



LOCAL AGENCIES AND ENDANGERED SPECIES

MEETING IN BULGARIA APRIL 2016



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



"WATER IS LIFE – LET'S PRESERVE IT"

This partnership involves five secondary schools and five countries:

- LPO Etienne Oehmichen /Châlons-en-Champagne, France/
- Foreign Language Secondary School /Pleven, Bulgaria /
- Nova Academy / Simrishamn, Sweden/
- Main-Taunus-Schule / Hofheim, Germany/
- I.S.I.S.S. /Bojano, Italy/

The project takes place between **September 2015 and August 2017**. Its theme is in the sphere of the problems the contemporary world must face; such as the lack of responsibility toward future generations and the indifference to the irrational use of water supply in daily life. Water is an essential source for the survival of humanity. The project is focused on the understanding of water pollution and the preservation of water supplies at a local, regional, national, European and international level.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Subjects: Biology, Chemistry, Citizenship, Environmental Education, Foreign Languages, Geography, Geology, Informatics /ICT, Natural Sciences

Languages: EN

Student's age: 14 - 19

Dissemination tools: Chat, e-mail, other software (PowerPoint, video, pictures and drawings), Project Diary, Twin space, Video conference, Virtual learning environment (communities, virtual classes ...)

Aims: Thanks to this project, we want to contribute to the improvement of the preservation of the water, educate our school communities to the environmental problem, consolidate the European dimension of education and promote the values of our European citizenship. The participants will develop their linguistic, civic, social, digital, and intercultural skills.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Work process: Some activities will be: the organization of events for the World Water Day in March and Europe Day in May; Save water at school and at home; poster contests in local endangered species due to the pollution of rivers; water use in local industries, the hydrological cycle; fieldtrips (a wastewater treatment plant, a dairy plant, Champagne vineyard and making plant, a dams, an aquarium, a modern water bottling plant...) The activities will include: - documentary research - communication activities in English - workshops; - laboratory experiences; - debates. A work schedule has been agreed upon by all partners. Five mobilities have been planned (one in each partner country).

Expected results: Some results of this partnership will be: a project logo; a digital booklet with photos, maps, and charts on the water resources and pollution in each partner region; Save water at school and at home; posters; the digital booklets on the subjects studied during the course of the project; a 2016 calendar; quizzes a basic conversation guide in English and in the five national languages of the partnership.

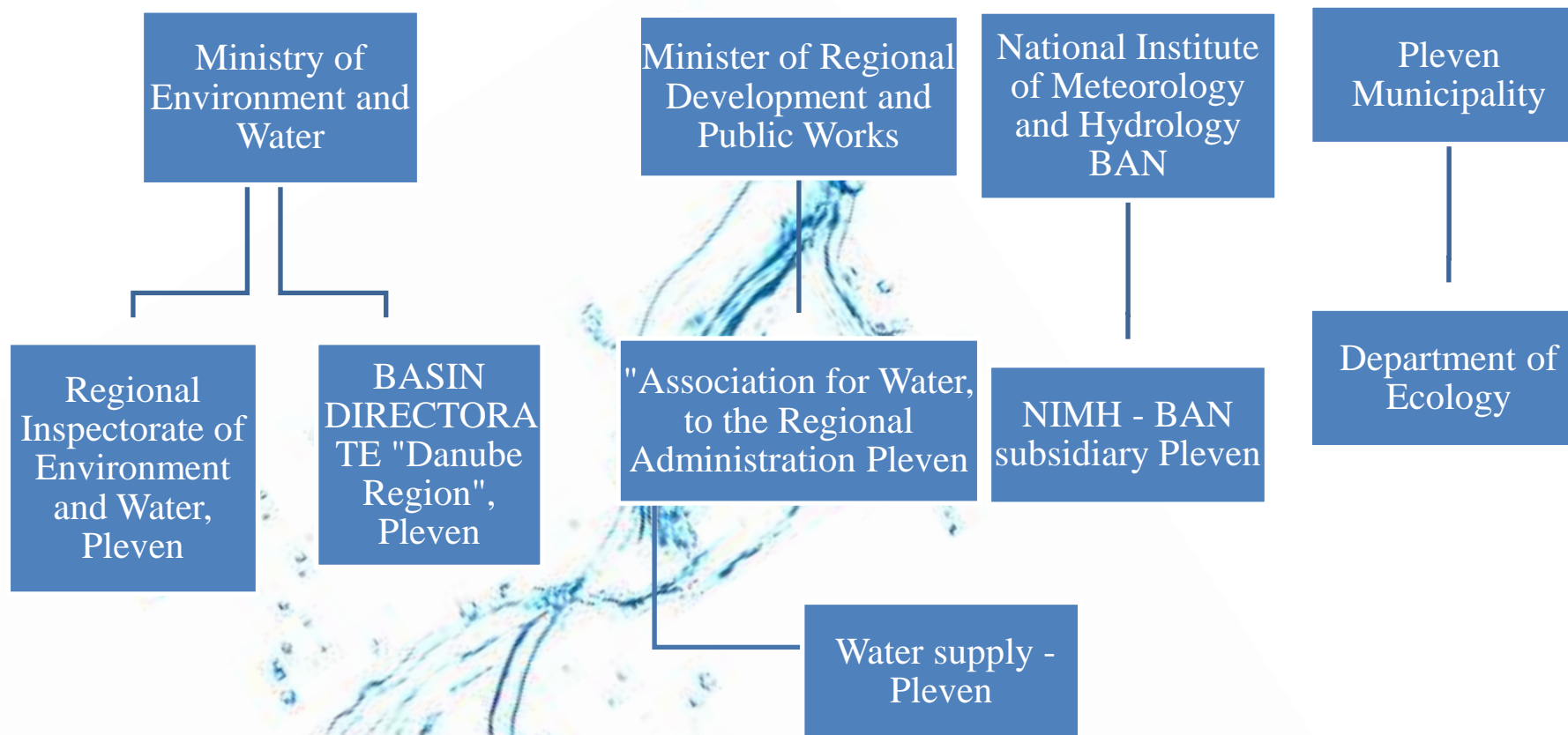
Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



WATER IS LIFE – LET'S PRESERVE IT

BULGARIA



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



The Ministry of Environment and Water manages, develops and implements the state policy in the field of environment and water.

Basin department - Pleven. Water management in Bulgaria is implemented at national and local basin level. Bulgaria is divided in four basin management regions – The Danube, The Black Sea, the East- and West White Sea and are established under four basin departments. The basin department is coordinated and controlled by the Ministry of Environment and Water and is a Public Administration, which assists the Director of the basin department in carrying out its mandate, provides technically its activities and performs administrative services to citizens and juridical persons. The activities, work organization and the structure of the basin department is determined by Rules of Procedure, work organization and composition of the basin department.

Regional Inspectorate of Environment and Water Pleven is an administrative structure of the Ministry of Environment and Water, whose purpose is to ensure the implementation and pursuing of state policy environmental conservation on a regional level. The functions, powers, competence, duties and obligations of the Regional Inspection - Pleven are regulated by the Rules of Organization and the Regional Inspectorates of Environment and Water. Within the framework of the

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



existing regulations in the country for conservation
Environmental RIEW - Pleven has competence regarding: protection of air, water and soil from pollution and damage, ruling on an environmental assessment and environmental impact, prevention and reduction of industrial pollution.

NIMH BAS is the main executor of scientific research and activities in the field of meteorology, agrometeorological and hydrology. These activities follow the standards of the regulations of the World Meteorological Organization (WMO) to the United Nations. NIMH is the official representative of Bulgaria in the WMO.

NIMH - branch Pleven. Based on measurements held in 290 stations in northwestern and central northern Bulgaria, radar and satellite information and advanced numerical meteorological and hydrological models at the center draw up local forecasts, including dangerous and especially dangerous phenomena, including floods. Monitoring and information are being improved and uniform standards and models are being created to predict river flow in the Lower Danube.

Association of W&C Pleven to Regional Administration – is responsible for managing, planning and constructing of water supply systems and facilities

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



for choice and control over the water supply operator of the territory.

"W&C" Ltd. - Pleven is a company with 100% state participation, which functions are normally executed by the Minister of Regional Development and Public Works.

The policy of Pleven municipality in environmental management is performed by the "Ecology". A number of activities are implemented that aim protecting and maintaining the quality of the elements of the environment. With particular attention to approaches to improve the quality and the proportion of green areas, maintaining standards parameters of air and water.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

DALMATIAN PELICAN

(Pelecanus crispus)



This huge bird is the largest of the pelican species. It measures 160 to 183 cm in length, 7–15 kg in weight and 290–345 cm in wingspan. Its median weight is around 11 kg, which makes it perhaps the world's heaviest flying bird species.

The Dalmatian differs from this other very large species in that it has curly nape feathers, grey legs and silvery-white plumage. The bill, at 36 to 45 cm long, is the second largest of any bird. When the Dalmatian pelican is in flight, its wings are with black tips.

The Dalmatian pelican is often silent, as most pelicans tend to be, although it can be fairly vocal during the mating season.

The Dalmatian pelican is found in lakes, rivers, deltas and estuaries.

This pelican feeds almost entirely on fish. The Dalmatian pelican requires around 1,200 g of fish per day.

Conservation status: Vulnerable species.

Negative factors: drainage of wetlands and land development, human activities.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

MUTE SWAN

(*Cygnus olor*)



The name 'mute' derives from it being less vocal than other swan species. Young birds are called cygnets. Measuring 125 to 170 cm in length, this large swan is wholly white in plumage with an orange bill bordered with black.

Asia and Europe are the mute swan's native habitat territories. However, their habitat has expanded to reaching North America and Oceania as well. It lives and nests near lakes and canals.

Conservation status: Least Concerned.

Negative factors: hunting, pollution, drainage of their natural water habitats.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

Platalea leucorodia

(Linnaeus, 1758)

Eurasian spoonbill



The breeding bird is all white except for its dark legs, black bill with a yellow tip, and a yellow breast patch like a pelican. It has a crest in the breeding season. They are mostly silent. The Eurasian spoonbills eat aquatic insects, molluscs, newts, crustaceans, worms, leeches, frogs, tadpoles and small fish.

Threats to the Eurasian spoonbill include habitat destruction by drainage and degradation by pollution. It is especially adversely affected by the disappearance of reed swamps. Eurasian spoonbills show a preference for extensive shallow, wetlands with muddy, clay or fine sandy beds.

The bird is in danger of extinction due to destruction and damage of the habitats, pollution of the water basins and illegal shooting.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

Haliaeetus albicilla

(Linnaeus, 1758)

White-tailed eagle



This species has broad "barn door" wings, a large head and a large thick beak. The White-tailed eagle has a combination of mousy-brown coloration, broad, evenly held wings, white tail, strong yellow bill and overall large size. Some individuals have been found to live over 25 years, 21 years being the average. The white-tailed eagle eats fish, birds and mammals.

The positive population development of the White-tailed Sea Eagle in recent years should not give reason to deny negative impacts caused by humans. Population development and size should not be significantly affected by anthropogenic factors. Anthropogenic mortality reasons should be less than 50% of the total mortality.


Copy right


Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Range of *H. Albicilla*

 Nesting range

 Wintering range

 Year-round range

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

EUROPEAN BEE-EATER



(*Merops apiaster*)



This species, like other bee-eaters, is a richly-coloured, slender bird. It has brown and yellow upper parts, whilst the wings are green and the beak is black. It can reach a length of 27–29 cm, including the two elongated central tail feathers. Sexes are alike.

This bird breeds in open country in warmer climates. These bee-eaters are living and nesting colonially in sandy banks, preferably near river shores.

As the name suggests, bee-eaters predominantly eat insects, especially bees, wasps, and hornets. It can eat around 250 bees a day.

Conservation status: Least concerned

Negative factors: human activity

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

Grey heron (*Ardea cinerea*)

Length of body: 90-100 cm

Wing spread: 165-170 cm

Weight: 1- 2 kg

Habitat: Lakes, marshes, reservoirs, mainly in the lower parts of Bulgaria (Europe - Bulgaria, Asia, Africa).

Nutrition: fish, mice, insects, snakes.

Negative factors: The drainage and degradation of wetlands and chasing in fishponds.

Conservation measures: Included in Red Book. Their nests are included in protected areas.



Ferruginous duck (*Aythya nyroca*)

Length of body: 40- 45 cm

Wing spread: 45 cm

Weight: 400- 700 gr

Habitat: Lakes, marshes, small rivers (Asia, Europe – Bulgaria)

Nutrition: Molluscs, Insects

Breeding: It lays 6 to 14 yellow-greenish eggs. The female incubates 25- 28 days.

Negative factors: The drainage and degradation of wetlands, fishermen' and tourists' activities.

Conservation measures: Included in Red Book. The main nesting sites are protected areas.



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

Little ringed plover (*Charadrius dubius*)

Length of body: 14 cm

Wing spread: 46 cm

Weight: 200-300 gr

Habitat: Lakes, Runs dry gullies,
Coast (Europe – Bulgaria, Asia, Africa)

Nutrition: Seeds, Insects, Clams,
Worms

Negative factor: Predators, water pollution, oil spills, fishermen' activities

Conservation measures: Included in Red Book. The main nesting sites are protected areas.



Black stork (Ciconia nigra)

Length of body: 90 – 100 cm

Wing spread: 165 – 170 cm

Weight: 1 – 2 kg

Habitat: Lakes, marshes, reservoirs,
mainly in the lower parts of Bulgaria (Europe
– Bulgaria, Asia, Africa).

Nutrition: fish, mice, insects, snakes.

Negative factor: The drainage and
degradation of wetlands and chasing in
fishponds.

Conservation measures: Included in Red
Book. Their nests are included within
protected areas.



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

Red-breasted goose (*Branta ruficollis*)



Red-breasted geese are distinguished by their dark sooty colour, relieved by white, and as a distinction from the grey geese of the genus *Anser*.

While wintering, the red-breasted goose feeds on grasses, leaves and seeds.

The red-breasted goose breeds in Arctic Siberia, mainly on the Taymyr Peninsula, with smaller populations in the Gydan and Yamal peninsulas.

Small populations of other Arctic breeding geese have shown dramatic population fluctuations and this may prove to be the case for this species.

It is listed in the (national and regional) Red Book of Russia and Red Books of Kazakhstan and Bulgaria.



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

WATER IS LIFE – LET'S PRESERVE IT

FRANCE

ENDANGERED SPECIES

<p style="text-align: center;">Bruant Ortolan</p>  <p style="text-align: center;">(Emberiza Hortulana)</p>	<p>Size: 17 cm. Wingspan: 24 to 27 cm. Weight : 19 to 27 g</p> <p>This species can be found in Europe and Asia. It is threatened by excessive hunting and extensive farming. To preserve its hunting is forbidden.</p> <p>Author : Thibault MONCLIN Source :Wikipedia</p>
<p style="text-align: center;">The Newt</p> <p style="text-align: center;">(Triturus Vulgaris)</p> 	<p>The Triturus has a long slender body with short feeble legs, and a tail. It is a urodel amphibian.</p> <p>The Newts category includes all other urodel amphibians, like Salamanders.</p> <p>The Triturus lives in dugouts and ponds; it has got lungs but mostly stays under water.</p> <p>All pollutions in water can affect the Triturus, but especially chemical waste like pesticide.</p> <p>To protect the Newt, there are natural reserves and restrictions on the use of chemical products.</p> <p>Author : Titouan PHULPIN Source : Wikipedia</p>

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

Amphibian vole

(Arvicola sapidus)



Size : 16 to 23cm

Weight : 150 to 280 g

This species is present in wet areas in Europe and mainly in France, Spain and Portugal.

This species is classified as vulnerable.

It is disappearing because it was hunted, poisoned, sometimes eaten and because of the human transformation of the riverbank which destroys its natural habitat. Today this animal suffers from water pollution because it eats water plants.

This species has been protected by the European Union only since 2009.

Author : Julie GUYOT

Source : Wikipedia

WATER TREATMENT IN OUR AREA

Our Urban Conglomeration is in charge of the sewage site. It manages the community treatment network to evacuate households' used water to the treatment plant. The water is treated as soon as flows back into pipes.

In the sewage, the water goes through a grid in order to keep the biggest waste above the grid and the water underneath. Once the sand and oil are removed from the water, it is deodorized and separated from the mud by decantation into clarifying basins. After the process the clean water is released into the River Marne, respecting the environment's balance.

The sand taken from the used water is reused for road works. The mud is transformed into granular to be used in agriculture.

<http://www.assainissement-cites-en-champagne.fr/>

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



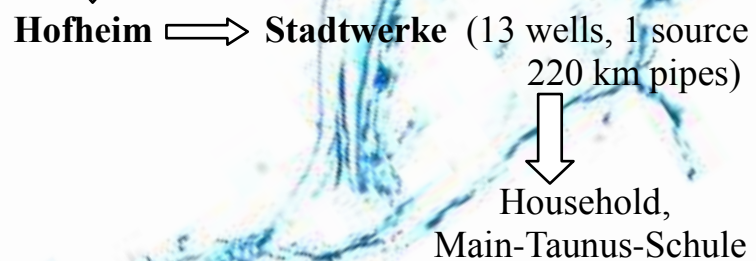
WATER IS LIFE – LET'S PRESERVE IT

Germany

Water supply in Germany

Water supply is a mandatory duty of state

responsibility lies with the municipalities:



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Common tern – Sterna hirundo (Flussseeschwalbe)

Look

- Length: 34cm
- Weight: 150g
- Wing-spread: 86cm
- Red feet, orange-red beak with a black point at its end, black hood

Habitat

- In land areas close to big fluidity with clear water and rich in fish and shingle
- Banks or sand banks
- Near lake shore
- April to June in Europe; winter in Africa

Offspring

- Build nest on the ground
- Duration of breeding: 4 weeks

Reason of endangerment

- River regulation
- Water pollution
- Disturbance through tourists

Safety precautions

- Artificial nesting sites (rafts for nesting, man-made shingle banks,...)
- Constriction of free time activities of humans

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Little bittern – *Ixobrychus minutus*

Look

- Length: 33 -38cm
- Weight: 60 – 150g
- Wing – spread: 40 – 58cm
- Male: the wings are black with a large white patch on each wing, the back and crown are black
- Female: patches on wings are beige, back and crown are brown

Behaviour

- Hunt fishes, amphibious, insects, molluscs

Habitat

- big and small, natural and artificial lakes
- fish ponds
- reed area
- slowly flowing water

Nest-Building

First the male is the leader and builds a platform right above the water (sometimes in bushes or on the ground). Afterwards the female takes the leadership, pads the nest and begins to brood

Occurrence and Spreading

- 35 – 50 pairs in Germany : in Baden – Wurttemberg, Karlsruhe, Mannheim, Lake Constance

Precautionary measure

- It is unknown why the birds' occurrence decreased maybe ...
 - o ... because of the dangers on the route to their □ winter habitats
 - o ... because of the loss of breeding areas
- Breeding areas are protected

Source: Extract from Im Portrait – die Arten der Vogelschutzrichtlinie”
www.lubw.baden-wuerttemberg.de < Naturschutz < Natura2000 < Publikationen

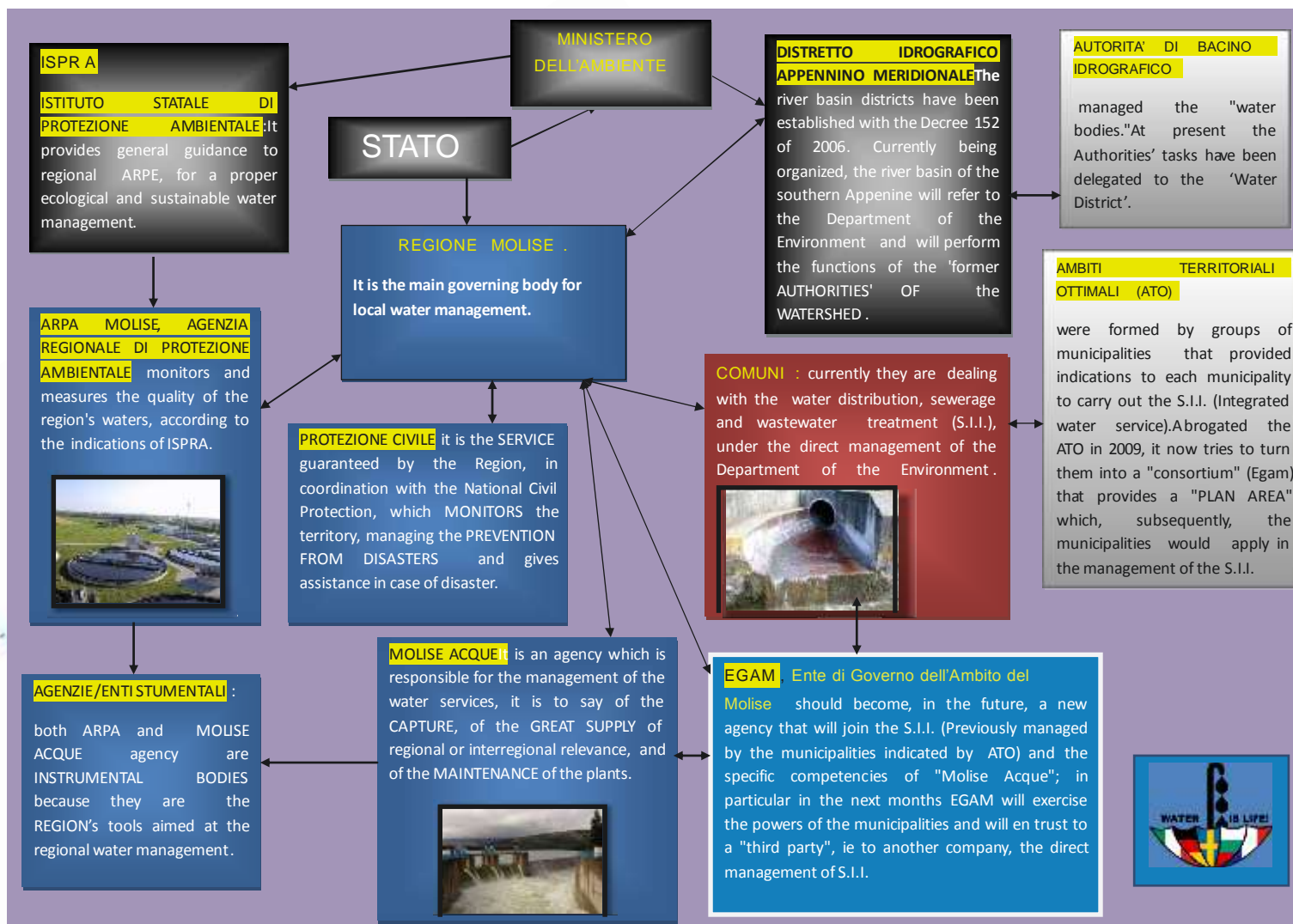
Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



WATER IS LIFE – LET'S PRESERVE IT

Italy



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Salamandrina Perspicillata

This amphibian has an average adult length of about 10 cm, the color varies from the brown of the back to the red or black or white of the belly, on the head it has a light-colored 8-shaped stain. Compared to other salamanders, it has four toes on its hind legs, instead of five. The back is almost black with two yellow marks on the head which are similar to a pair of glasses from which it takes its name. The vibrant color is a signal that it is very poisonous for all the potential predators, from the skunk to the snake. It reproduces in spring when the females enter into the water to lay their eggs after being fertilized on the ground. The larvae live in cold and well oxygenated waters and feed of small freshwater invertebrates (mainly crustaceans, larvae of aquatic insects, flatworms). The great drainage interventions operated especially in the last century, the industrial development, the extensive and intensive agriculture and the growing urbanization, have drastically reduced the available sites for the reproduction of the species. Another factor linked to the extinction of this species and of other amphibians is represented by the air pollution.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

Species in extinction in Molise



Austropotamobius Pallipes

The white-clawed crayfish Austropotamobius pallipes is an indicator species of freshwater good quality. Over the last few decades, European populations of native crayfish showed considerable fragmentation and decline on a widespread basis. The LIFE+ Nature and CRAIN Biodiversity project mainly aim to recover the native populations of A. pallipes in 2000 sites of Lombardia, Abruzzo and Molise regions (Italy). It lives in oxygenated streams and canals. It prefers gravelly or sandy beds with banks where there are ravines and safe places, often represented by branches of fallen trees or leaves, in order to hide and rest. It prefers the fresh waters (between 15 ° C and 23 ° C).

Mating takes place especially in autumn. The abdomen female carries the fertilized eggs for 5-6 months (about a hundred), taking care of them, ventilating and cleaning them constantly. In the spring they hatch. The factors that most threaten their survival are the presence of exotic shellfish (ie non-indigenous) introduced by human activities, in particular escaped from herds. Another major factor is the organic pollution which decreases the oxygen content in the water. Also the presence of Inorganic pollution mainly due to heavy metals in fungicides makes impossible the life of the crayfish.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



“This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.”

I.I.S.S. BOJANO ITALY



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

WATER IS LIFE – LET'S PRESERVE IT

Sweden

For this Ebooklet we have brought forth two endangered animals dependent on water. The two endangered species we've chosen both have their habitats close to Simrishamn, the city of which we come from. That's why we picked them. Here below we've written a bit of general information about them and why they became endangered.

European Tree Frog (*Hyla Arborea*)



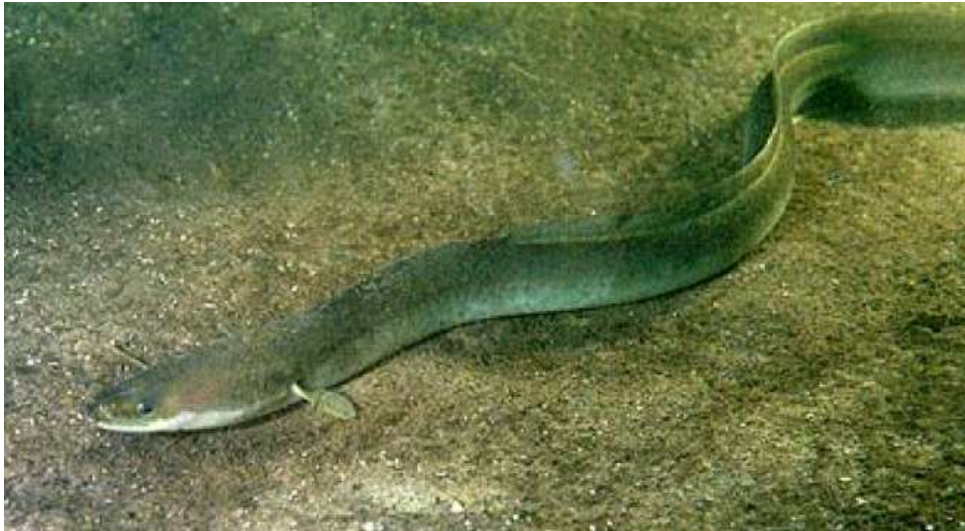
The European Tree Frog is one in the family of Hyla, and has its northern habitational areas in the southern parts of Skåne. Skåne is the region furthest down in Sweden. It prefers being around ponds surrounded by rosehip and blackberry bushes. The frog is around 5 cm and it is the smallest frog in Sweden. It is light green and has a black line on the side. But unfortunately we've destroyed its water due to fertilizers, spruce plantations and exploitation of lands.

It was on the brink of not being able to survive, but Swedish scientists succeeded in making new environments for them to repopulate and now its numbers have increased. The new habitats are fake ponds, filled with water containing the right bacteria and life needed for the frog to prosper. Now it's recovering, and because of the scientists' work they're not labeled endangered anymore.

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

European Eel (*Anguilla anguilla*)

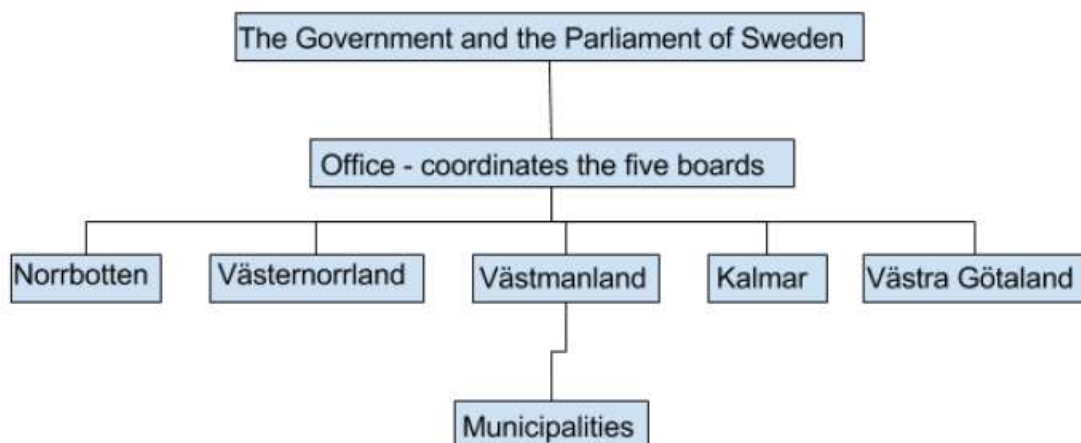


The European eel lives almost everywhere in European waters except for the Black Sea. The European eel is a critically endangered species. The last 45 years the wild eels have declined in population by around 90% and is now critically endangered.

This is due to overfishing, dams and natural changes in the seas. European eels can live more than 50 years, but more likely is about 20 years. Females generally live longer than males and grow to be about twice the size. It is still unknown where the females lay their eggs. The European eel, *Anguilla anguilla*, is one of 19 species in their genus.

In captivity, European eels can live for very long times. According to a report in a local Swedish newspaper, an eel lived 155 years in the well of a family home in Brantevik, a fishing village in southern Sweden, close to where we live.

National and local institutions and agencies, responsible for water issues



Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



WATER IS LIFE LET'S PRESERVE IT

Water is the most important resource on earth. It's important because all living things are made up of water. In fact where there is water there is life.

We have to think that fresh water is only the 2.5% of all the water that is on earth.

We all need it to live, and it is important for our progress too, in fact, it's used by all industries. So don't waste it!

We have to be more responsible about water.

We waste too water and we are polluting it too.

To reduce all this pollution of the water, we could save the water with some good actions.

We could water the plants with the well water, not with the fresh water. Or we could close the flow of water when we have a shower or when we brush our teeth.

We don't have to pollute soil because under our feet there is water.

We don't have to throw garbage in the sea or in the lakes due to the pollution, many species of animals are dying out.

This project has the purpose to make it clear that water is a precious commodity and we mustn't waste it.

One person cannot stop this waste and this water pollution, but if every day each of us tries to avoid this waste and tries to throw rubbish in the bins, maybe the water pollution could be reduced, maybe even almost disappear.

Carmen Buccini I.I.S.S BOJANO ITALY

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



The first life forms were born into the oceans, the human beings can live without eating, but they must drink freshwater to survive .

I think everyone can agree with me about **water is life**. That's why scientists are looking for water on Mars.

Despite the scientists reached the Moon and they are investigating on the Mars planet, human beings haven't been able to create water in laboratory.

So water is the most precious resource for human beings and we have to learn to save it, because it is not limitless.

By this project, I have known:

- this limited resource is not equally shared among people on earth,
- water is an essential part of our daily life in many ways,
- every product we use every day needs water to be produced, carried and packaged before it can reach us.

I have tried to change some of my habits when I have a shower or I brush my teeth, for example, I do not waste the water left in my glass, at the end of my lunch, into the sink but I reuse it.

I found out that not only agriculture uses water for its final products but also the industries. To produce one piece of steak (150g) you need 2,310 litres of water or to make a cotton t-shirt you need 2,700 litres

It's illogical!

So, in my opinion, **being a water responsible citizen** , means :

- use water wisely
- protect water quality
- recognize how different types of water should be used
- learn how to recycle and reuse.

Cristiana Pietrangelo I.I.S.S. - Bojano, ITALY

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



WATER IS LIFE

Water is everywhere: above us under the form of clouds, below us in the groundwater and inside us.

Plants, animals and human beings can't live without water. The water is a renewable resource, whose reserves are continually replenished through a large natural cycle, but in many areas of the Earth water is scarce.

“Water is life!” How many times have we heard this phrase? Yes, really many times we have listened to these words and perhaps we haven't understood the true meaning of the phrase, but recently in the world there is an excessive waste of water.

So, if water is life, polluted water is bad life and in the future we will have serious health problems.

How can we contribute to reduce the consumption of water in schools and at home?

For example the students, who belong to the younger generation can do a lot of things for this world: turn off the tap when we do not use it, have a shower instead of a bath, wash dishes with the water used to cook pasta. These are just some of the many things we can do to become eco-citizens, to become more sensitive and to get a strong sense of responsibility about our life and subsequently of our water.

So the message of this project is “Not only people can solve everything but everybody can do something!”

Michela Malatesta

I.I.S.S.- Bojano, Italy

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



How many times have our teachers, media, or our parents told us...

“Water is life”?

We have always listened to those words with indifference and little interest but we have to know that they are the truest words in the world: water is the base of everything, life on Earth, humanity, agriculture, our progress started with it.

We can't see how water is important for our life, how it's a need for all the human beings, because we have it in large quantity and so, thinking of it as it were limitless, we waste, every day, a lot of fresh water that, actually, is only the 2.5% of all the water on our planet.

So nowadays the problem with water is its consumption, I think we are pulling it too much.

Daily, polluting substances are discharged in large quantities in our water by industries, cities, or simply by citizens. This is a dangerous problem. If water is life, polluted water means bad life for us, in fact, water pollution causes serious diseases.

So, if we want to have fresh water on Earth for more time, if we don't want to see around of us only muddy water, if we care about our health and our life, we must get a **strong sense of responsibility**, that is to say: doing small things all together, becoming **eco-citizens**, becoming more sensitive about our life and so about our water.

Younger generations can do a lot for this world. So let's turn off the tap and save water when we don't use it, let's buy only low water impact products, let's drink tap water and let's become more responsible citizen.

This project wants us to understand all this and that “**Not only one person can solve everything but everybody can do something**”.

Paola Calabrese I.I.S.S. BOJANO ITALY

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Water is life

Water is the most important resource on earth, it can modify our planet in terms of geological and landscape views and the birth of life was possible on our planet thanks to its presence and abundance.

The earth is covered by water for the three quarters and seen from the space our planet is blue. Water plays an essential role in the survival of living organisms, animals and plants. All living things are made up of water. In fact, where there is water there is life. Springs, glaciers and lakes provide water both for plants and animals

It can be used for various uses, for example, it is exploited to produce energy or simply to water the plants of our garden.

It should be remembered also that the water is at the centre of that wonderful process that is the photosynthesis and do not forget that the history of human civilization started on river sites. The first great civilizations of the Egyptian and Babylonian were built near large rivers, the Nile and the Tigris and the Euphrates rivers.

The water is a necessary means of sustenance for man, but also an element and occasion of joy. Let's think, for example, about the water parks or the crowded beaches.

With the evolution of civilization water is becoming a rarer and rarer commodity in terms of resources, despite the progress of hydraulic engineering, capable of building aqueducts, channels, embankments and huge and sophisticated dams in fact water is not accessible for a large part of the world population so water consumption should be optimized, the water should not be wasted, or worse, polluted with pesticides and industrial waste water.

Respect the natural water cycle, avoid the emissions of greenhouse gases and the overbuilding are the aims that everybody should keep in mind, which require not only the awareness and involvement of individual citizens, but above all of a new political point of view.

Maria Prioriello I.I.S.S BOJANO ITALY

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.

Water is Life

Water is one of the nature's essential gifts to the earth. All living things consist for around 75% of water. The human body contains two thirds of water. It is a clear, colourless liquid that appears green/blue when viewed through a thickness of 20 ft. The



colour reflects not only from physical causes but also from suspended impurities such as clay, mud and algae. The freezing point of water is 0 degrees Celsius and its boiling point is 100 degree Celsius.

Water is the most important component of and is vital for life. The importance of water in our diet is apparent as it regulates our body temperature and helps the body to transport oxygen within the blood, as more than 80% of the blood is water. 71% of the earth's surface is covered in water and it is very important to our earth and the life roaming it. Water contains no calories and is a significant factor in losing weight.

It is the key component in deciding the quality of our lives and is a universal solvent.

It's important to teach children to turn off faucets tightly after use, adjust sprinklers to water your lawn. To plant in the fall when conditions are cooler and collect spare water for rinsing fruits, vegetables and houseplants. Wash pets outdoors in an area of the lawn that needs water and repair leaking pipes right away. Mankind use up our planet's fresh water way faster than it can naturally be reproduced, therefore save water for the earth, family and animals. For water is life.

From: Nicole, Rije, Linnéa, Casandra and Adrian

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



WATER IS LIFE – LET’S PRESERVE IT

There is a water crisis today. But the crisis is not about having too little water to satisfy our needs. It is a crisis of managing water so badly that billions of people - and the environment - suffer badly!

The water you drink today has likely been around in one form or another since dinosaurs roamed the Earth, hundreds of millions of years ago. Water scarcity is an abstract concept to many and a stark reality for others. It is the result of myriad environmental, political, economic, and social forces.

Freshwater makes up a very small fraction of all water on the planet. While nearly 70% of the world is covered by water, it is easy to think that it will always be plentiful. However, freshwater—the stuff we drink, bathe in, irrigate our farm fields with is incredibly rare - only 2.5 % of it is fresh. The rest is saline and ocean-based.

Even then, just 1% of our freshwater is easily accessible, with much of it trapped in glaciers and snowfields. In essence, only 0.7% of the planet's water is available to fuel and feed its 7 billion people.

Due to geography, climate, engineering, regulation, and competition for resources, some regions seem relatively flush with freshwater, while others face drought and debilitating pollution.

Wherever they are, people need water to survive. Not only is the human body 60% water, the resource is also essential for producing food, clothing, and computers, moving our waste stream, and keeping us and the environment healthy.

Unfortunately, humans have proved to be inefficient water users. According to the United Nations, water use has grown at more than twice the rate of population increase in the last century. Many of the water systems that keep ecosystems thriving and feed a growing human population have become stressed. Rivers, lakes and aquifers

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



are drying up or becoming too polluted to use. More than half the world's wetlands have disappeared.

Agriculture consumes more water than any other source and wastes much of that through inefficiencies. Climate change is altering patterns of weather and water around the world, causing shortages and droughts in some areas and floods in others.

By 2025, an estimated 1.8 billion people will live in areas plagued by water scarcity, with two-thirds of the world's population living in water-stressed regions as a result of use, growth, and climate change.

The challenge we face now is how to effectively conserve, manage, and distribute the water we have...

Whatever the use of freshwater (agriculture, industry, domestic use), huge saving of water and improving of water management is possible. Almost everywhere, water is wasted, and as long as people are not facing water scarcity, they believe access to water is an obvious and natural thing.

But water should be recognized as a great priority.

Mariya, Italy

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Water is life

Water as a limited resource is more important than oxygen not only to the humanity and the animal kingdom but also as a part of the biosphere. Plants release oxygen in the air, however, without water they die. Life on Earth is impossible without water.

To begin with, the very first living creatures appeared in water due to the suitable living conditions. What is more, all life forms are still connected to water. And so are we, as our bodies contain 75% water so it is really necessary for life.

Although water is of vital importance to our survival, we continue taking it for granted. I can't bear the fact that while I waste so much water taking a shower or brushing my teeth, a person somewhere becomes ill of contaminated water as this is the only water source they have access to. 1 in 10 people around the world still lacks access to clean water.

All in all, we can't live without water. So instead of polluting and wasting it we should start appreciating it. Save water, save the Blue Planet, save life!

Victoria Netova, 17

Foreign Language School – Pleven, Bulgaria

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.



Water is life

Think blue

We all know that water is a really essential part of our lives. There is surely no lie behind that statement. After all, we drink and use water but most importantly -we live on water. It covers almost 71% of our planet and it is one of the most valuable natural resources.

What is water for us? People don't really understand how important water is. If there is no water, we wouldn't exist. It is also an environment for many creatures and plants. Where would fish go if there were no oceans, seas, lakes or rivers? And what about all the dolphins, sharks, whales?

It is important to protect our planet, and water happens to be the biggest part of it. We pollute water in many ways as well as the air and the land we live on. We have to get a deep understanding that water is a key factor to any form of life on the Earth and plants, animals and humans are totally dependent on it. It is time to stop and take a look at what's surrounding us. Animals all around the world are threatened with extinction because of polluted waters. Deserts are expanding thus plants and animals are endangered. Aren't animals our friends?

Let's all protect the planet we live on and help each other.

Dalia Dinova, 17

Foreign Language School – Pleven, Bulgaria

Special thanks to:

Persina Nature Park - Bulgaria

Bulgarian Society for the Protection of Birds / Bird Life Bulgaria (BSPB)

Danube River Basin Directorate-Pleven /DRBD/

Copy right

Material made with the financial support of the European Commission. The content of this material represents the exclusive responsibility of the authors and the National Agency and the European Commission are not responsible for the way in which the content of the information will be used.