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WETLANDS AND THEIR IMPORTANCE

Participant's Booklet



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BIOLEARN-BSB142
ECO-CONSCIOUS MINDS TO STOP POLLUTION
IN THE VALUABLE WETLANDS OF BLACK SEA BASIN

WETLANDS AND THEIR IMPORTANCE

Participant's Booklet

Target Audience: 8-14 years old

District Government of Enez

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About The Project

BIOLEARN (Eco-Conscious Minds to Stop Pollution in the Valuable Wetlands of Black Sea Basin - BSB142), which was initiated on 01.01.2020 within the scope of the first call for proposals of “Joint Operational Programme Black Sea Basin 2014-2020” where the Directorate for EU Affairs is the national authority, is led by District Government of Enez.

Representatives of the following partners are as follows:

1. District Government of Enez-Turkey
2. Division Directorate of Edirne under First Regional Directorate under General Directorate of Nature Protection and Nature Parks of Ministry of Agriculture and Forestry - Turkey
3. Foundation Caucasus Environment - Georgia
4. Agricola NGO - Ukraine
5. Green Balkans / Stara Zagora NGO - Bulgaria
6. Management Body of Evros Delta and Samothraki Protected Areas - Greece

The overall objective of the project is to provide information, experience transfer and capacity building training between partners and develop a common environmental protection and education approach, methodology and organizing campaigns that will raise awareness in the society to reduce pollution in important wetlands in the Black Sea Basin.

The main activities to be carried out within the scope of the 26-months project are as follows:

1. Establishment of a total of 4 environmental protection and training centres, one of which is on the shores of Gala Lake, and providing environmental protection training to visitors and especially to students. By providing equipment for the other 6 existing centres, there will be a network of 10 activity and training centres.
2. Workshops to be held in Bulgaria and Greece, focusing on discussions about examples of

successful training and awareness-raising campaigns for the protection of wetlands, sharing experiences and preparing the materials to be used in training which will be applied in all centres. Capacity building training for trainers.

3. Organizing massive and synchronized cleaning campaigns to reduce pollution in wetlands.
4. Award-winning photo contest and exhibition focused on wetland protection.
5. Organizing a wetland pollution-based painting contest and exhibition in primary and secondary schools.

Outputs of the Project:

1. “Stop Pollution” and “Save Nature” environmental education and activity centres, one of which is mobile, will be established in 5 countries and will sustainably carry out training and awareness-raising activities.
2. A report will be prepared on the nature and rate of pollutants in 5 wetlands in the Black Sea Basin.
3. A guide with examples of good practices consisting of training and campaigns focused on protecting wetlands will be prepared.
4. A wetland protection training set consisting of 12 sections will be prepared especially for students. Training sets will also be shared on the internet.
5. After 10 people from 2 each partner country received trainer’s training, they will train 25 people in each region (totally 125 people) and the sustainability of training activities will be ensured in the established centres.
6. A painting competition on environmental protection will be held in at least 15 primary and secondary schools and paintings selected by the jury will be exhibited.
7. Pictures taken in 5 regions with the participation of professional photographers will be exhibited. With the mobile ‘Stop Pollution’ vehicle, the exhibition will travel to 5 countries.
8. An environmental cleaning campaign will be held simultaneously with the participation of 1500 people in 5 regions.
9. With the international conference to be held in Georgia, the outputs of the project and future action plans will be shared with the public.

For more information, you can visit the project website: www.bio-learn.org



Wetlands and Their Importance



 A typical view of a wetland.

What Is a Wetland?

As you can understand from its name, a wetland means a land surface covered with shallow water. The water level in wetlands is mostly low when you compare it with seas and lakes. The main reason for this is that the soil absorbs as much water as possible and cannot take it anymore. The rest of the water is accumulated on the surface and wetlands are formed!

Keep in mind that any area with puddles is not called a “wetland”. Let’s look at the waterholes in the garden, field or streets after raining. These areas could accumulate water for a while, but it does not mean that they have characteristics of wetlands.

Did You Know?

Wetlands only cover 6% of Earth’s surface but 40% of all known living beings live in these areas.

Wetlands assume several important tasks. Apart from hosting millions of living creatures, wetlands maintain the health of the ecosystem.

First of all, water always exists in wetlands. Although the water level changes according to rainfalls, there is always water in wetlands. Thus, the plants which live in water have access to an unlimited source to survive. Not just plants but birds, mammals, fish, insects and many others live in the wetland ecosystem.

What Types of Wetlands Exist?

Wetlands could be in different shapes, sizes and characteristics. While some of them are formed as marshes near lakes and rivers, others are formed as bogs deep in the





 Marshes are the one of the wetlands which form in the soils rich in terms of minerals.

forests. Some of them could be large like the Amazon River Basin, while others could be the size of a small water pond.

Wetlands are usually classified into three categories as marshes, swamps and bogs. Each of them has its own soil characteristics and mineral levels. So, each wetland hosts different kinds of plant species.

Marshes are one of the wetlands which form in the soils rich in terms of minerals. They are mostly covered with grassy areas and herbaceous plants. The water level is generally low, so it creates an important feeding and breeding area for numerous

Did You Know?

One of the largest wetlands in the world is the Pantanal Protection Area in South America. Its size is almost half of the Black Sea.



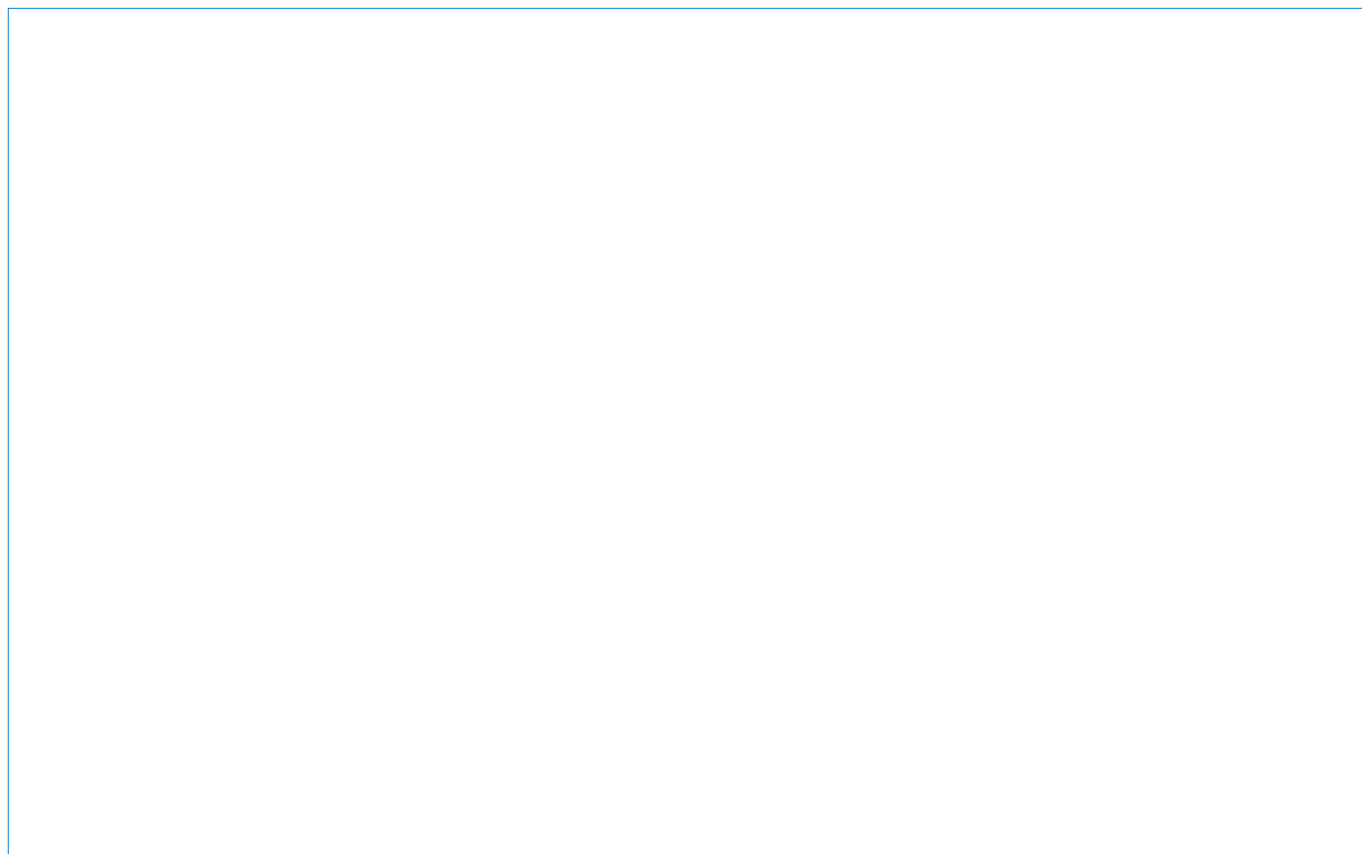
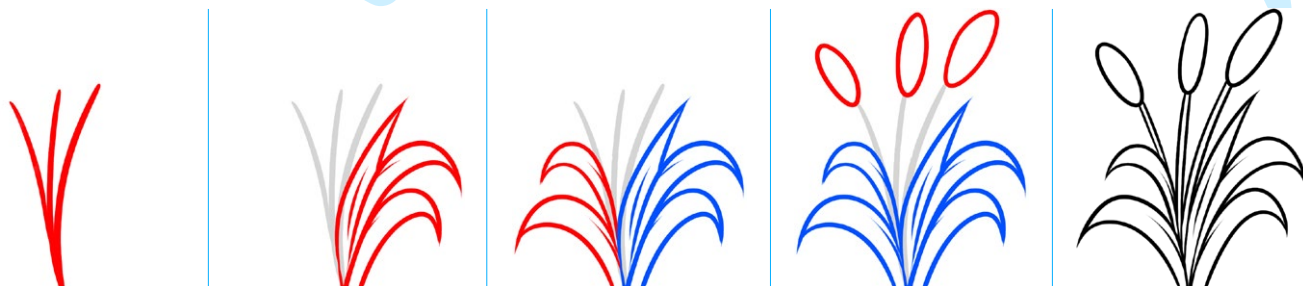
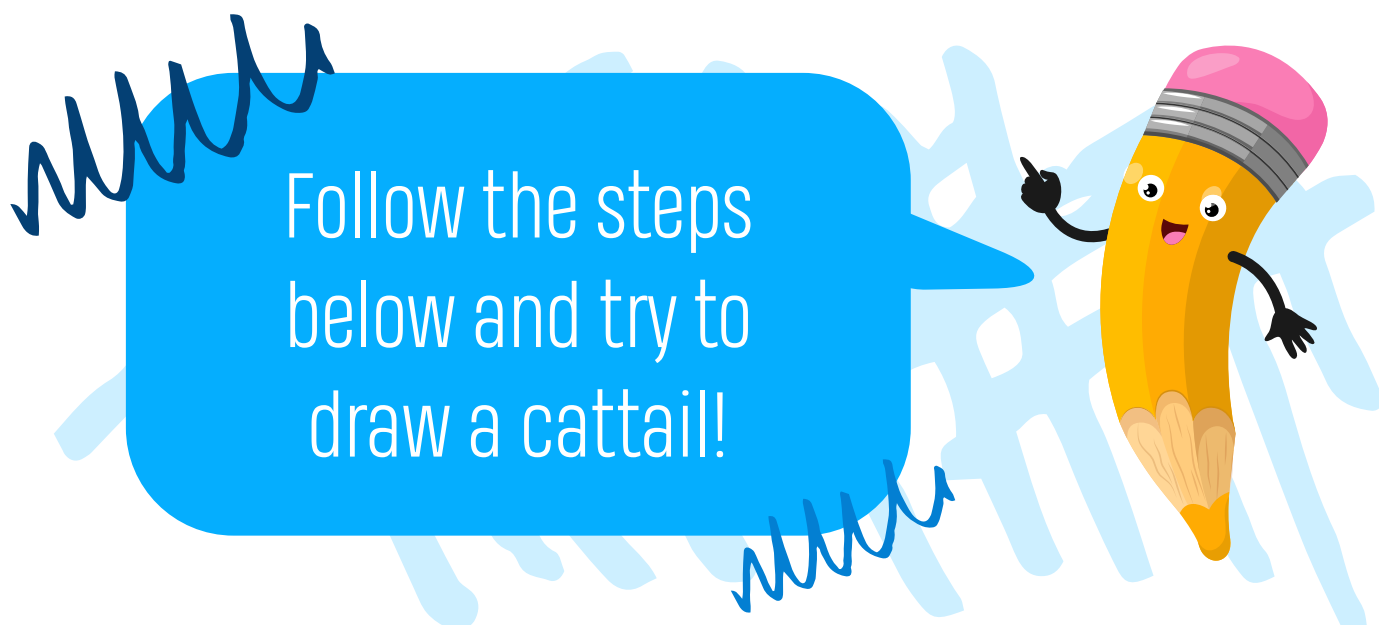
 *Pantanal Protection Area*

bird species. The river deltas where a river and a sea meet, the banks of lakes or artificial ponds are good examples of marshes.

The other wetland type is **swamps** which also is formed in mineral-rich soils. The water depths in swamps are generally higher than in other wetlands. They also provide suitable growing conditions for woody plants like trees.

Lastly, **bogs** are wetlands that form in the land with poor minerals. Bogs are mostly found in Siberia and Canada which have cold and rainy climates. One of the most important features of bogs is the acidic characteristics of their waters. Because of that, only mosses could grow in bogs.





Where Are Wetlands Found?

Wetlands could be found almost anywhere on Earth. There are numerous wetlands in different shapes and sizes on all continents except Antarctica, which is completely covered by ice. On the scale of Europe, the Black Sea Basin is a very important area that contains the richest wetlands of the region.

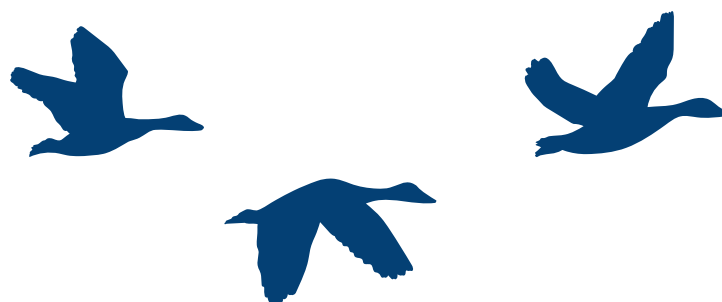
For example, the Danube River travels all across Europe and then it creates the globally important Danube Delta where it meets with the Black Sea. Similarly, the Kızılırmak River, the longest inland river in Turkey, creates a large delta on the Black Sea coast. These wetlands host dozens of bird, insect, fish, mammal and plant species.

Did You Know?

There are more than 700 bird species that have been observed across the entire Europe, and nearly 250 of them could be observed in the Danube Delta.



 Rivers create wetlands called river deltas where they meet with the sea.



What Are the Roles of Wetlands?

Wetlands assume several important tasks. Apart from hosting millions of living creatures, wetlands maintain the health of the ecosystem.





First of all, wetlands protect the water which is the key element of life on Earth. Due to their physical characteristics, they prevent floods and keep water safe. Their characteristics are not only limited to that! They purify this accumulated water and create clean water. At the same time, this water feeds the underground water supplies. All these features are vital for humanity to live safely.





Secondly, the incredible richness of wetlands provides plenty of food for each living being in the food chain. Therefore, many plant and animal species live in wetlands so that they can use this abundance of resources, which is the center of life for them. It is not a coincidence that almost half of all living creatures live in wetlands!


What Did We Learn?

 Wetlands consist of both water and land, so they are called “wetlands”.

 Wetlands always have water and its level could change according to rainfall. They are “wet” all year round.

 Wetlands could be found on all continents except Antarctica. They are mostly formed near river beds and lakes.

 Wetlands are very important for ecosystems because they host numerous plants and animals. At the same time, they filter the water and prevent floods, which significantly helps humanity.

 If a wetland has more trees, it is called a swamp. But if there are grassier plants, they are called marshes.

 The water in wetlands could be freshwater, salty or a mix of these.



World Wetlands Day

The Ramsar Convention was signed on 2 February 1971 to protect wetlands. Each year, the 2nd of February is celebrated as World Wetlands Day. Seminars, field studies and workshops are organized on this day to raise global awareness about the importance of wetlands for our nature.



Worksheets

WORD HUNT

Let's find the words related to the wetland hidden horizontally and vertically in the puzzle!

1. Marsh, **2. Swamp**, 3. Bog, **4. Shallow**, 5. Ramsar, **6. Wetland**, 7. Ecosystem,
8. Flood, 9. Plants, **10. Birds**, 11. Animals, **12. Freshwater**, 13. Saltwater,
14. February Two, 15. Biological Diversity, **16. Migration**

D	S	R	T	G	B	N	E	F	L	O	O	D	M	U	D	P	R	M	F
R	M	A	R	S	H	K	C	G	H	J	K	W	P	Q	Q	G	V	C	E
E	T	E	Y	N	M	K	C	S	A	L	T	W	A	T	E	R	H	J	B
R	E	A	T	Y	B	V	N	B	O	C	E	R	Y	G	F	D	S	J	R
A	A	S	W	E	T	L	A	N	D	X	N	F	H	J	F	R	Y	U	U
M	Z	B	T	L	O	U	K	H	B	N	F	T	R	E	R	L	W	H	A
S	Y	O	B	M	X	L	W	O	P	U	M	T	E	F	E	D	B	G	R
A	E	G	T	Y	H	G	F	D	S	A	I	V	C	N	S	J	I	X	Y
R	E	W	T	F	D	A	H	J	B	V	G	X	O	C	H	Z	R	Z	T
G	Y	I	S	H	A	L	L	O	W	Z	R	V	S	B	W	C	D	B	W
A	D	S	G	J	Y	N	C	B	W	L	A	C	Y	N	A	P	S	W	O
S	A	N	I	M	A	L	S	T	R	Q	T	Z	S	V	T	N	R	M	X
V	Y	T	F	D	K	L	S	I	Y	T	I	E	T	T	E	U	O	K	V
A	R	T	V	G	B	D	Y	J	M	H	O	J	E	Y	R	R	G	N	B
S	E	F	D	G	H	Y	T	O	I	Y	N	Y	M	U	H	N	H	Y	T
D	G	H	J	K	L	S	D	F	G	H	Q	K	A	S	D	F	A	D	W
B	I	O	L	O	G	I	C	A	L	D	I	V	E	R	S	I	T	Y	Q
K	H	J	K	H	T	R	E	V	B	N	M	J	U	I	T	R	F	D	Q
R	P	L	A	N	T	S	R	R	H	J	K	L	U	T	N	B	V	G	X
R	T	Y	H	N	B	V	F	F	B	H	S	W	A	M	P	L	I	K	T

MY OBSERVATION NOTES

Let's observe your surroundings and record the things you have seen.

Date

Start and
End Time

Location

Weather

Wind speed

Observer

Tasks

Draw the sky

Find two different leaf shapes. Draw them.

What type of wetland are you in?

Observe two different bird species.
Write their names.

What did you observe from what color? Write them down.
For example, a red ladybug.

Green

Blue

Red

White

Brown

Yellow

Gray

Black

What did you see with the shapes below? Write down. For example, a triangular pine tree

Rectangle

Circle

Triangle

Have you encountered any traces / hints (such as animal excrement, animal footprint, feather, nest)? If you have, write them down or try to draw them.

Notes

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