

# Birds and Nature around Icelandic Neighborhoods

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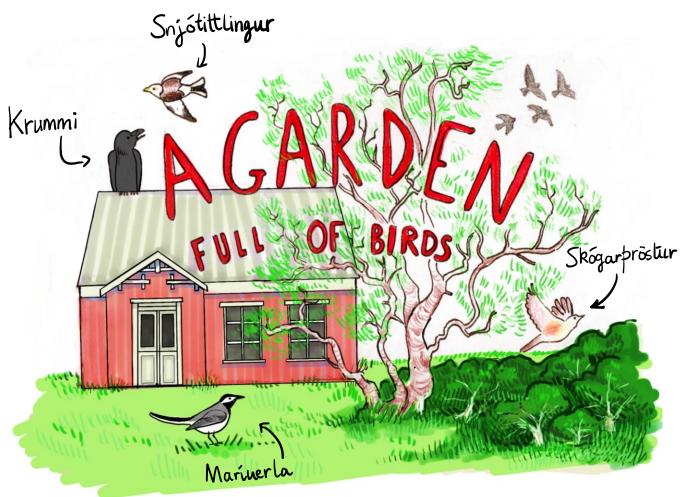
#### Foreword

You may be wondering why we decided to focus our book specifically on birds, since there is an incredible richness to Icelandic natural history. However, there is an advantage of first engaging children to nature through learning about birds. In Iceland, birds are everywhere. Although the same species are not present in all places, birds can be found in cities, towns, small villages, and all wild areas of the country-except for glaciers. Many of these bird species, especially the ones that are present around urban areas and farms, are very well known by people of all ages. They are easy to find, recognize, and observe. Some birds show interesting behavior and are entertaining to watch. Others have enjoyable songs to hear, and it can be fun to help children recognize them when out on a walk. Environmental education, in particular bird watching, can help everyone (young and not so young) learn and enrich their knowledge about nature and the environment in general. It also makes it easier to learn about the different habitats of Iceland and which birds are present in these areas. Particularly, we focus on the areas closest to our homes and on the local wild environments around gardens and towns. The purpose of this book is to facilitate learning with nature, rediscovering our connection to the natural world, and developing a curiosity to learn more.

Because of climate change and human influences on habitats, there are many new bird species that have colonized Iceland. On the other hand, many other species have become vulnerable or endangered. With this book, we want to teach children and families interesting facts about local birds, but also how to take action to make gardens and towns into a better habitat for them. We show some plants and trees to plant in gardens to attract and feed different species of birds. Through years of building bird houses to withstand the Icelandic climate, we outline some examples of how to build your own bird houses to shelter nests.

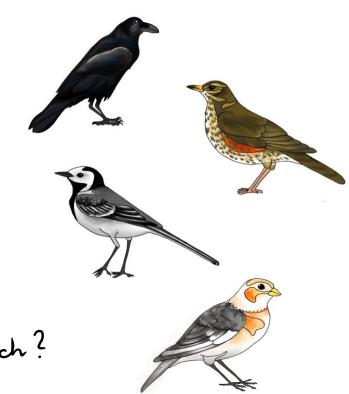
We hope that this book helps children and those who care for them to get closer to nature and to each other. Many of the activities require cooperation, such as the food web game and the construction of bird houses. This book was designed to work together on each activity with friends, classmates, parents, teachers, youth leaders, and more.

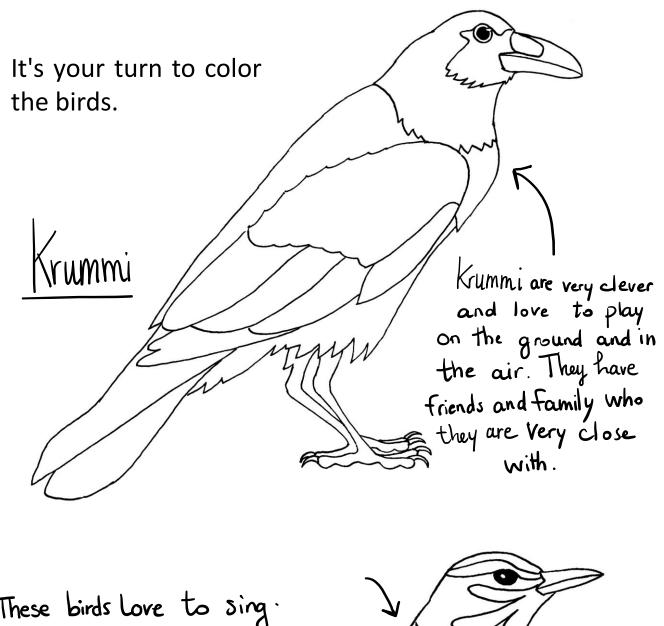
### Chapter 1:



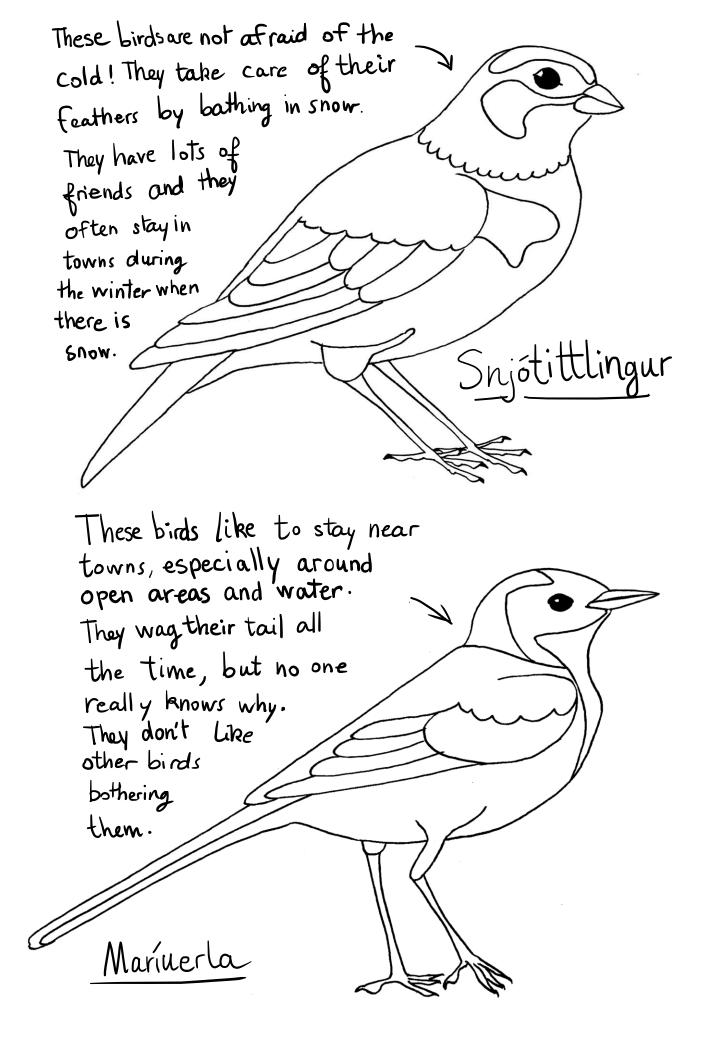
One of the easiest places to observe birds is right in your back yard, in town, or at school! Some birds are accustomed to people and even prefer to stay near towns and villages. In this chapter, we will explore the relationship between birds and people in Iceland by learning about four birds which like to hang out in gardens: the raven, the snow bunting, the redwing, and the white wagtail.

Here they are. Can you tell which is which?









# A Raven's day:

What does a raven do when they wake up?

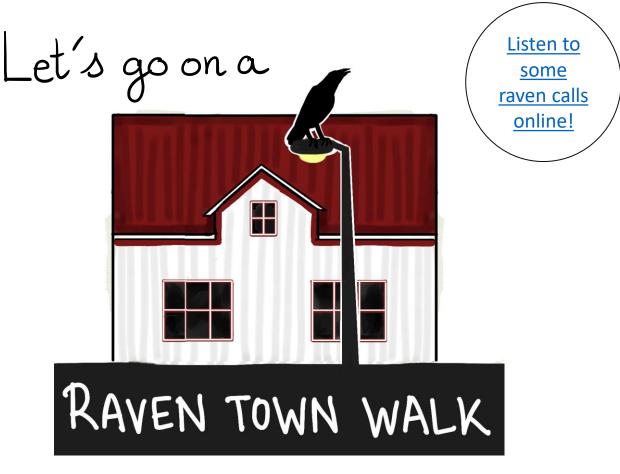
What do they eat for breakfast?

What do they like to do for fun?

What are they talking about with their Friends?

Where do they sleep? where do they go during

Discuss with your friends about what a Raven does in a day. You can answer these questions and anything else that comes to mind. What do you have in common with the Raven?



Learn everything about your town by following the ravens!

Walk around the town center with your teacher or an adult and look for ravens. They are easy to spot because they are so big, talkative and completely black! They like to stay in high places like roofs and streetlamps, to see what happens around and below them. They especially love schools, kindergartens, shops, big crossroads... All the best places to find food!

If you see ravens perched on buildings that you've never been in, ask your teacher or an adult with you what these buildings are. Is it the bank, the town hall, a shop, or just a house? Are there stories about this place?



# Sing about nature with the redwing

First, <a href="here">here</a> is a fun bird song game from the Cornell Lab Bird Academy. Can you beat both levels?



Now, <u>listen to the song of a redwing</u>. Does this give you inspiration for a song? Think of a melody that you think the redwing would like to sing. Could you write it down with musical notes?

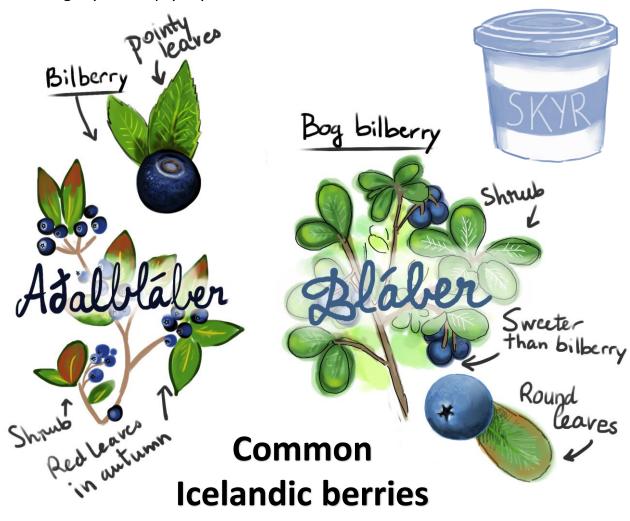
Finally, write down the words for a song from the perspective of a redwing. It could be about your favorite berries, what you like to do in a day, trees you like, your bird friends, or anything else you think the redwing cares about.

If you're interested in learning more, Fuglavefurinn has games in Icelandic about recognizing local birds and their songs!

# Berry hunting

Let's go on a berry hunting trip!

Go out to some hills that have berry shrubs in August to mid-September. You are going berry hunting, like the redwing. Can you recognize what berries you got? Don't forget your empty skyr or ice-cream containers!





Did you see the redwing while you were out berry hunting? They can be seen around trees and shrubs. What were they doing?

## Making binoculars:

Need help finding birds? Binoculars can help you see birds more clearly. Here is how to make your own.

What you need:

- Glue
- Two rolls of toilet paper
- Some paint (if you want)



- Get two toilet paper cardboard tubes.
- If you want your binoculars to be more colorful, you can paint the tubes.
- Glue both toilet paper rolls together side by side on one line. Let dry.
- There you go! These binoculars don't really make things bigger, but they allow you to practice looking at the birds, and just the birds. Now you can be a bird watcher!

How to attract birds in your garden?

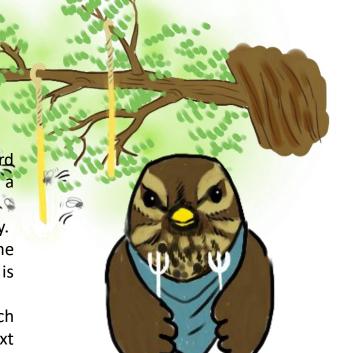
What you need:

\_ Yarn Strings

- Honey

The day before you go garden bird watching, cut a few strings around a meter long.

- Cover half of each yarn string in honey.
- Tie the dry parts of the strings on some branches in a part of the garden that is a little sheltered from the wind.
- The strings should attract bugs, which in turn will attract birds for the next few days!



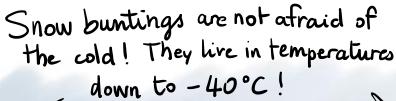


## Zittle snow buntings

What if a snow angel was actually a snow bunting?

Go outside with good, warm winter clothes, and make a snow angel by lying on your back in the snow and waving your arms up and down, and your legs outwards and inwards.

Now you are bathing in snow like a snow bunting. Except snow buntings don't have coats, they rely only on their warm feathers!





A snow bunting has even been seen at the North Pole!

You may see snow buntings in your town in winter, but only when there is a lot of snow.

They tend to flock on roofs and fly back and forth between places. They are sometimes called "snowflakes" because when they fly together, they can look like snowflakes flying in the wind.



# Making a snow bird



A few pine branches

- Two branches without leaves
- Two black stones
- A few carrots
- Lots of snow

You can start your snowbird like any snowman, by rolling a ball of snow bigger and bigger for the base.

Then, roll another smaller ball of snow for the head.

Stick the pine branches on the sides and in the back to create two wings and a tail.

Stick the two branches without leaves in the front to create bird claws.

Create two eyes on the side of the head with small black stones.

Stick a carrot on the front of the head for the beak.

Finally, use some slices carrots to create the snow bunting's orange color on the cheeks, neck, and breast.

### Chapter 2:



Now you know how to observe birds in a garden or town, but how can you attract birds to your area? This chapter covers

- How to make gardens into bird paradises
- · How to feed garden birds in the winter
- How to create feeders, baths, and houses for the birds
- How to avoid birds hurting themselves on windows
- What to do if you find a baby bird or an injured bird



# Creating a bird paradise

Here is a list of perfect trees and bushes to attract garden birds in Iceland. First, it is good to know that any trees, bushes, and flowers, are better for attracting birds than having a bare garden.

### **Trees**

Conifers trees. These can get very big and may therefore have to be trimmed. However, they provide seeds, shelters, nest sites, and attract insects, for many species. They especially attract wrens, goldcrests, redpolls, and crossbills:

- Sitka spruce (*Picea sitchensis*)
- Lodgepole pine (Pinus contorta)

Trees with seeds that attract garden birds and bumblebees:

- Downy birch (Betula pubescens).
- Goat willow (Salix caprea)
- Dark-leaved willow (Salix myrsinifolia)
- Woolly willow (Salix lanata). This is the native species of Icelandic birch.

Trees with berries that attract garden birds:

• Rowan tree (*Sorbus aucuparia*). This native tree has berries that attract thrushes. The berries are edible when cooked.

### **Bushes**

Bushes with berries that are inedible for humans:

- Showy cotoneaster (Cotoneaster multiflorus)
- Creeping cotoneaster (Cotoneaster adpressus)
- Common Ivy (*Hedera helix*). This climbing plant provides good shelter and roosting for small birds.

### Edible berry bushes:

- Elderberry (*Sambucus racemosa*). The berries are edible only when cooked, but the flower nectar is widely used to make syrup.
- Barberry (Berberis vulgaris)
- Saskatoon (Amelanchier alnifolia)
- Downy currant (*Ribes spicatum*)
- Blackcurrant (Ribes nigrum)

### **Flowers**

Wild roses with fruits that attract birds and bumblebees:

- Rosa moyesii
- Rosa sweginzowii



### How to stop birds from flying into your windows?



## Homemade bird food

In winter, there are many birds that can be fed from gardens in Iceland, including starlings, blackbirds, redwings, fieldfares, and snow buntings. But be careful! If you start to feed them, it is important to keep the feeding regular and not to stop it for too long, especially when there is bad or cold weather. This is because some birds may start to rely on the food you give them to survive the harsh winter.

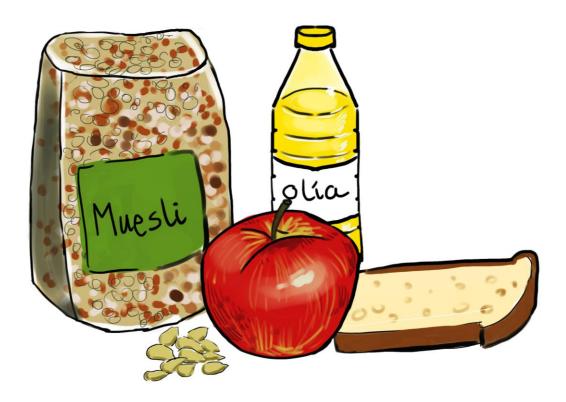
Here is how to make homemade bird food:

For starlings, blackbirds, fieldfares, and redwings You will need:

- Bread
- Vegetable oil (like rapeseed, sunflower, or corn oil)
- Muesli with raisins
- Apples

Depending on how many birds you are feeding, the quantities will change, but a ratio of around 2/3 bread for 1/3 muesli is good. Cut the bread in small pieces and mix with muesli. Then soak the mixture in oil, which should be completely absorbed. Add one or two apples cut in half. Fieldfares especially are very attracted to apples.

For snow buntings, the best food is simply providing them with sunflower seeds, which are sure to attract them if they are around.



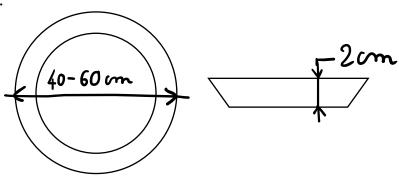
Let's make ...



Here are the instructions and resources we recommend for building bird houses and baths.

### Boths:

Making a bird bath is very easy. You just need a large shallow plate, which should be rather heavy, so it doesn't get blown away. Put it on the ground near your feeding area, fill it with water and clean it regularly. Put it far from any place a cat could hide. You can mount it on a sturdy 1,5 meter pole to make sure the cats cannot reach it.



## General tips

For the houses, we will assume that all wooden planks are 1cm thick. Measurements should be adjusted for thicker or thinner planks.

### Important!

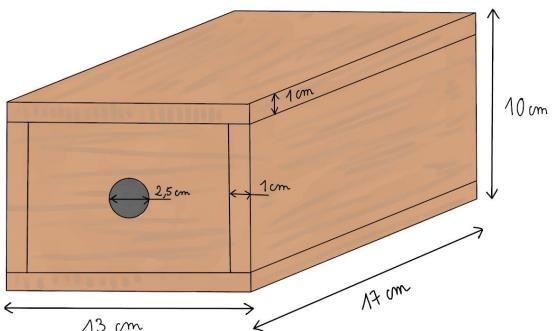
All houses should be attached to a sturdy pole that should be 2 meters to 2,5 meters long to keep it away from cats

All houses should be secured in a shelter place, under a roof, a shed, or a dense thicket of trees.

All houses should be either made out of dark wood or painted dark brown or black for better camouflage.

All houses should have 5 small (around 5mm) drill holes at the bottom. There should be one in the middle, and one near each corner, to provide drainage in case of rain.





The wren house is a simple rectangular box with a hole for the bird to come in and out.

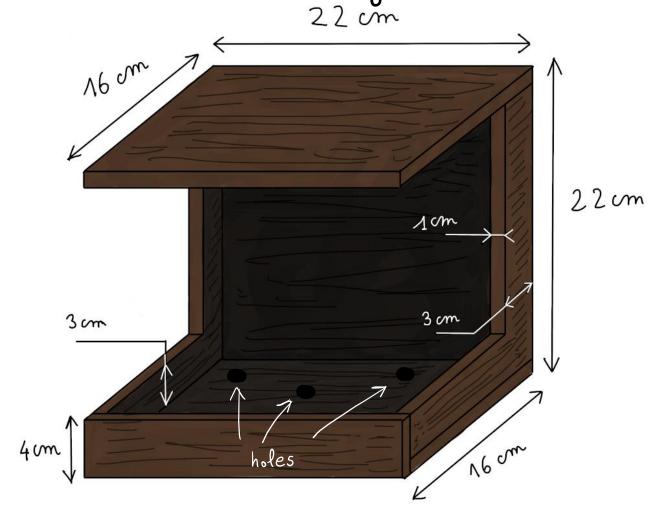
Here are the dimensions of the pieces:

Two 17x13x1cm rectangles for the top and bottom.

Two 17x8x1cm rectangles for the sides

Two 11x8x1cm rectangles for the front and back. Pierce a 2,5cm diameter hole in the front.

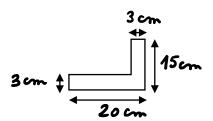
# Thrush house (redwings and blackbirds)



Dimension of the pieces:

One 16x22x1cm rectangle for the top
One 15x22x1cm rectangle for the bottom
One 3x22x1cm rectangle for the front
One 20x20x1cm rectangle for the back

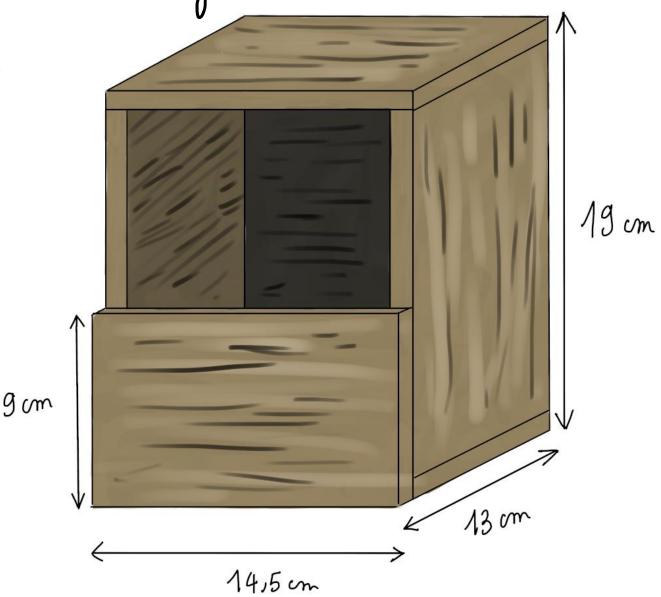
Two pieces of the following proportions for the sides:



This thrush house can be attached to a high house wall.

A good thrush house can also be a simple basket, between 15cm and 17cm in diameter and 10cm high, secured and nestled in the branches of a dense tree, preferably a conifer.

White wagtail house



Dimension of the pieces:

Two 14,5x12x1cm rectangles for the top and bottom

One 14,5x9x1cm rectangle for the front

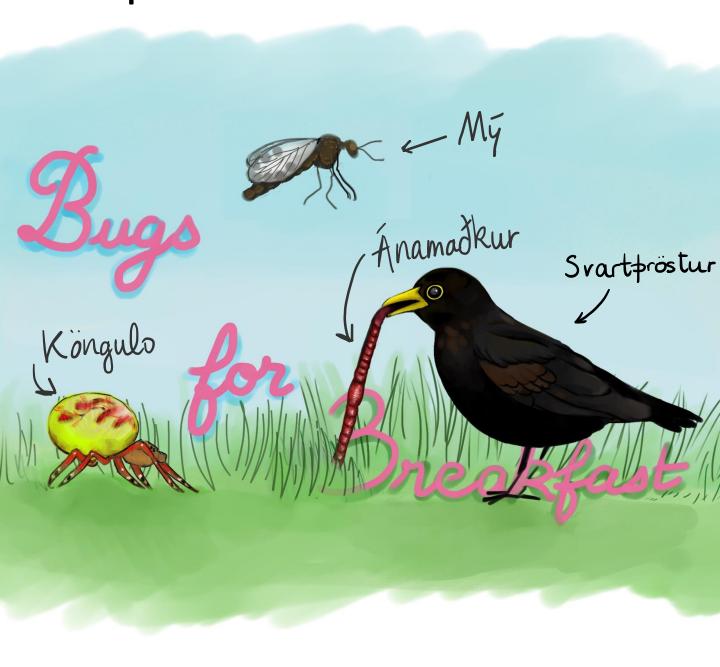
One 12,5x17x1cm rectangle for the back

Two 12x17x1cm rectangles for the sides

## Starling house

Here is a link to a very good resource on how to build a great starling house!

### Chapter 3:



In this chapter, we will look at a food web what birds eat, and how they interact in with other Icelandic animals and plants.

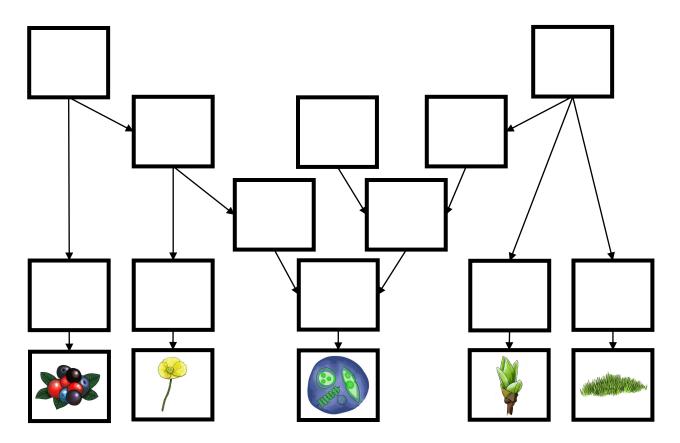
Younger children can play a memory game. Print two sets of the cards. They can play in pairs!



# How does the game work?

On the next three pages, you will find 17 images in boxes that each represents an Icelandic animal or plant. All of these living beings are part of the same food webs: they all eat at least another animal or plant, and (or) are eaten by another animal.

First, cut out all 17 cards. Here is the outline of how they fit in together, with arrows pointing to what the animal on the card eats.



As you can see, all the plants are already in place at the bottom of the food web. Place the plants in the right order on a white board or big piece of paper and draw the arrows that lead to them. Now, you can either try to place all the cards in the right place on your own or in a group, or you can make it a game.

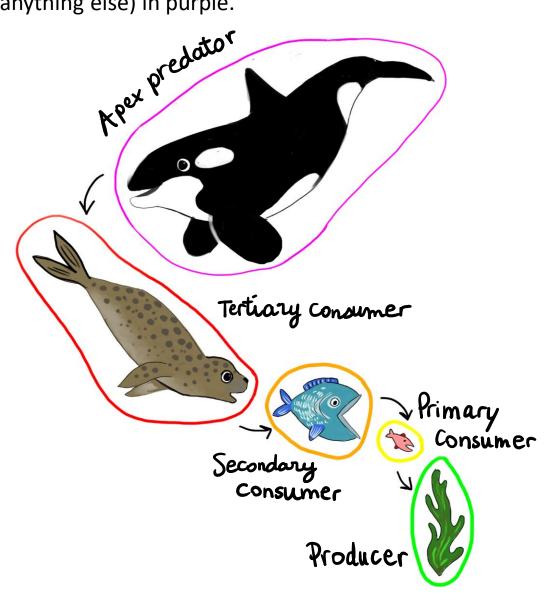
For the game, separate the players in two groups, and ask a parent or teacher to help you by looking at the answers. The group with the youngest player starts.

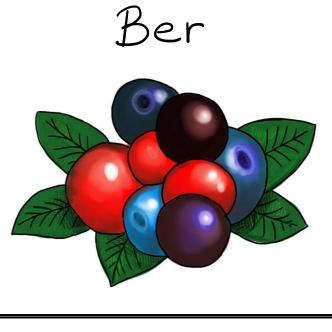
- 1. The group chooses a card and where to place it on the board
- 2. If they are right, they earn a point and go back to step 1
- 3. If they are wrong, the other group gets to try and goes to step 1 When the food web is completed, the group with the most points wins.

# Troducers and Consumers

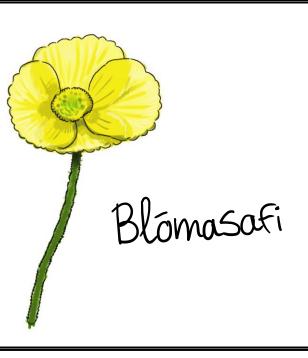
### Circle

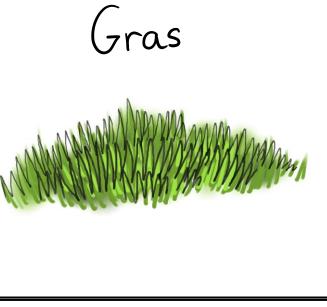
- The producers (those that don't eat anyone) in green
- The primary consumers (animals that eat producers) in yellow
- the **secondary consumers** (animals that eat primary consumers) in orange
- The tertiary consumers (animals that eat secondary consumers) in red
- The apex predators (animals who are not eaten by anything else) in purple.

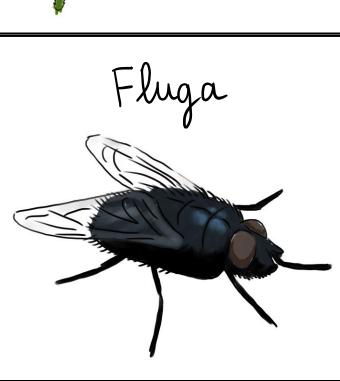


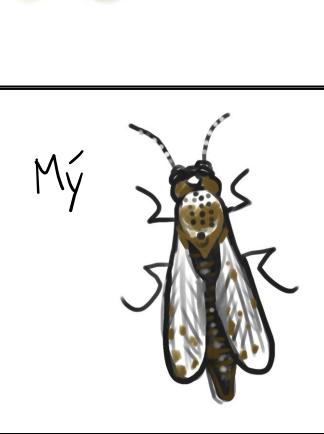


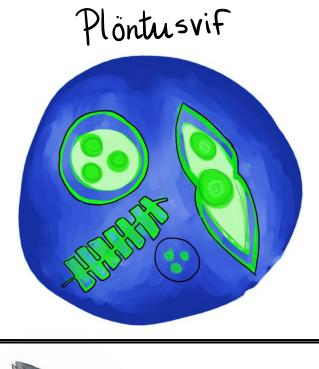




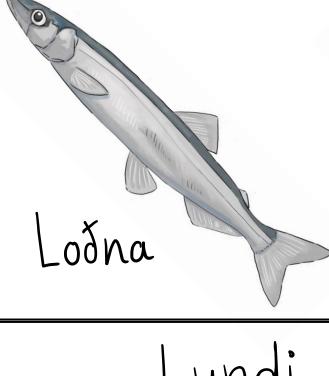






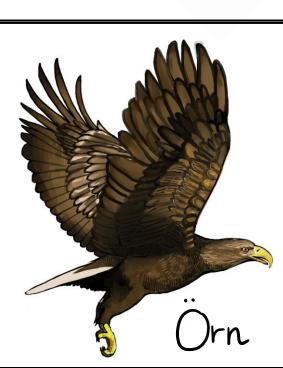






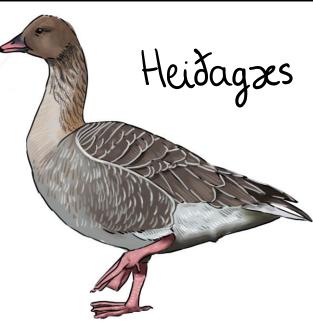


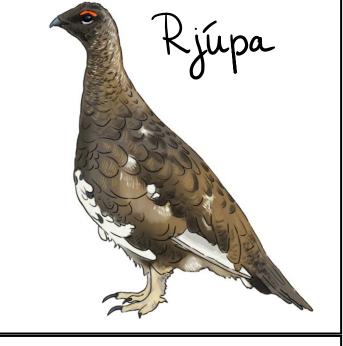




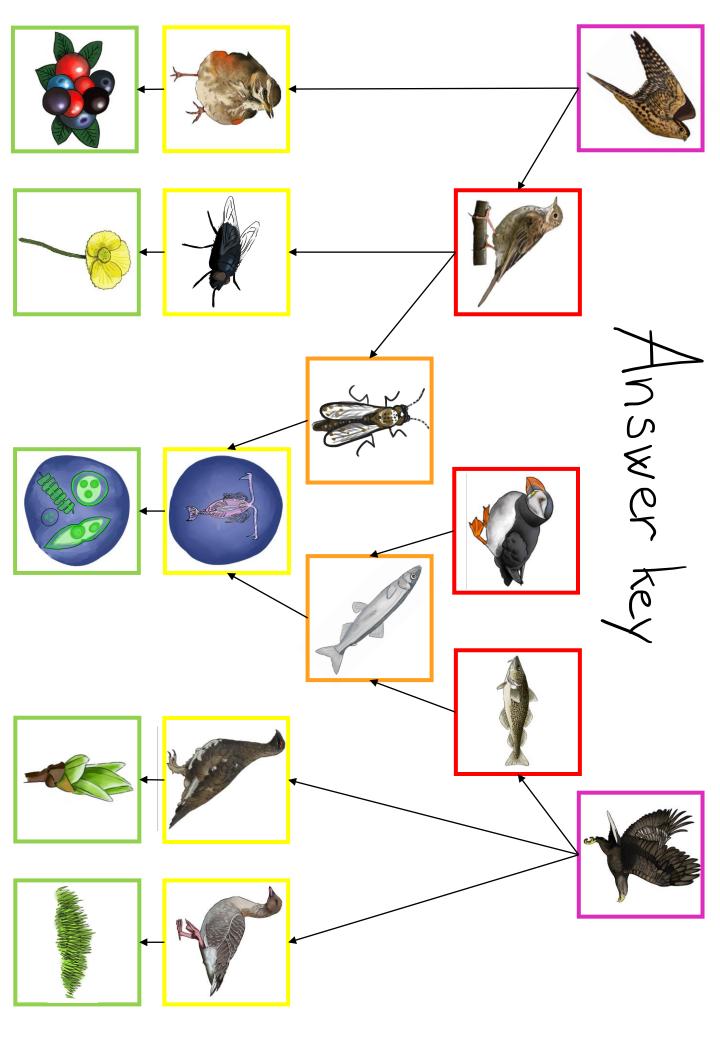












## Learn Icelandic

Ánamaðkur: Earth worm

Aðalbláber: Bilberry

Ber: Berry

Bláber: Bog bilbeberry

Blómasafi: Flower nectar

Brum: Leaf bud

Dýrasvif: Zooplankton

Fluga: Fly Gras: Grass

Heiðagæs: Pink-footed goose

Könguló: Spider Krummi: Raven

Krækiber: Crowberry

Laufblað: Leaf Loðna: Capelin

Lundi: Atlantic puffin

Maríuerla: White wagtail

**Mý**: Midge **Olía**: Oil

Örn: White-tailed eagle

Plöntusvif: Phytoplankton

Rjúpa: Rock ptarmigan

Skógarþröstur: Redwing thrush

Smyrill: Merlin

Snjótittlingur: Snow bunting

Svartbröstur: Blackbird

**Þorskur**: Cod

**Þúfutittlingur**: Meadow pipit



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Cécile Chauvat is a naturalist at Náttúrustofa Norðurlands vestra (Northwest Iceland Nature Research Center), and the Coordinator of Environmental Education at the Natural History Department of the Icelandic Seal Center. She received her Master's degree in Coastal and Marine Management from the University Center of the Westfjords, where she wrote her thesis on seal watching management. Her main research interest is interdisciplinary, combining social sciences and ecology to study environmental education. Cécile is interested in educating visitors of wildlife watching activities about tourism impacts, as well as in creating curriculum teaching youth about learning in local nature. She enjoys drawing and illustrating in her free time.

#### Dr. Jessica Aquino

Jessica Aquino is an Assistant Professor with Hólar University and works collaboratively with the Icelandic Seal Center on projects. She has nearly 20 years of experience in environmental education and has a Ph.D. in Community Resources and Development. Jessica has an interest in community-based participatory projects with a focus on community youth development and responsible management of wildlife and natural areas. She is also the director and a founding member of Húnaklúbburinn.

#### Einar Þorleifsson

Einar Ó. Þorleifsson works as a naturalist for Náttúrustofa Norðurlands vestra (Northwest Iceland Nature Research Center) in collaboration with The Icelandic Seal Center.

Einar studied nature-based geography at the University of Iceland. He also has some background in wildlife biology, botany and geology as well as environmental studies.

Einar's main interests are bird studies; populations, distribution, and historical aspects of bird distribution and changes in bird species throughout time. Nature protection and restoration of natural habitats are also one of his subjects, as well as some studies in botany and geology. Einar has decades of experience in different kinds of fieldwork, mostly in field ornithology in Iceland and abroad. A part of Einar's work is in the field of environmental education for NGOs and local schools; all with interest in nature and wildlife.

Cécile Chauvat, Jessica Aquino, og Einar Þorleifsson. (2021). *Fuglar og náttúra í nærumhverfinu*. Sauðárkrókur, Ísland: Háskólans á Hólum

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