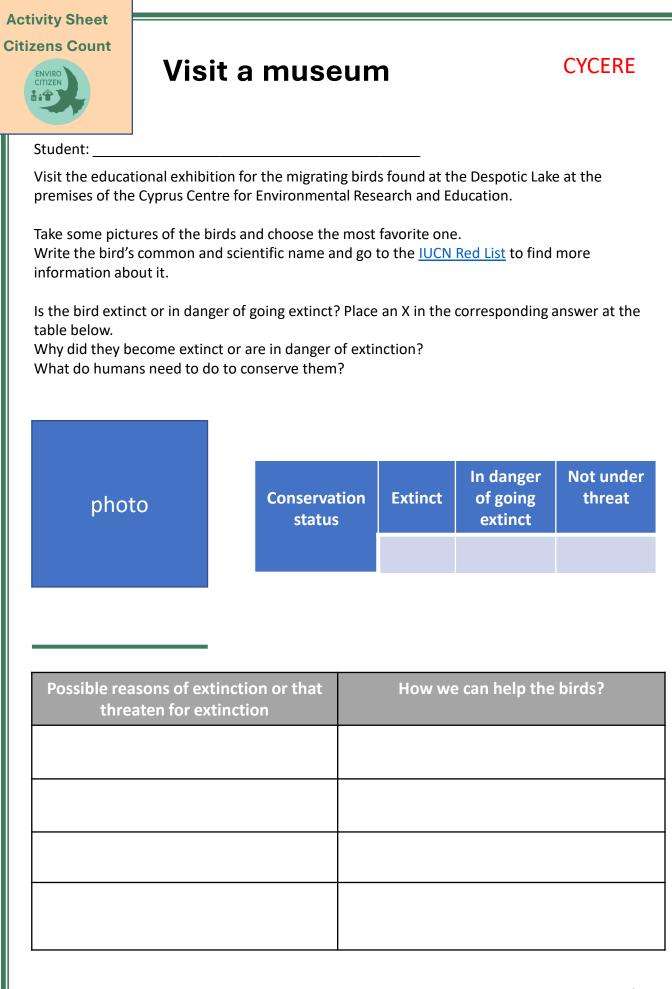
<u>https://www.youtube.com/watch?v=cnsbhFYq0X0</u>
<u>https://www.youtube.com/watch?v=l-dYNttdgl0</u>

A poem turned into choir music and a dance about corn crake imitates the call and the behaviour of this bird. What does the choreography of this dance tell us about this bird? <u>https://www.youtube.com/watch?v=krB3oLqSZUM</u>

Do you know that birds can dance?

https://www.youtube.com/watch?v=WS3Yt2aqyTE

	Activity Sheet
Visit a museum	Citizens Count
Student:	
	Side 1



Activity	Sheet
Citizens	Count



### **Provide for birds**

Student: \_\_\_\_\_

**Goal:** Learn more about the needs and dangers birds have and face. Observe, analyse, communicate. Become a mindful observer. In pairs or small groups.

We can all do something for birds. In urban areas, birds are a little more dependent on people, so there is more opportunity to help them.

**Activity**: Look around or think about your local area near the school or home area and make a little map of what and where we can do something to provide for birds.

#### Food

\* Is there a place to plant an apple tree or a rowan tree (pine, spruce, oak, ash, ash, hazel, rose (*Rosa majalis*), currant are also fine choices)? Is there a lawn nearby? Is it left partially unmown? Constant mowing of lawns means there is no place for insects to live.

#### Habitat

Think of possible places for nesting: hedges, trees, or buildings providing holes or places under roof tiles for example for swifts and sparrows?

#### **Drink and bath**

Is there a place to provide water for birds in hot dry summers? Birds prefer simple shallow bowl, so the tiny birds don't drown, with fresh water to drink and bathe in. This should be placed in shade.

#### Nest

Is it possible to install nest boxes (following advices on the needs of different species) - think of all the possible dangers: can predators get in or how the species can approach their nest box?

#### Danger

\* Are there large glass surfaces where one could stick <u>decorations</u> or drawings, bird silhouettes to protect birds? Are there any places where one could turn off the outdoor lighting or draw curtains or blinds? Are there cats walking freely around in the area? Think of five reasons to explain to cat owners why they shouldn't leave their pets outside alone.

Finally,, choose a place for **a feeder** in winter. When the outside temperature drops to zero, it's the right time to start feeding small garden birds.

Activity	Sheet
Citizens	Count



## **Provide for birds**

Student: \_\_\_\_\_\_

Part 2: Make or plan to make your own feeder from recycled materials.

\*Think whether it is possible to set up a fixed or hanging feeder. Tits and greenfinches like hanging feeders, blackbirds and yellowhammers prefer fixed feeders. Do you have squirrels and cats around? Think of squirrel-proofing options!

\* Consider materials: birds need a place to perch and a roof that keeps the seeds dry in rain.

\* The construction depends also on the choice of food. Research what's best for the birds! The most common food in winter for little passerines are fat mixes and sunflower seeds, but also peanuts, oatmeal and millet. No salt or water!

\* Once you've started feeding the birds, it's an obligation until spring. Feeder must be easily refillable! [Make sure you put out food on a regular basis. Food should certainly be available in the mornings after cold nights.]

Some examples from Internet:







https://eestilapsed.ee/ulesanne-nr-1-meisterdame-ise-lindudele-toidumaja/eestilapsed-linnumaja-puust/

**NB!** Hygiene is very important, as birds might have diseases and parasites and contact with infected specimens **can** cause human **diseases**. Wash your hands after refilling the feeder.

	Activity Sheet
	Citizens Count
Birds of the Anthropocene	
Student:	





## Birds of the Anthropocene CYCERE

#### Student: \_\_\_

Activity a: The production of plastics has increased substantially with negative effects in different ecosystems and on the welfare of birds and animals. Most of the plastics are not biodegradable and break down into small plastic particles (microplastics). Due to their size and appearance, these particles are wrongly regarded as prey by marine animals such as fish, which are the primary food resource of many seabirds.

- How the environment, the animals, and humans are impacted due to the production and use of plastic products in our everyday life?

- What we should do in order to mitigate those effects and protect nature and its surroundings?

Activity b: Watch the following video <a href="https://www.youtube.com/watch?v=k-ktNnmM8sc">https://www.youtube.com/watch?v=k-ktNnmM8sc</a>

- How would you describe the birds of the Anthropocene?

- Write down your thoughts based on the video you watched earlier.

- Is there anything we could do at a local, national, or global level in order to protect nature and the environment?

# Caring for birds

Student:

Birds and people live together in both urban and rural areas. People interact with birds and can also take care of them, for example by creating nesting places or feeding birds in the garden or in the park.

1) before class, ask three adults if you can talk to them about their memories of birds. You could talk to one of your parents or grandparents, another relative, maybe a neighbour. Ask each of them the following questions:

- As a child, did they ever watch birds? Did someone in their family ever go birding with them?

- Did they used to help birds, for instance by feeding them or hanging up nesting boxes?

- As a child, were there any birds that they used to see a lot?

- are their any birds they used to see that have disappeared, or become very rare? Do they miss these birds, and what do they miss about them?

2) In class, make a list together of birds that people mentioned have disappeared or become rarer. Have you seen any of them?

What are birds that you like, and what would you miss if they were gone?

What could you do to help prevent them from disappearing?



# **Counting garden birds**

Student: \_\_\_\_\_



# **Counting garden birds**

Student: \_\_\_\_\_

	Activity Sheet
	Citizens Count
Upload bird count results	ENVIRO CITIZEN
Student:	

	Activity Sheet
	Citizens Count
Upload bird count results	ENVIRO CITIZEN
Student:	

# Mathematics of the bird count

Student: \_\_\_\_\_\_

Activity Sheet Citizens Count



# Mathematics of the bird count

Student: \_\_\_\_\_\_

Activity Sheet Citizens Count



# **Kids count reflections**

Student: \_\_\_\_\_\_

**1. Field journal.** Think about what you have learned during our birdwatching activites. How did they make you feel? What was your favorite part? Which was your favourite bird?

Create a field journal: Write down what you have done during the day, take notes of what species you have seen, add feathers and other natural objects, draw the birds.



Picture: Cornell Lab of Ornithology

Activity Sheet Citizens Count

> ENVIRO CITIZEN

# **Kids count reflections**

Student: \_\_\_\_\_

2. Interview. Write a script for an interview between journalist and an ornithologist. Pick a theme from a list of available topics such as migratory birds or birds under threat. Perform and record the interview, asking the ornithologist about what we can do to help these species.

**3. Bird mural.** Do a research mural about a bird species. Include pictures, feathers, main characteristics, fun facts, and a migration map. Invite parents and community members to see the murals and have a vote for the best mural.



Picture: Dreams Time

Activity Sheet Citizens Count

ENVIRO

ENVIRO CITIZEN

# Investigate local environments

Student: \_\_\_\_\_

Draw a map of your locality and its surroundings. Consider and pay special attention to areas that are good places for birds to live and feed in: hiding and nesting places, shrubs and trees that give berries, seeds or cones, water sources, marshy areas, fishing places. If you encounter birds, mark them on your map as well

Activity	Sheet
Citizens	Count

# Investigate local environments

ENVIRO CITIZEN

Student: \_\_\_\_\_

Looking at your maps, as a class consider ways to either improve some of the places to make them more bird-friendly or create more bird-friendly places. Think about the following questions and write down your observations:

- Are there any places that would need to be cleaned up of litter or poisonous materials?
- Are there enough old trees with burrows for nesting or is there a need for artificial nests?
- Do animals have access to water to drink and bathe?
- Are there enough leftover berries, seeds, and cones for birds to feed in winter or would there be a need for feeders?

Consider contacting your local birding NGO, they are friendly and excited to hear from young people taking interest in birds and wildlife. Discuss these observations with them and receive their feedback. Ask them if there is anything you can do to create bird-friendly areas in your home, school or locality.

		Activity Sheet
Consumption mapping		Citizens Count
Student:		
Choose one item you frequently use or consume. It can be paper, pens, a favourite snack or drink, clothes, shoes or a phone. Using the internet, try finding out what all the elements, packaging, or ingredients of the item are made of, where do they come from, and where do they end up after you are finished with them. Write down or draw a map of your findings.		
Where does it come from?	Where does it go?	

ENVIRO CITIZEN

# **Consumption mapping**

Student: \_\_\_\_\_\_

Consider your item and the many places it travels to and from again. Think about the following concepts of circular economy. What do you think they mean? Write it down.

## Reduce

### Reuse

Repair

Remanufacture

Recycle

Recover