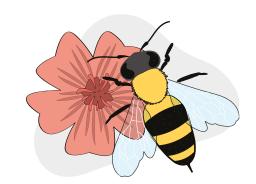
# WHAT IS BIODIVERSITY AND HOW IT EFFECTS OUR LIFE?



How to sustain endangered animals?

#### Task 1

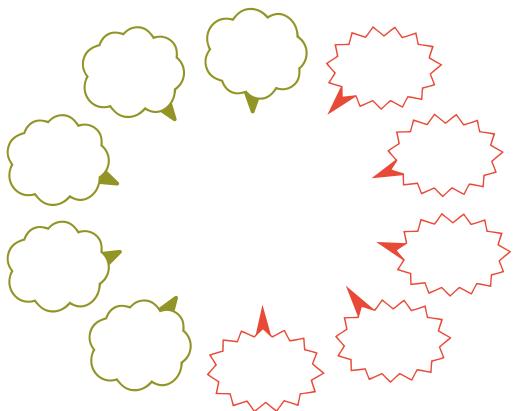
Collect the materials and mark them. Think of any extra you need and add to the list!

- A playing field with 36 numbered and stacked squares
- 10 blank, white pages
- Image of the protected animal
- Information sheet about a protected animal
- Scissors
- Color pencils
- Black text marker
- Glue

#### Task 2

Look at the infographics about animals. Make a mind map of ideas.

Write 5 good things and 5 bad things that happen to animals because of where they live.







Use the step by step guide and mark activities that you have finished! This will help you to guide you through the process of creating the game!

	Have I done it yet?
Create designs for each card in the game.	
Plan how the cards will be placed on the large square board.	
Secure the cards onto the playing board.	
Include arrows or steps on the playing board. Use forward arrows for positive actions and backward arrows for challenges.	
Use paints, colored paper, and other materials to make the game look attractive.	
Develop the main rules for playing the game.	
<ol> <li>What did you learn about endangered animals? (What you didn't kn</li> </ol>	ow but now you do?)
2. What surprised you the most?	
2. What surprised you the most?  3. What would you do, to save species?	



Sea eaple:

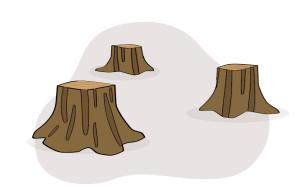
powerful hunter with
the golden head

The sea eagle is a majestic bird found in northern Eurasia, including Latvia. It is one of the largest birds of prey, with an impressive size and strong build. A sea eagle can reach a length of 90 cm and have a wingspan of up to 2.5 meters! The eagle's feathers are brownish-black, while its head and tail are golden brown. It is a skilled hunter that feeds on various fish, waterfowl, and even small mammals. The sea eagle is known for its ability to soar in the air for extended periods, searching for prey. It can spot potential prey from a great distance, thanks to its sharp eyesight.



# Threats

# for sea eagle population



#### **Habitat loss:**

Sea eagles need special places to live, like forests by the water. When these areas are destroyed for human activities like logging or development, the eagles become homeless.



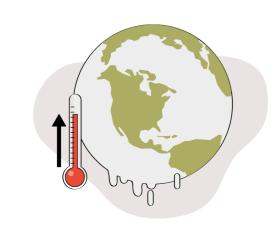
# The impact of human noise:

Loud noises near sea eagle nests can cause the birds to abandon their homes, negatively affecting their breeding success.



### Environmental pollution:

Water and air contaminated with various chemicals can cause various diseases. Sea eagles can accumulate harmful substances in their bodies, which can ultimately lead to their death.



### Climate change:

Our planet is getting warmer, with more extreme weather events. This can lead to a decline in the animals sea eagles hunt, putting their survival at risk.



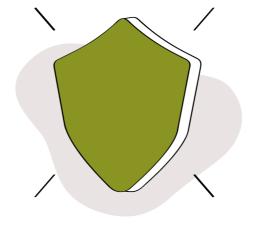
# Protecting nesting grounds:

By setting aside protected areas and regulating logging, wildlife protectors aim to conserve sea eagle nesting sites.



## Public awareness:

Various educational programs are being implemented to raise public awareness of the importance of sea eagles and the need to protect them.



# Conservation programs:

Goal is to recover sea eagle populations with the help of research and projects carried out by nature conservation organizations.



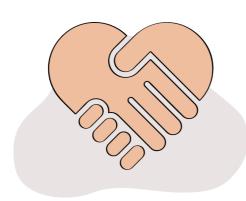
can we help?

sea eagle population to grow?



## Reducing waste:

Less waste means less pollution in the waters where fish live - the sea eagle's primary food source.



# Support organizations that protect nature:

Donations and volunteer work can help organizations working to protect sea eagles.

# Apmeklējot dabas teritorijas, ievērot noteikumus:

Tas palīdzēs saglabāt mieru un netraucēt putnus ligzdošanas laikā.



# White

The white stork is a large, beautiful bird found in Europe, Asia, and Africa. It can be recognized by its black and white plumage, long neck and legs, and large, red beak. Storks migrate south for the winter but return in the spring to nest.



# Threats

# to population of white stork



### Loss of habitats

Storks need large, open areas for feeding and nesting. Unfortunately, agricultural land use and deforestation reduce the available habitat.



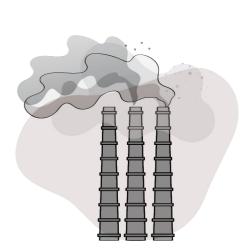
### Chemicals

Storks feed on frogs, snakes, and other small animals. The use of various chemicals in agriculture harms and kills the animals that white storks feed on.



### **Power lines**

Storks often build nests on electricity poles. Birds can be injured or even killed by flying into power lines.



### Air pollution

Air pollution, particularly from industrial emissions, can disrupt a stork's sense of smell, which is crucial for finding food.

# What helps population to grow?



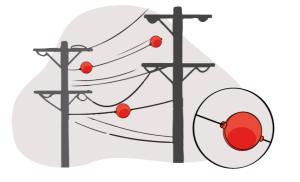
# **Protection of habitats**

Nature parks are being established to provide storks with protected areas where they can nest and forage undisturbed.



### Limiting the use of chemicals

Stricter regulations are being introduced in agriculture to reduce its impact on the organisms that storks feed on.



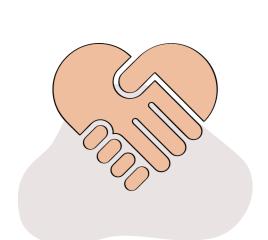
## Improvements in electrical line safety

Electrical lines are being equipped with special protections to prevent stork collisions.



### **Educational activites**

People are being informed about the importance of white storks and the need to protect them.



**Support organizations** that promote bird preservation.



Do not use chemicals in your gardens and yards and choose organically grown products.



Report any observed damaged or dangerous power lines.

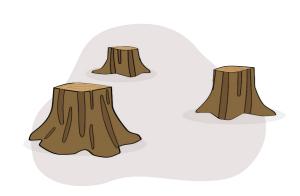


# Eurasian brown bear: the giant of the forest

The Eurasian brown bear is one of the largest terrestrial predators in Europe. They are large, strong animals with dark brown fur and long, sharp claws. Brown bears are omnivores, meaning they eat both plants and animals. They often feed on berries, fruits, grass, nuts, fish, and other small mammals!



# Threats for Eurasian brown bear



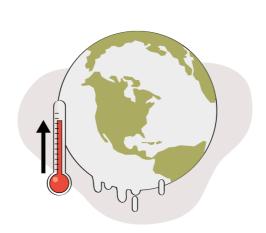
### Loss of habitat

Human activities, such as deforestation and road construction, reduce the amount of available habitat for bears. This makes it more difficult for them to move around and find new homes.



# Hunting

In some places, bears are still hunted for trophies and meat. Poisoned bait or traps are used to hunt them.



# Climate change

Climate change can affect the availability and distribution of food sources for bears.





# Creating protected areas

Create protected areas where bears can live and feed undisturbed. By building "green bridges," bears have a better chance of moving safely and finding more suitable habitats.



### **Hunting limitations**

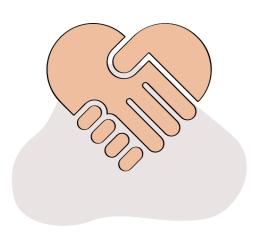
Hunting in forests is strictly regulated and completely banned in some areas. Campaigns are being conducted to clear forests of traps.



## Food supplies

In areas where bears live, additional fruit trees and bushes are planted, and special feeding stations are set up.

# How can we help?



Support organisations that promote bear conservation.



Don't support and avoid buying products that destroy bear habitats!



Learn and follow the rules when visiting bear-inhabited areas.



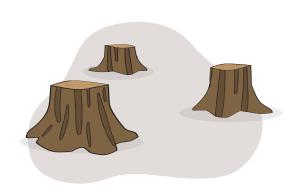
Climate-friendly lifestyle.

The Black Stork: A Mysterious Forest Bird

The black stork is a large bird with black plumage and a bright red, long beak and legs. It is smaller than the white stork, but still impressive, reaching a height of 90-100 cm. Black storks can be found in the forests of Europe and Asia, preferring peaceful places with nearby bodies of water.



# Threats for black stork population



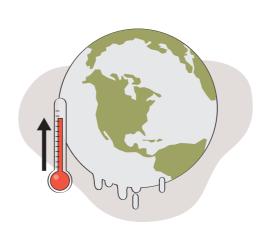
### Loss of habitats:

Mežu izciršana un purvu nosusināšana samazina melnā stārķa pieejamo dzīvotņu platību. Tas apgrūtina barības atrašanu, ligzdu vietu ierīkošanu un mazuļu audzēšanu.



### Ūdens piesārņojums:

Melnie stārķi barojas ar zivīm, vardēm un citiem ūdensdzīvniekiem. Ūdens piesārņojums var saindēt barības avotus un apdraudēt stārķu veselību.



### Klimata pārmaiņas:

Klimata pārmaiņu rezultātā mainās nokrišņu daudzums un ūdens līmenis ūdenstilpnēs. Tas var ietekmēt melnā stārķa barības pieejamību un ligzdošanas vietu atbilstību.



#### Medības:

Dažos reģionos melnie stārķi joprojām tiek medīti, lai gan tas lielākajā daļā Eiropas ir aizliegts.

# What helps

# melno stārķu populāciju?



# Creating protected areas

Creating safe havens for black storks where they can thrive. These protected areas offer the peace and resources these birds need to raise their families.



# Restoration of water reservoirs

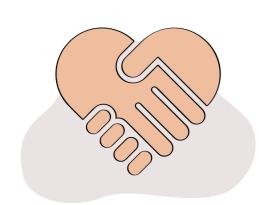
By restoring and cleaning our waterways, we're creating healthier habitats for water birds. Improved water quality means more food for a variety of species.



# **Educational programmes**

By teaching people about the importance of these birds and their role in the ecosystem, we can foster a sense of responsibility and encourage positive actions to safeguard their future.





Support organizations working to protect the black stork. These organizations implement various projects to safeguard storks and their habitats, conduct research, and educate the public.



Do not leave litter in nature. Litter can pollute water bodies and threaten the living creatures that black storks feed on.



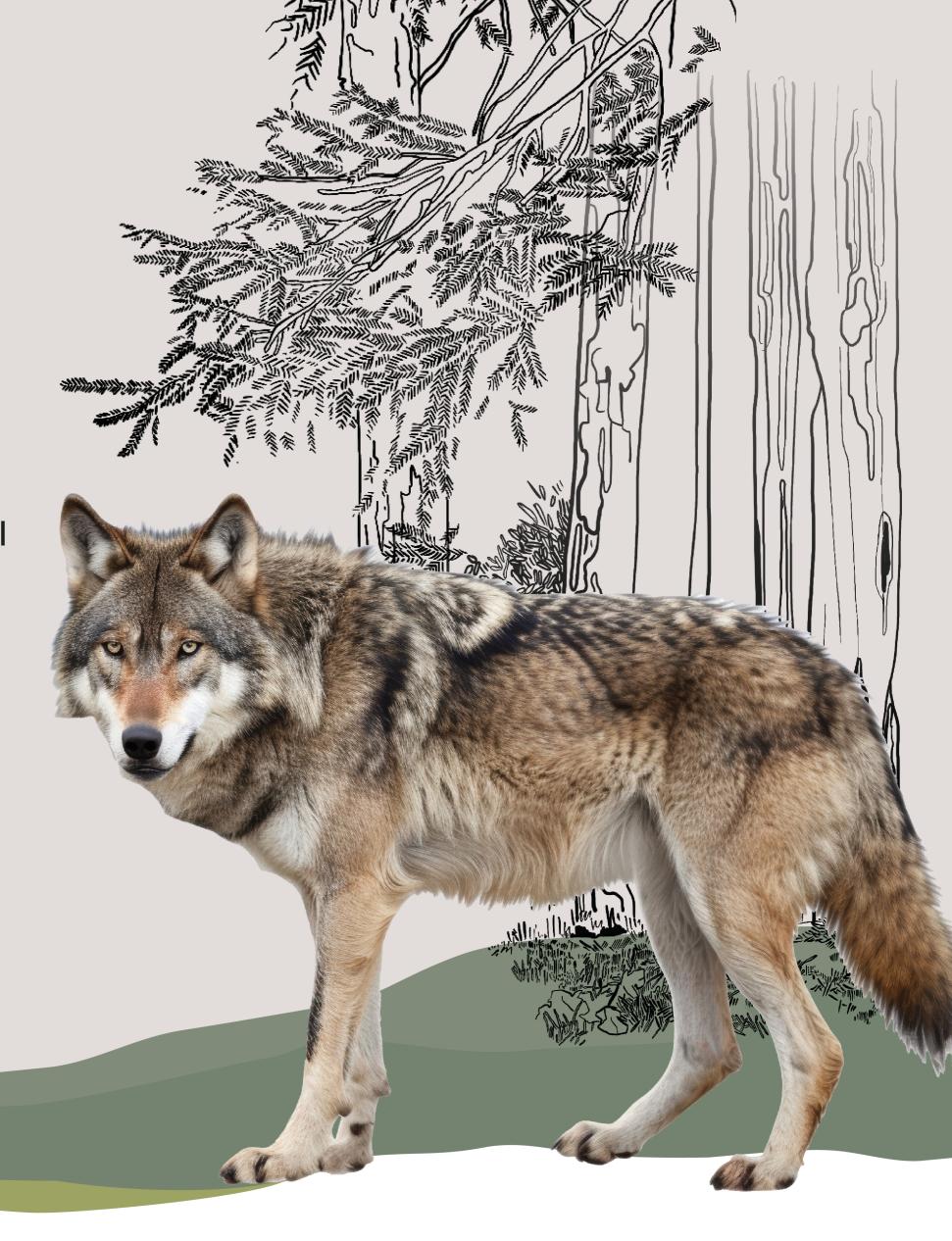
Discover the fascinating world of the black stork and spread the word. By raising awareness about this remarkable bird, we can ensure its survival for generations to come.



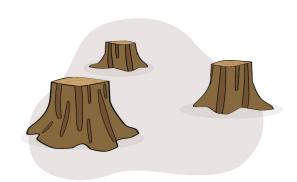
Make a difference for our planet by walking, biking, and using public transportation more often, conserving energy, heat, and water, eating more plant-based foods, reducing food waste, and buying only what you need.

# European grey wolf

The European wolf is the largest wild canid in Europe. It is widespread in forests and open landscapes across the continent. Wolves are social animals that live in packs, known as wolf families. They are very intelligent animals that have been able to survive in a variety of environmental conditions. The European wolf has a gray-brown coat, strong legs, and sharp claws, which allow it to hunt and run long distances. It has a large head with a long snout and strong teeth. Wolves are predators that feed on a variety of animals, including deer, wild boar, foxes, and rabbits. Wolves may also eat carrion left by other animals, and sometimes even fish and berries.



# Threats for grey wolf



#### Loss of habitat

Deforestation and degradation of other natural habitats reduce the areas where wolves can hunt and live.



#### Hunt

Although wolves are protected in Europe, wolf hunting, which is intended to protect livestock from their attacks, is one of the main threats faced by wolf populations.



# Competition with other predators

Other predators, such as bears and lynxes, can compete with wolves for food and habitat.



### Diseases

Various diseases, such as rabies, can spread among wolves and threaten their populations.



# Creating protected areas

Wolves require large territories for hunting. National parks, nature reserves, biosphere reserves, and other protected areas provide wolves with safe havens where they can live and reproduce freely, without facing significant human impacts.



# Research the health of population

By conducting regular health monitoring of wolves, it is possible to detect diseases early and take the necessary measures to limit their spread. This also includes the examination of dead animals to determine the cause of death.



# **Education of society**

By educating the public about the role of wolves in nature and their lifestyle, we can foster greater public understanding of these animals.



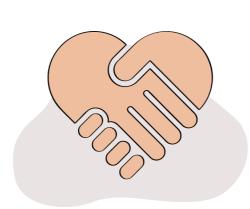
population to

grow?





Learn and follow the rules in protected areas.



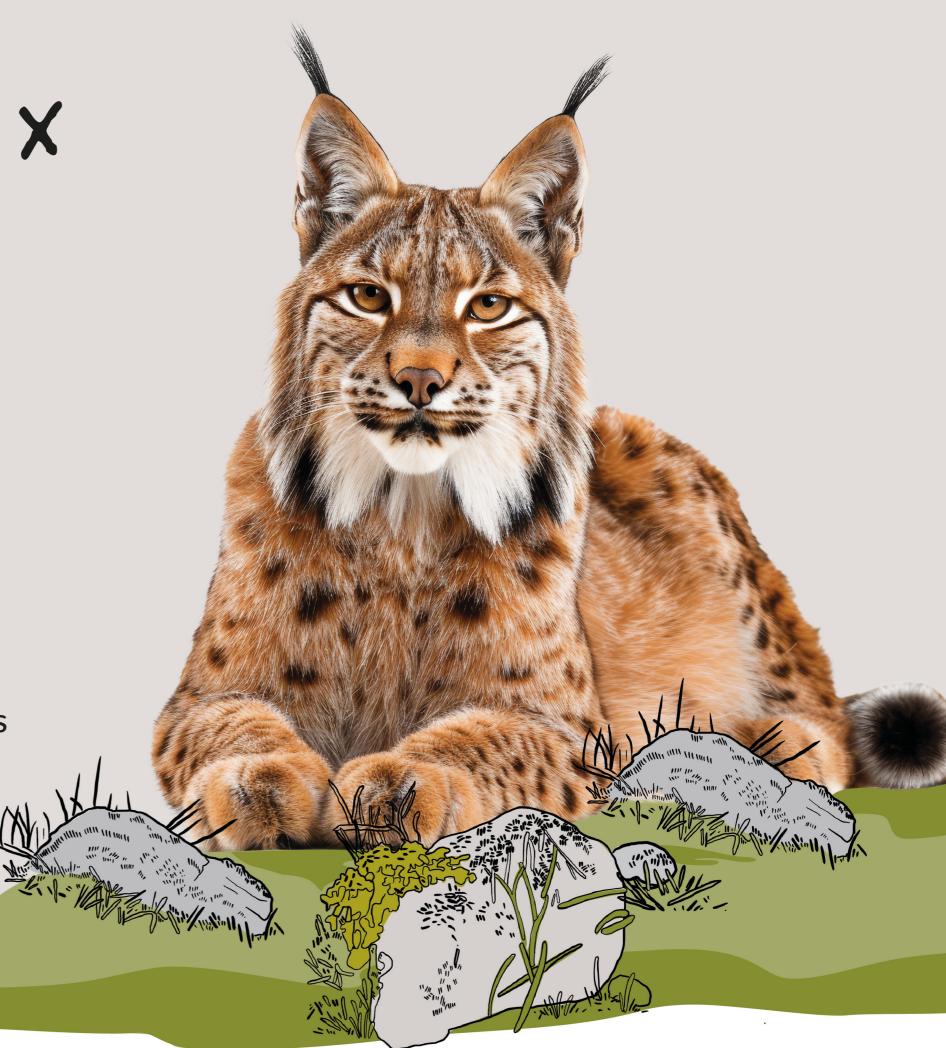
Get involved with environmental organizations and take part in their events.



Learn about wolves' lifestyle and behavior.

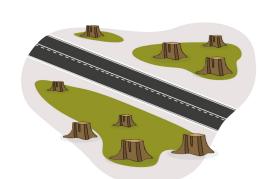
European Lynx The Majestic Forest Cat

The Eurasian lynx is one of the largest predators in Europe, found in forests from Scandinavia to the Carpathians and the Balkans. This majestic cat is notable for its long, fluffy tail, brown coat with dark spots, and impressive size - males can reach 25 kilograms! Lynxes are solitary and skilled hunters that prey on deer, hares, foxes, and other smaller animals.



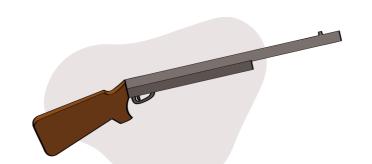
# Threats

# for European Lynx



### **Habitat loss**

Deforestation and road construction reduce the available living space for lynxes. This makes it difficult for them to find food, shelter, and raise their young.



#### Hunting

In the past, lynxes were hunted for their fur and meat, although hunting is now banned in most of Europe. In some regions, lynxes are still hunted if they threaten livestock or game.



### Collision with vehicles

Lynxes can be killed when crossing roads, where they have a high risk of being hit by cars. As car traffic increases, this problem becomes more pressing.



#### Diseases

Lynxes can contract diseases carried by other animals, such as domestic pets. Some of these diseases can be very dangerous for lynxes.

What helps



# Creation of protected areas and "green bridges"

Protected areas are being established where lynxes can live and hunt undisturbed. These areas provide lynxes with the peace and necessary resources to successfully reproduce and raise their young. The possibility of creating animal crossings or "green bridges" over roads is also being explored.



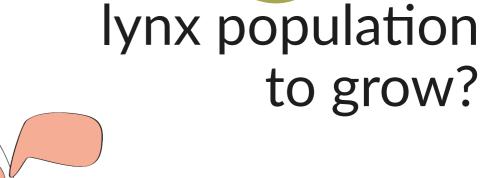
# **Hunting restrictions**

Hunting is strictly regulated and in some places completely banned. This helps to reduce the decline of the lynx population and ensures its sustainable existence.

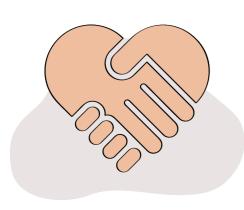


# Supporting organizations working to protect lynxes

Organizations research the lifestyle of linx and educates society about the importance of European lynx.



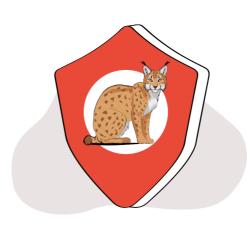




Support the organisations that promote lynx preservation.



Observe traffic regulations when driving on forest roads. This will help reduce the risk of collisions with lynxes.

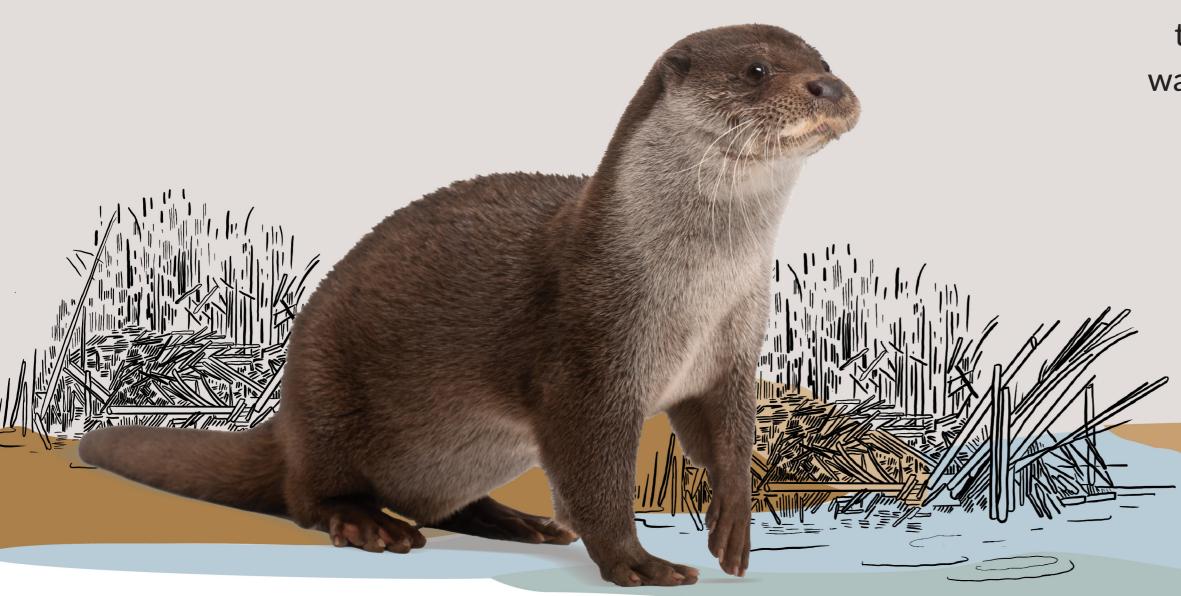


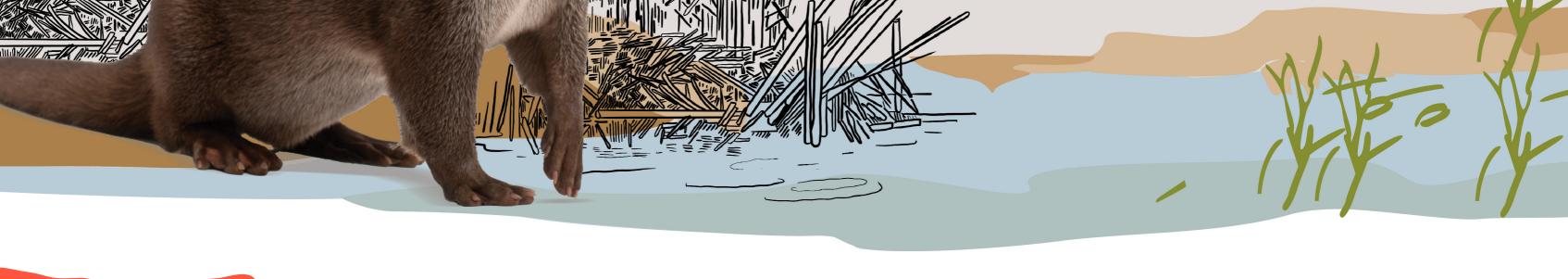
To protect lynx habitats.

# European otter: lively water adventurer

The European otter is a graceful predator adapted to aquatic life. It inhabits rivers, lakes, and ponds throughout Eurasia.

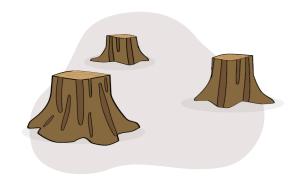
The otter is an excellent swimmer, thanks to the webbed feet and dense, waterproof fur. Its main food is fish, but it also eats crayfish, frogs, and other small animals.





# Threats

# for European otter



#### Loss of habitat

The destruction of river and lake banks, deforestation, and water pollution reduce otter habitats and make it difficult for them to find food and place to live.



### Water pollution

Water pollution from various chemicals negatively impacts ofter health, reduces their ability to reproduce, and makes them more susceptible to diseases.



### Hunt

Although otters are protected in Latvia, illegal hunting practices still persist.



# Competition with other species

Other aquatic species, such as beavers and water rats, can compete with otters for food and habitat.

What helps

otters to grow?

population of



# Protection of habitats

Otters are very sensitive to disturbances, therefore it is important that their habitats are as peaceful as possible and not disturbed by human activities. National parks, nature reserves, and other protected areas provide otters with safe havens.



# Responsible human action

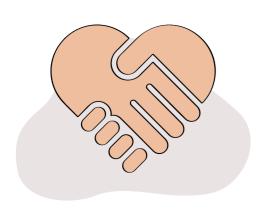
This includes waste collection, pollution reduction, and sustainable forestry and fisheries.



## International cooperation

European countries are collaborating to implement joint otter conservation measures and exchange experiences in their protection.





Support organisations that helps to protect endangered species.



To organize water clean-up events.



Choose products with an eco-label that do not harm the environment.



To inform others about European otters and the threats they face.

# Grey seal friendly sea giant

The grey seal is one of the largest seal species globally. These massive creatures can be found along the northern Atlantic coasts and seas. With their dark grey coats, thick blubber, and strong flippers, they're well-adapted to their cold-water environment. Grey seals are highly social and often form large colonies on rocky shores and islands.



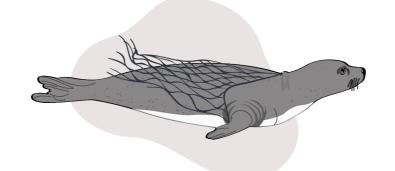


# for grey seal population



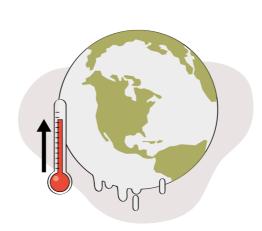
### Illegal hunting

Historically, gray seals were hunted to extinction for their fur and meat. While hunting is now tightly controlled, poaching still remains a threat in certain areas.



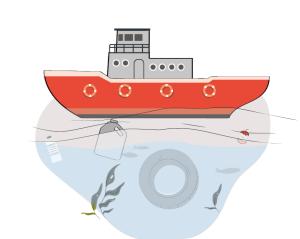
# Fishing and the use of nets

Seals often become entangled in fishing nets and drown.



## Climate change

Rising sea levels and melting ice due to climate change are making it harder for seals to find food and suitable resting areas.



# Pollution

Seals are suffering from the effects of marine pollution, which is impacting their ability to thrive and reproduce.



# Grey seal population to grow?



# Hunting restrictions

Hunting is strictly controlled and outright forbidden in certain regions.



## Fishing restrictions

People are making new rules to help seals stay safe in the water.



# **Creating** protected areas

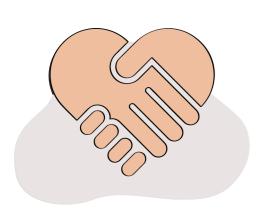
Protected areas are created to keep seals safe. These places are perfect for seals to rest, eat, and raise their pups.



## Climate-friendly lifestyle

Actions like walking, biking, and saving energy help protect the climate. Eating less meat and wasting less food also make a big difference.

# How can we help?



Get involved in actions organised to preserve species.



Preventing the pollution of water bodies with waste, household chemicals, and agricultural chemicals.



Live climate-friendly!