



Co-funded by the  
Erasmus+ Programme  
of the European Union



# NATURE AND PHOTO ENDANGERED SPACIES

e-booklet



**SLOVAKIA**

## BROWN BEAR

- It is the most widespread bear species in the world.
- According to the International Union for Conservation of Nature and Natural Resources, the brown bear is one of the least endangered species and the overall population is stable.
- Occurrence in Slovakia was recorded in 32.7 % of the territory.
- The brown bear is the most variable in size of all modern bears. Typical size depends on which population the bear comes from, as most recognised subspecies vary considerably from one another.
- It needs large open areas to survive (although it lives in forests in Europe and Asia), which explains the viable populations in isolated areas in the Yukon and Alaska.
- There are more than 200 000 brown bears in the northern hemisphere, divided into 44 subpopulations. The most of bears live in Russia (~100,000) and North America (~58,000).



## VARIED BAT

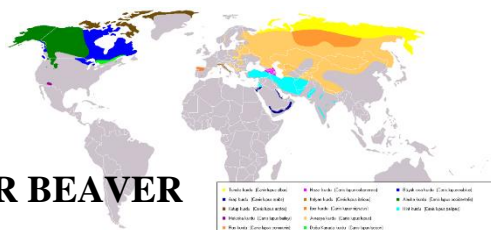
- is a species of bat in the bat family
- in autumn, during the mating season, they emit chirping calls, similar to bird calls. It is variously coloured, about 5-6 cm in size with a wingspan of 27-33 cm and weighs 12-23 g.
- his name is derived from the double colour of his coat. The back is dark brown with grey fur. The underside is white or grey. The ears, wings and face are black or dark brown
- they are found in Central and Western Europe and Asia. Their natural habitat is mountainous areas, steppes and woodlands. In Western Europe, they are mainly found in cities.

- they hunt mosquitoes, gnats and moths. They use ultrasound at a frequency of 25 to 27 kHz. They hunt after nightfall at a height of 10 to 20 metres over open countryside, streams, lakes, woods or under street lighting.



## THE PREDATORY WOLF

- is a type of mammal in the Canidae family. According to the International Union for Conservation of Nature and Natural Resources, the wolf is one of the least endangered species, and the overall population is stable
- the clamp has 6 to 8 members. In the Western Carpathians, the average size of a pack in winter was found to be 4 to 5 individuals by tracking
- there is a certain hierarchy in the wolf pack - from alpha to omega. The alpha pair has the pups and leads the pack, eats first and the other individuals are subordinate to him.
- the wolf is considered to be the direct ancestor of the house dog
- in the past, wolves inhabited large areas of North America, Europe, Asia and the Middle East. The main reasons for their elimination was the damage they caused to herders by killing their animals, the fear of the population that wolves were dangerous to humans, and the profit and benefit from the raw materials of the wolf.



## WATER BEAVER

- is one of the two recent species of the genus (Castor), belonging to the beaver family (Castoridae).



- Today it can be found (intermittently) from France and Norway to Siberia; in the past it inhabited continuously the whole of the Palearctic. It is a legally protected species in Slovakia.
- The water beaver is Europe's largest rodent. Length 75 - 100 cm, tail 30 - 40 cm, weight 15 - 30 kg.
- The beaver prefers a combination of standing and flowing water in lowland and foothill areas. There must be plenty of softwoods on the banks: willows, alders, birches and poplars. The water must be deep enough not to dry out in summer and not to freeze to the bottom in winter.



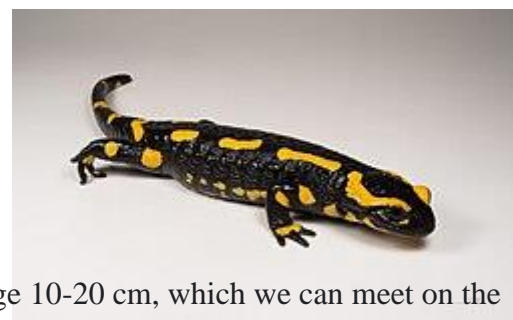
## SPECKLED SALAMANDER

- is a medium-sized species of amphibian in the salamander family (Salamandridae).
- it is the most widespread European representative of the family, widespread in West Asia, southwestern Africa, and especially in southern and central Europe.
- they most often stay near clean forest streams and wells, where they breed. Their food is mainly earthworms, molluscs or insects, which they hunt at dusk and at night.
- the spotted salamander is a robust amphibian with short limbs, a relatively long and strong tail and a small head with a rounded mouth and bulging eyes.
- it seeks mainly foothill localities, most often rising to altitudes below 1,200 m above sea level.
- it lives a night life, during the day it hides under leaves, tree trunks, branches, in holes in the ground or under stones, where it is protected from direct sunlight.



## LILY WHITE

It is a floating plant. Beautiful white flower, large 10-20 cm, which we can meet on the surface of stagnant or slightly flowing water.



The leaves are green, with reddish edges.

The stem is 3 meters long. It was included among the protected plants mainly because of the threat to the places of its natural occurrence. Nowadays, it is popularly grown in the parks of castle gardens. We can classify it among medicinal, but slightly poisonous plants, which were attributed magical powers in the past.



## **ASTRA ALPINUS**

The flower is found mainly in the mountainous regions of Europe, Asia and North America. In our region, it is a very rare variety that is protected by law. Astra aster is a perennial plant reaching a height of 10–20 cm. It blooms from July to September with purple flowers with a yellow center. It grows very slowly on rocky soils. The minimum pH is from 6 to a maximum of 7.5. It grows in a cold climate.



## **SLOVAK PONIKLEC**

It is found mainly in central and eastern Slovakia, especially in higher elevations. It is a plant protected by law, which is considered a symbol and messenger of spring. This blue-violet flower grows on warm scrubby and grassy rocky slopes. Slovak poniklec is a West

Carpathian endemic. Flowering is from March to May, sometimes in June and September. during flowering, the Slovak poniklec reaches a length of 10-30 cm. The diameter of the flower is 5.5-6.5 cm. Slovak poniklec is a poisonous plant, its aerial part contains the poisonous active substance proanemonin. The external effect of this substance is strongly irritating, causing inflammation on the skin. Its internal ingestion has a depressing effect on the central nervous system. It causes vomiting and diarrhea. The released toxins slow the heart rate and lower the blood pressure.



## **CLUSIOV GENTIAN**

Clusiov gentian has beautiful trumpet-shaped flowers that are 4-6 centimeters long, while the leaves are tiny and usually do not exceed 1 centimeter. In Slovakia, it grows in Mala and Veľká Fatra, Chočské vrchy, Western, Belianske and Low Tatras, in Slovak karst and Muránská plain. It is protected by law in Slovakia. The flower is a fully frost-resistant species, does not tolerate wet soils, feels best on rocky soil protected from the afternoon sun. It looks good when planted singly or in groups. It fits perfectly near primroses. that coma can occur.



## CARPATHIAN SPRING MEADOWSWEET

The leaves appear at the same time as the flowers, are fleshy, linear, 5-25 mm wide and 10-25 cm long, generally do not grow taller than the flowers. The flowers appear usually solitary, rarely in a raceme of two flowers. The flowers have six white petals, each with a greenish or yellowish mark. Each petal is 15-25 mm long. We can see these populations flowering in March, they will flower in early April, leaving only the bulbs in the ground to wait until the next spring. It grows in about ten locations in Slovakia, and only in eastern Slovakia. The richest and most famous locality of them is Jovsianska hrabina.



# CROATIA

## RIVER OTTER

Home of a river otter is a number of Croatian rivers and near ponds. The Eurasian otter is one of the only species of otter found in most of Europe, and Croatia is lucky enough to be one of the places where these playful little creatures reside. These animals are known to be skilled swimmers and feed on fish, amphibians, and crustaceans. Having adapted to both aquatic and terrestrial lifestyles, the European otter is well-suited for the diverse aquatic environments found in Croatia



## BOTTLENOSE DOLPINS

There are 220 individual bottlenose dolphins and a small number of short-beaked common dolphins living in the Adriatic Sea. Common bottlenose dolphins grow up to 4 m long and 590 kg. Also these animals live for 40 to 60 years. Bottlenose dolphins are super swimmers, they can reach speeds over 30km an hour and dive as deep as 250m below the surface.



## **MEDITERRANEAN MONK SEAL**

The Mediterranean monk is one of the most endangered sea animals and the rarest seal in the world. There are an estimated 200 specimens living in the Mediterranean. The last monk seal in the Adriatic was caught in 1960 near the island of Vis. They are very fragile and as such are frequently destroyed by anchors dragging along the seabed and by careless divers. Ever since 1995 it has been a strictly protected that is prohibited from being harvested from the sea. Mediterranean monk seals swim so agile swimmers that they are able to outmanoeuvre a shark. These animals also consume up to 3 kg of food per day.



## **ALPINE DOWNY MILDEW**

Certainly one of the most popular, as well as the most endangered protected plants, is the edelweiss. This symbol of heights and unspoiled nature has distinct woolly hairs and white flowers that are reminiscent of a lion's paw, from whose Greek cognate the scientific name of the plant is derived. Although characteristic of tall mountains, the edelweiss also grows in Croatia, on the rocks and in the alpine land of the Velebit, Dinara, Risnjak, Bitoraj.



## **BEARBERRY**

The age of certain plants may exceed 100 years, which makes them highly valuable. One such example is the bearberry.

It grows in the mountain regions of south Europe, and in Croatia it occurs on Velebit and in Gorski Kotar. It is protected by law and included on the list of endangered plants due to excessive picking brought on by its medicinal properties and edible fruit.



## **CENTAUREA RAGUSINA**

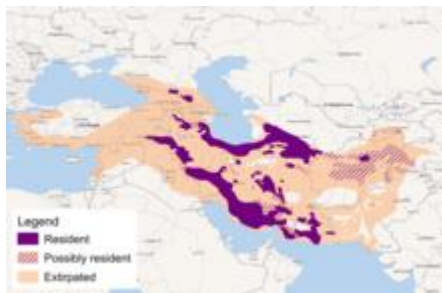
The *Centaurea ragusina* is a plant endemic to the Adriatic, which thrives in dry habitats with a high salt concentration and also grows in the crevices of carbonate rocks and cliffs. The *Centaurea ragusina* also grows along the entire coastline around Cavtat, Split and central Dalmatian islands, in addition to the rocks of the city of Dubrovnik. The yellow-tinted flowers of this unique rock decoration extend vertically on a long stem, resembling small suns surrounded by silver-green velvety leaves.



# TURKEY

## PANTHERA PARDUS TULLIANA

- is a subspecies of leopard native to the Iranian Plateau and surrounding areas encompassing Turkey, the Caucasus, Azerbaijan, Georgia, Armenia, Iraq, Iran, Turkmenistan, Afghanistan, and possibly Pakistan
- in the 19th and 20th centuries, the Anatolian leopard was considered a distinct leopard subspecies that occurred only in western Turkey
- *P. p. tulliana* has grey, slightly reddish fur with large rosettes on the flanks and back, smaller ones on the shoulders and upper legs, and spots on the head and neck
- the habitat of *P. p. tulliana* in the Greater Caucasus is subalpine meadows, deciduous and mixed temperate forests and rugged ravines from (600 to 3 800 m); in the Lesser Caucasus and Iran, rocky slopes, mountain steppes and sparse juniper forests
- stone traps for leopards and other predators dating to the Roman Empire still exist in the Taurus Mountains in southern Turkey.



## EURASIAN LYNX

- is a medium-sized wild cat widely distributed from Northern, Central and Eastern Europe to Central Asia and Siberia, the Tibetan Plateau and the Himalayas.
- The Eurasian lynx has a relatively short, reddish or brown coat that is marked with black spots; their number and pattern are highly variable.
- In the Anatolian part of Turkey, the Eurasian lynx is present in the Lesser Caucasus, Kaçkar Mountains and Artvin Province.
- In Ciglikara Nature Reserve located in the Taurus Mountains, 15 individuals were identified.
- Although they may hunt during the day when food is scarce, the Eurasian lynx is mainly nocturnal or crepuscular, and spends the day sleeping in dense thickets or other places of concealment.



## **SQUALIUS CARINUS**

The chocolate chub (*Squalius carinus*) is a species of freshwater fish in the family Cyprinidae. The species is endemic to the Lake Isikli basin in Turkey.

- .



## **ALLIUM PSEUDOALBIDUM**

*Allium pseudoalbidum* is a species of onion that is endemic to Kars Province in Turkey. It can be found in montane steppe at about 1,900 m elevation. It is threatened by overgrazing, hay making and deforestation.



## **LILIUM CILIATUM**

A rare native of the Turkish Black Sea coast. Makes a stem from 30-60 cm tall although exceptionally in shade it can be double that. The stem is densely clothed with leaves that become progressively hairier towards the top of the plant, so that the upper leaves are densely clothed in silvery hairs.

The flowers are deep yellow, turkscap in shape and spotted in purple, which becomes confluent towards the throat. Green filaments bearing orange-yellow anthers protrude.



## **ABIES NORDMANNIANA**

*Abies nordmanniana* subsp. *equi-trojani*, synonym *Abies bornmuelleriana*, the Turkish fir is a rare, coniferous evergreen tree native to northwest Turkey. Another common name is Uludağ fir. It is a subspecies of *Abies nordmanniana*.

On the back of its foliage, the Turkish fir has a silvery hue, exposed as a result of the upward growth habit of its needles. This characteristic makes the tree, along with its pleasant fragrance, a common ornamental.

Its native range is in northwestern Turkey, including the western Pontic Mountains south of the Black Sea, and Uludağ and other mountains southeast of the Sea of Marmara.

