

The Secrets of the Körös-Maros National Park



Workbook for young conservationists

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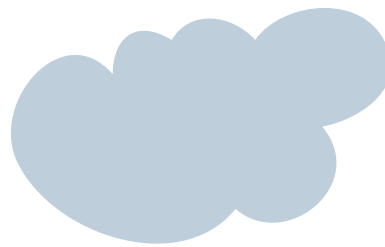
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The Secrets of the Körös-Maros National Park

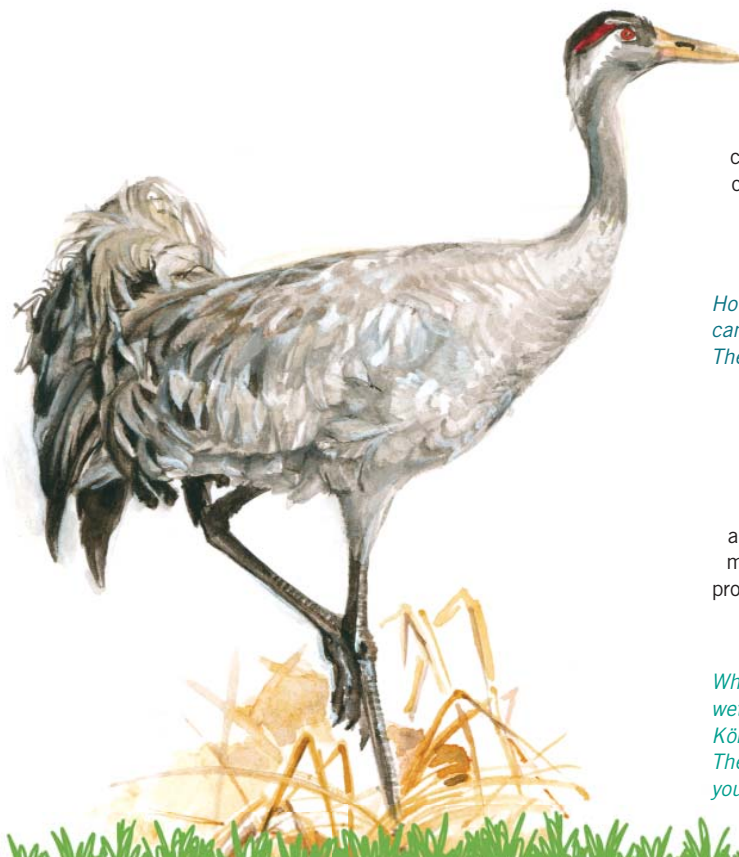


Have you ever been to Körös-Maros National Park?

There are many more exciting natural sights hiding in the scenery than you might think. Endless salt meadows, loess steppe, rivers and lakes, swamps and wooded plains, mysterious alluvial forests are all home to a myriad of wonders.

Are you ready to get to know the protected secrets of our national preserves?

Join us in having some fun and discovering the natural treasures of the Körös-Maros National Park!



Natura 2000



Plants and animals do not know the protected areas artificially created by humans or the borders of different countries. Thus, conservation of wildlife can only be done by cross-border with the cooperation of several different countries.

The Natura 2000 network is one such cooperation that protects many important species and their habitats.

How many Natura 2000 species can you count in the workbook? The little stamps will help you.



Ramsar Convention



Masses of aquatic birds set off each year and traverse several countries during their migration. The Ramsar Convention provides protection to the most valuable wetlands that serve as a place for these birds to hatch their young, feed, multiply, and rest.

Where can such significant wetlands be found in the Körös-Maros National Park? The little stamps will help you in your search.



Körös-Maros National Park

Visitor Centers

SI

Sterbetz István Great Bustard Visitor Centre

GPS:
N: 47°04'53.03"
E: 20°55'51.10"

K

Koros Valley Animal Park

GPS:
N: 46°51'29.39"
E: 20°31'31.57"

B

Birdwatchers Retreat of Bihar

GPS:
N: 46°58'32.40"
E: 21°38'28.89"

M

Bird Migration Museum

GPS:
N: 46°29'02.24"
E: 20°39'06.37"



Protected Areas and Nature Trails

1. Kis-Sárrét
Sző-rét nature trail
N: 46°58'32.40" E: 21°38'28.89"
2. Mágor-puszta
Mágor-puszta nature trail
N: 46°56'23.12" E: 21°12'48.03"
3. Kígyósi-puszta
Kígyós nature trail
N: 46°35'56.47" E: 21°04'58.33"
4. Bélmegyeri Fáspuszta
5. Tompapusztai löszgyep
6. Dévaványai-Ecsegi puszták
Réhelyi nature trail
N: 47°04'53.03" E: 20°55'51.10"
7. Körös-ártér
Halásztelek nature trail
N: 46°54'44.12" E: 20°33'41.51"
Kingfisher aquatic nature trail
N: 46°51'29.39" E: 20°31'31.57"
8. Cserebökény
9. Kardoskúti Fehértó
10. Tatársánci ősgyep
11. Csorvási löszgyep
12. Maros-ártér
Bökényi nature trail
N: 46°09'24.66" E: 20°39'39.19"
13. Csanádi puszták



Kis-Sárrét

RAMSAR

Beside the Kis-Sárrét, we find the Apuseni Mountains, the range visible to the naked eye in clear weather. The highland species arriving from the hills further enrich the area's wildlife.

Thousands of birds, European fire-bellied toads, green frogs, multitudes of fish, a forest of reeds and a sea of orchids... This is likely how the Kis-Sárrét once looked like, ruled by the waters. Sadly, the area has been dried and drained by human activity with almost all the wildlife gone by now. The ancient patches of marsh and wetlands still present today are conserved as a part of a system of fishing ponds, a habitat for flora and fauna of the old landscape.



Purple-flowered orchid



Otter

European pond turtle

Geoffroy's bat

Danube crested newt



Mosquito



Dragonfly



Crab



Burgundy snail



Dragonfly larva



Fish

Connect the animals with what they eat.

In the past only the marsh dwellers, folks intimately acquainted with the aquatic environment, knew their way around the reeds and marshes surrounding the waters. These folks lived a life of fishing, hunting, and gathering year-round along the wildlife-rich waters and swamps. They only took what they needed from nature without causing harm.



European fire-bellied toad



Great egret



Try to go through the maze to your water hut.

Which of these four Natura 2000 indicator species did you encounter in the obstacles?

NATURA 2000



European weatherfish



European pond turtle

The Biharugra Fish Ponds have always been a popular spot with the several thousands of wild geese, ducks, and shorebirds migrating in autumn and spring. Find the names of all 14 Natura 2000 indicator bird species.

NATURA 2000

Red-breasted goose



Purple heron



Black stork



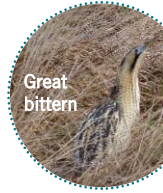
Lesser white-fronted goose



Ferruginous duck



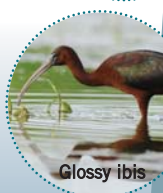
Greylag goose



Great bittern



Black-crowned night heron



Glossy ibis



White-tailed eagle



Eurasian spoonbill

Greater white-fronted goose



Common kingfisher



Bearded reedling



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

Plant water clover in the marsh.



NATURA 2000



Water clover

This plant lives in marshes, silty surfaces used for grazing. It is similar to the four-leaf clover, but they are not related as it belongs to the phylum of ferns and reproduces with spores.

Mágor-pusztá



This area is both a natural preserve and an archeological preserve.

Mágor Hill is one of the most significant Neolithic-Bronze Age dwelling mounds in the Carpathian Basin.

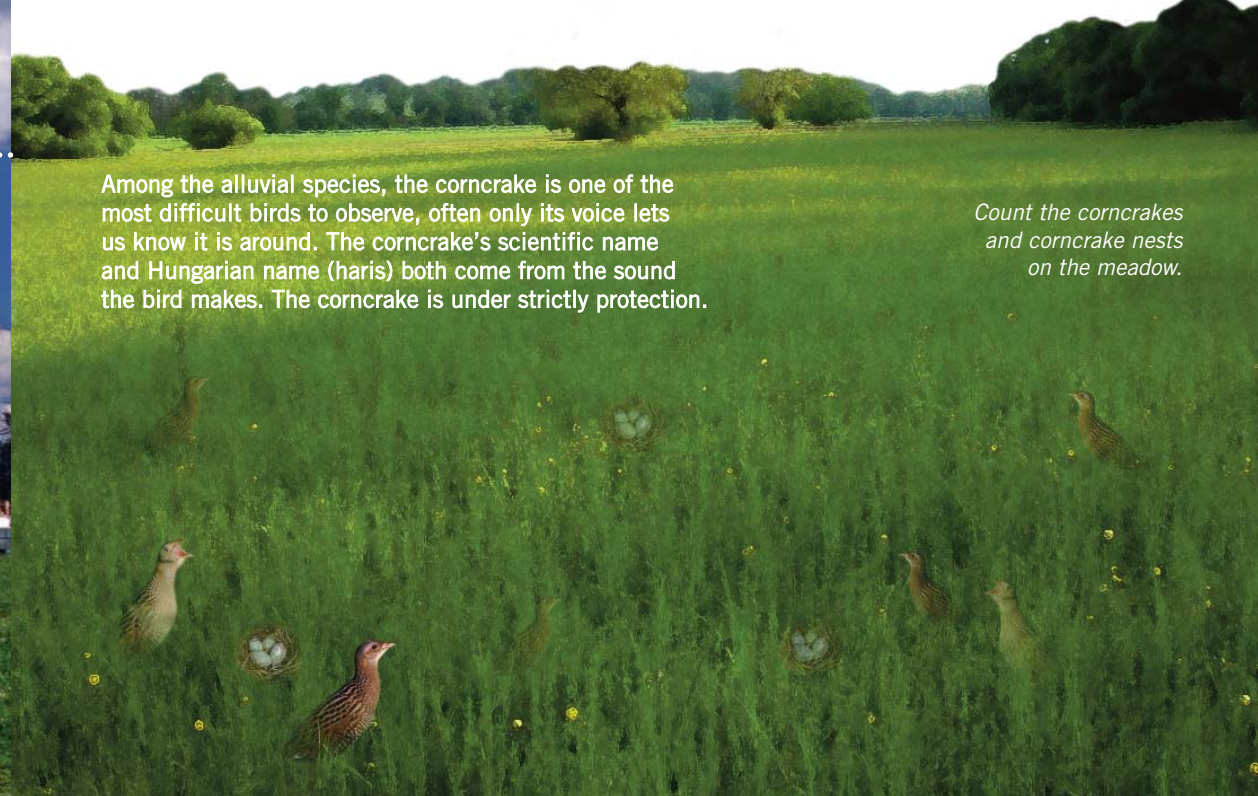
This mysterious place shows us not only a beautiful natural environment but also a history of more than 10000 years during which even Stone Age man was able to find the right living conditions. The two-fold Mágor Hill and its surroundings are the remnants of a prehistoric settlement, the ruins of the world-famous Árpád Age Csolt Monastery are hidden here as well among the protected grassland along the rivers Holt-Sebes-Körös.

How do you imagine the ornate Csolt Monastery in its medieval glory and its environment? Complete the drawing.



Among the alluvial species, the corncrake is one of the most difficult birds to observe, often only its voice lets us know it is around. The corncrake's scientific name and Hungarian name (haris) both come from the sound the bird makes. The corncrake is under strictly protection.

Count the corncrakes and corncrake nests on the meadow.



Due to the loss of untouched habitat the corncrake, one of Magor-pusztá's characteristic residents has all but disappeared from the area.

Did you know?

Male corncrakes, when returning from wintering in Africa, can occupy territories of up to the size of 10 soccer fields for themselves. They defend their territory with their voices which can be heard at night too.

MAYURA 2000

corncrake



Let's protect nature so that the corncrake and many other extraordinary species can find habitats for themselves again.



Thistle

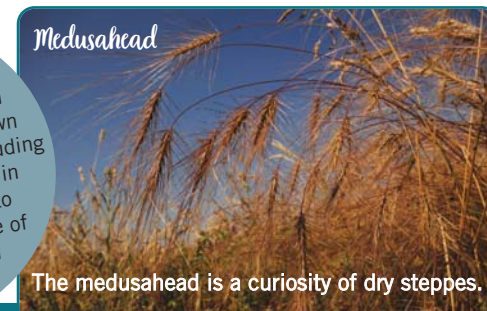
The thistle, native to Pannonia, is a protected plant of the area's salt marshes.

Did you know?

This type of grass, with its exceptionally long awn (can be up to 15 cm including its bristles), is a rarity in Hungary. According to researchers it was one of the first cultivated grains.

Medusahead

The medusahead is a curiosity of dry steppes.



Kígyósi-puszta

A stable population of the quite rare steppe polecat calls Kígyósi Plain their home.

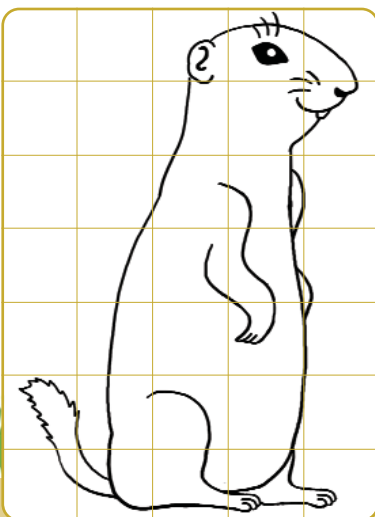


Steppe polecat

Varied scenery. Salt meadows, wetlands, marshlands, and oak forest habitats can all be found here. It is no wonder that this was an attractive place for people to settle in. The countless kurgans that we can still see today show us just how far back people have been living in the area of Kígyósi-puszta. The famous noble Wenckheim family also built a stately castle here which remains an ornament of the region.

Try to copy the ground squirrel with the help of the grid.

The existence of the population of ground squirrels depends greatly on the short grass steppe habitat maintained by grazing and the preservation of the saker falcon is determined by its favorite meal, the ground squirrel.



Connect the Kígyósi-puszta habitats with their inhabitant species. Write the numbers in the squares.

1. Kígyósi Great Forest

2. Nagy-gyöp salt marsh

3. Apáti plain dry salt meadow

Dead man's fingers

Chinese wolf spider

Black-winged stilt

Schwarzenberg's Plaintain

European oak

Middle spotted woodpecker

If you unscramble the anagrams you can find out why the kurgans were built. The pictures will help you.

Did you know?
The kurgans are known as "kunhalom," that is Cuman mounds, in Hungarian (The Cumans were a nomadic people.), however, the barrows were not built by the Cumans, but by people living here thousands of years before them. There are over 50 barrows in Kígyósi-puszta and several thousand in the Alföld (Great Hungarian Plain).

GAN KUR

OW BA RR

DER MOUND BOR

L TE L



Put the syllables in order to get the name of a wonderful, rare insect.

tig ccia Phyto rina

Did you know?

The larva of this specially protected insect species can only grow in the shoots of the blue anchusa flower.



Blue anchusa

The majority of the Hungarian population lives between the Körös and Maros rivers.

It blooms starting in May. It can be seen mainly in roadside areas.



30-80 cm

Wenckheim Castle

We can marvel at the variety of flora in the French and English gardens of the castle built at the end of the 19th century.



Bélmegyeri Fáspuszta



The existence of many creatures, such as the stag beetle and the great capricorn beetle depend on the rare habitat provided by the wooded plains of the Alföld.



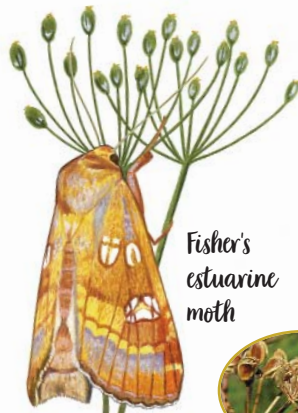
In Hungary, oak forests growing in alkaline soil are mainly found in the Transtisza region, the most beautiful population is on the forest-steppe of the Bélmegyer Wooded Plain. The oaks growing in alkaline soil are, to this day, a subject of debate among researchers. It may be influenced by drought, the salt contents of the soil, or the varying level of groundwater, high in spring and low in summer. Completely closed-canopy forests cannot develop here, colorful flowery salt meadows often punctuate the woods.

Did you know?

The European oaks grow very slowly in the alkaline soils of the Alföld and their height does not exceed 15 meters.

Did you know?

The ants living in the forest play a large role in spreading the seeds of the hollowroot flower as the ants use the seeds to store a protein source. They carry the seed to the ant colony where, given the right conditions, it sprouts.

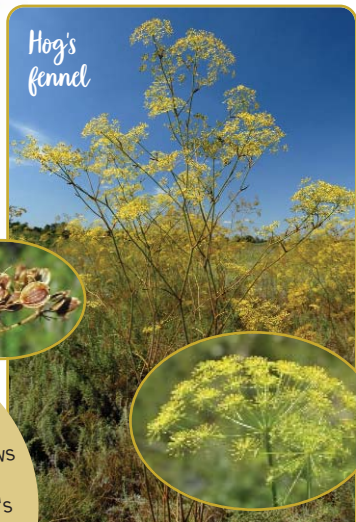


NATURA 2000

Did you know?

The larvae of the Fisher's estuarine moth, an insect under special protection, grows in shoots and roots of the protected plant species hog's fennel. The plant can continue to thrive even if its flowers are mowed down, but the moth larvae will die.

Hog's fennel



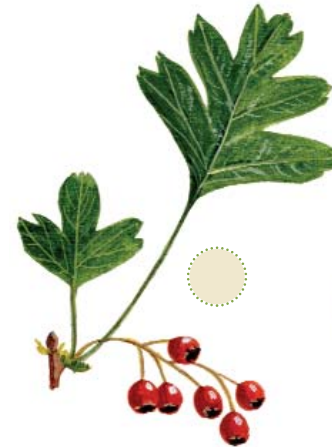
Blooms from July to the beginning of autumn.

50-180 cm
It can grow as tall as an adult person.

Bélmegyeri Fáspuszta is home to several trees and shrubs, some of which you will see here. Try to figure out which is which.

1. Field elm

You will recognize me from my small, toothed, pointy leaves.



2. Common hawthorn

You may not know this, but I am a kind of rose. In spring, you will see me blooming beautifully white. My red berry-sized apple like berries ripen in autumn.



3. Wild pear

In autumn you will find my walnut-sized, greenish colored tasty fruit among my round-shaped leaves.



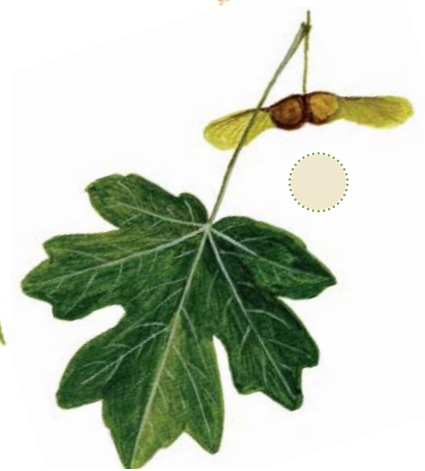
4. Field maple

My samara is light as a feather, it is more like a little pair of wings. In autumn it is like a small propeller, spinning as it falls to the ground. It may go a long way if the wind catches it.



5. European oak

My acorn grows on a long stem and provides food for animals such as birds and rodents.



6. Blackthorn

I am a shrub related to the plum as you can see from my bluish-black, round, berry-like fruit. My thorny bushes provide safety and shelter for many living creatures.



Tompapusztai Cöszgyep

The Tompapuszta Loess Steppe is the "jewelbox" of the Körös-Maros National Park. This tiny oasis surrounded by arable land gives us insight into how the Békés-Csanád Loess Ridge once was with its habitat rich in plants and animals before the appearance of human activity. It is bordered by the Száraz-ér which has protected it from being used for agricultural purposes for centuries.

Loess steppes can live to several hundreds of species of flora and fauna per square meter which rivals the species density of tropical rainforests.



European hamster



Beautiful butterflies appear in the area at the beginning of spring.



Southern festoon

This butterfly lays its eggs on only one plant, the Dutchman's pipe. The caterpillars grow here. The Southern festoon is a fairly rare and large species growing to about 5-6 cm.



Peacock butterfly

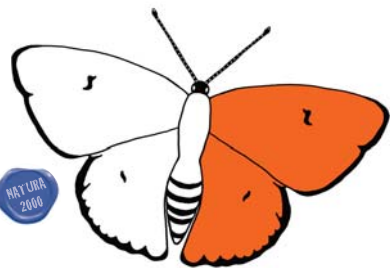
This is the most well-known diurnal European butterfly species, it can be found often on flowering loess meadows. The eyespots help protect it from its enemies: the Peacock butterfly may scare smaller birds when it suddenly opens its wings.

Bumblebee



Tuberos Jerusalem sage

The protected plant species Tuberos Jerusalem sage blooms with pink blossoms in the summer which attract butterflies and bumblebees like magnets. The body of the bumblebee is well-suited to the shape of the labiate flowers.



Large copper

The male of this very decorative species of butterfly has beautiful, fire-red fore and back wings.

The Tompapuszta Loess Steppe is one of the habitats of the lesser mole-rat, a species with a special lifestyle and only found in a few places in Hungary.

Help the mole-rat get from its underground nest to the plants it feeds on.



lesser/Hungarian mole-rat



mole-rat dung beetle

Did you know?
The dung beetle feeds off the dung of rodents, especially the mole-rat.

Did you know?
The completely blind mole rat navigates the world according to the principle of ultrasound just like bats and dolphins. The vibrations generated by the animal are reflected from the objects in its environment, these reflections are then perceived by the mole-rat.

The mole rats' tunnel system can be over 100 m long and the deepest known tunnel is 4 m below ground.



Hungarian keeled plump bush-cricket

Did you know?
This rare species of cricket lives exclusively in the Carpathian Basin. This insect is present only in a few places throughout the country, one of these places is this loess turf.

African death's head hawkmoth caterpillar



The death's head hawkmoth is the largest species of moth in Hungary. It can have a wingspan of up to 13 cm. Its caterpillar is notably large as well.

Dévaványai-Ecsegi puszták



This was the first place in our national park that the eastern imperial eagle nested in 2002.

Hungary's largest great bustard population can be found here as well.



Great bustard chick



Did you know?

The great bustard is the largest European bird species capable of flight.



It has only three toes.

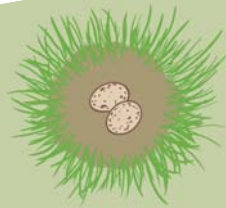
It is a strictly protected animal species, its conservation value is one-million forints.

The largest Central European population of the beautiful bird featured on the Körös-Maros National Park's coat of arms, the great bustard, lives on these plains. This is the largest Pannonic salt steppe habitat in the national park. The Hortobágy-Berettyó winds through it, this is one of the rare rivers of which part has not been regulated allowing it to preserve the values of its aquatic habitat. One of the strictly protected curiosities of the area is the Ördögsánc (The Devil's Rampart), the over 3000-year-old remnant of a fortified settlements assumed to have been built by the Sarmatian tribe. Its surface, which has never been used as arable land, is a refuge for rare loess steppe vegetation.



Place the circles in the right chronological order from the great bustard's mating season to its winter feeding.

1 The male bustard moults into its breeding plumage for the mating season and grows "mustache" feathers.



The great bustard does not build a nest, rather just a small hole in the ground.

The chicks leave the nest almost immediately after hatching and follow their mother around.

In autumn, they form large groups to prepare for the winter.

Its most important source of food is the green leaves of wintering vegetation.



The Hortobágy-Berettyó and its floodplain are an exceptionally valuable area with the winding river carving a path around and partially enclosing large areas.

Match the drawings with species names.



European bitterling

Northern pike

Rudd

Tench



During March and April, the great bustards hold their "wedding ceremony," that is, their mating season when, on their previously conquered territories, the males give a strange and spectacular performance in the dawn and late afternoon hours to attract the females.

They are puffing up their neck sac which is capable of holding up to 5-6 liters of air, then showing their white wing and undertail feathers. In the final stage ruffling the feathers on their body the male birds "strut" around like a foam bath.



Michaelmas daisy

A characteristic plant of alkaline soils. A protected species. Blooms from July to September, grows to 25-100 cm in height, it is salt-tolerant.



Early star-of-Bethlehem

A type of lily blooming in March. A protected species. The first specimens in Hungary were found on the outskirts of the village Ecsegfalva at the Ördögsánc (the Devil's Rampart) in 2004.

Körös-árter

The longest-extending protected area of the national park follows the floodplains of the Hármas-Körös bordered by willow and cottonwood forests noisy with birdsong, alluvial pastures with lush green grass and the valuable backwaters artificially disconnected from the river.

The largest European species of mayfly is the long-tailed mayfly. This insect can live as larvae for 3-5 years, but only a few hours as an imago.



Tisza mayfly

Did you know?
The long-tailed mayfly lives mainly in the Tisza's water harvesting system.

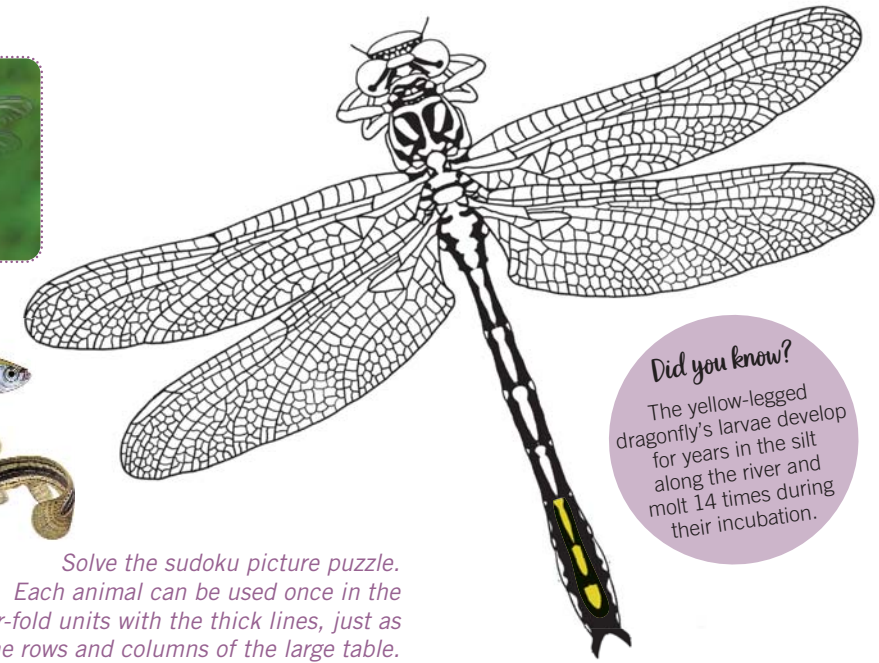
If uninfluenced by human activity, the vegetation along the water grows in an order determined by the distance from the river or lake.

Connect the different groups of plants growing by the water with their names.

1 2 3 4 5 6

Floating fresh-water kelp
 Riverine willowscrub
 Rooted kelp
 Reeds
 Willow-cottonwood gallery forest
 Meadow foxtail

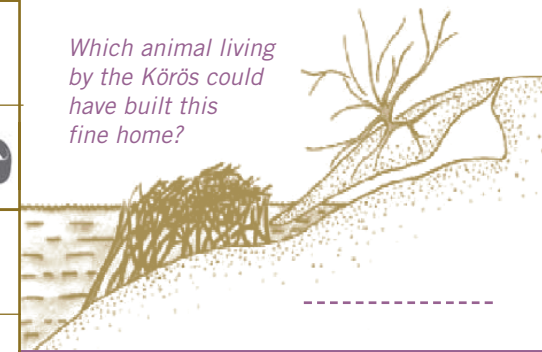
The Hungarian milkvetch is a very rare plant found for periods of time in the silty soil beside rivers.



Did you know?
The yellow-legged dragonfly's larvae develop for years in the silt along the river and molt 14 times during their incubation.

Solve the sudoku picture puzzle. Each animal can be used once in the four-fold units with the thick lines, just as in the rows and columns of the large table.

Which animal living by the Körös could have built this fine home?



Water caltrop



Did you know?
During times of famine, flour was made from its spiky fruit in order to bake bread. When baked, it tastes somewhat like chestnuts, that is how the plant got its name.

Floating aquatic plant

Solitary virgin's-bower



Did you know?
The protected Solitary virgin's-bower grows on alluvial hay meadows.



Cserebökény

Due to the decreasing numbers of old, hollowed trees, the experts of the national park have placed artificial nesting hollows out for the European rollers to help them hatch their nestling.

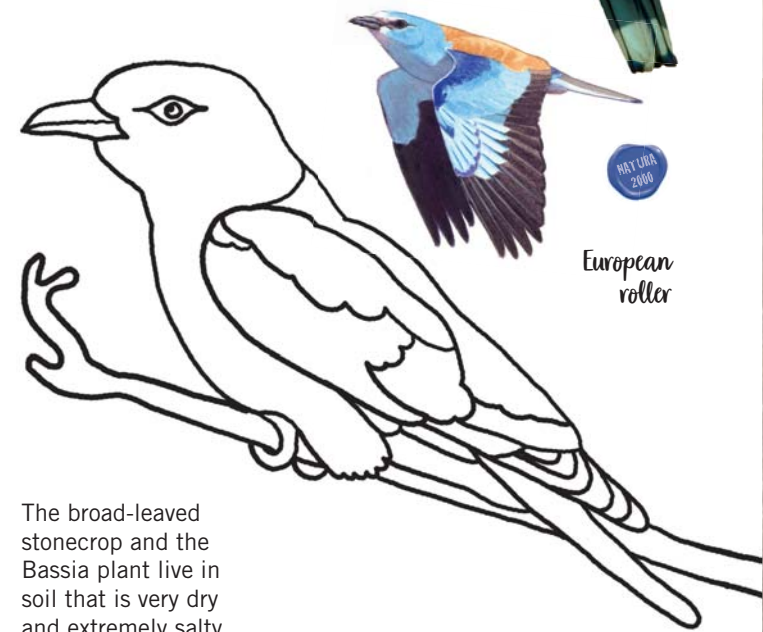
Cserebökény was once an alluvial floodplain fed by the river Kőrös and a number of streams. The land has changed considerably due to water regulation and draining, the once swampy area is now a dry, alkaline meadow. Despite this, characteristics of the original habitat can still be found here and there. This duality is what makes for such diverse wildlife today.



Did you know?

This plant ensures its survival with its thick taproot reaching deep into the ground..

Bassia

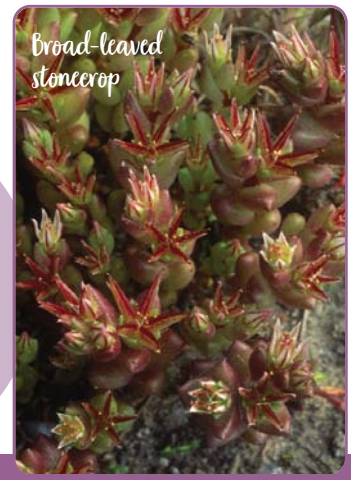


European roller

The broad-leaved stonecrop and the Bassia plant live in soil that is very dry and extremely salty in the summer.

Did you know?

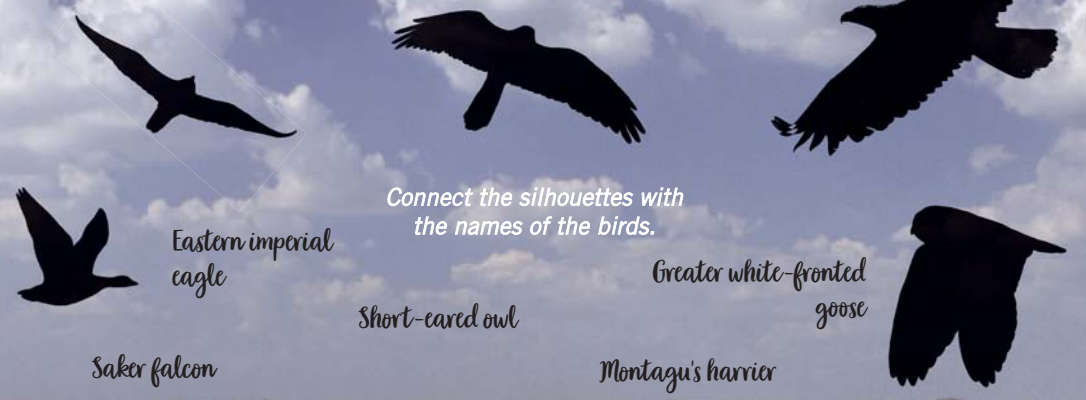
This plant has an interesting survival strategy. In the autumn, when precipitation is more abundant, the plant sprouts giving it a head start in spring when its shoots grow very quickly. At the beginning of summer, when most plants are blooming, it loses its leaves quickly and dries to dust.



Broad-leaved stonecrop



The birdlife of the fields is rich and spectacular. Looking up at the sky we will notice the silhouettes of many avians, and upon a closer look, we will see how diverse they are, such as the large eagles and slender falcons.



Connect the silhouettes with the names of the birds.

Saker falcon

Eastern imperial eagle

Short-eared owl

Montagu's harrier

Greater white-fronted goose

Greater white-fronted geese travel several thousands of kilometers every autumn from their breeding and nesting areas on the tundras to their wintering areas, passing through the Kőrös-Maros National Park along their way. Their groups composed of several hundreds of specimens are sometimes joined by rare bird species such as the specially protected red-breasted goose or the lesser white-fronted goose recognizable by its yellow eye-rings and white facial blaze. Even bird watchers have a difficult time spotting them. *Can you find them?*



Kardoskúti Fehértó

White Lake of Kardoskút as a soda lake is a natural asset of the Great Hungarian Plains that is exceptional not only in Hungary, but worldwide. Due to its special characteristics, it is the last resort of some unique species and one of the most important resting place in Hungary for migrating birds. Because of humans' activities altering the landscape, the expanse of such salt waters has decreased drastically. Today there are only very few left, thus they are very vulnerable and must be emphatically protected.

RAMSAR

The White Lake of Kardoskút is fed not only by precipitation but by secret, underground springs as well.

The lake dries up completely every summer and its bed is covered with a layer of pure white sodium carbonate.

The Vásárhelyi Plain is one of the central gathering places of the red-footed falcon before its autumn migration.



Red-footed falcon



Nowadays several thousand indigenous Hungarian Grey Cattle and hundreds of domestic water buffalo as well as Racka and Tsigai sheep graze on the grassland areas of the Körös-Maros National Park. They play a very important role. These animals contribute to maintaining the balance of the plain habitats. They treat the grassland with their grazing and stomping and their useful dung draws a myriad of insects to the area, which are, in turn, important food sources for a great many birds of the plains.

Which grazing area of which indigenous species would these ground-nesting (Natura 2000) birds of the plains nest in? Match the birds to the domestic animals.

NATURA 2000

Did you know?

All domestic animals graze in different ways. Herbivores leave different areas and surfaces behind after grazing.



The Hungarian Grey Cattle enjoys grazing on both drier and wetter turfs and they will even consume younger, more tender reeds. They do not leave areas as barren as other grazing animals do.



Sheep chew the vegetation down until it is very short sometimes leaving completely bare patches.



Black-tailed godwit

Its nest can be found on flooded grasslands hidden among high vegetation.



Collared pratincole

This bird's nest is merely an indentation in the ground on dried out grazing pastures around soda lakes.



Peewit

Nests on grasslands and plow-lands around saline lakes.



Kentish plover

This bird makes its nest by scratching a hole into the barren soil around saline lakes.

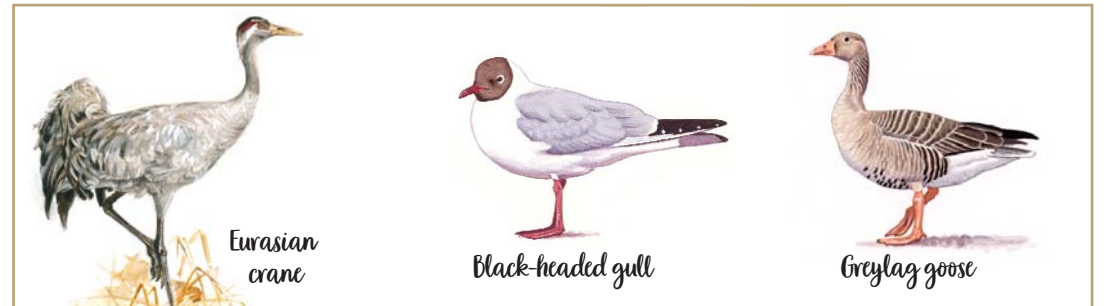
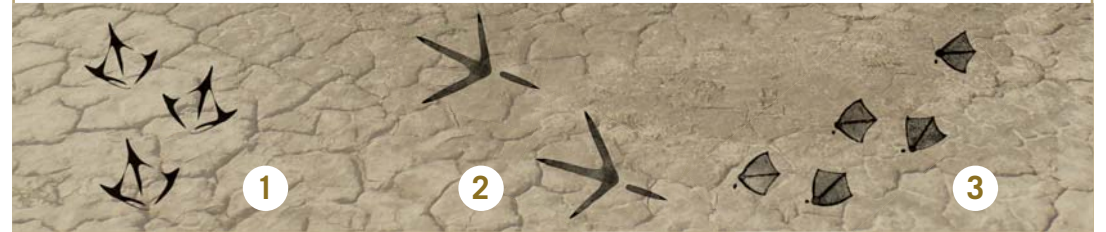


Which Natura 2000 birds have left their footprints on the dried-up bed of the White Lake? Connect the birds with their footprints.

Great egret

Northern shoveler

Pied avocet



Eurasian crane

Black-headed gull

Greylag goose



During the autumn migration period, the cranes feed on cornfields by day. At dusk, they retreat to the lake to keep safe from predators. The number of cranes spending the night on the lake can be most easily estimated during this spectacular event.

Calculate how many cranes spent a November night on the lakebed if we watched them flock to the lake for 3 hours during the day and about 60 birds arrived every minute.

hours X minutes X birds = birds



Tatársánci ősgyep

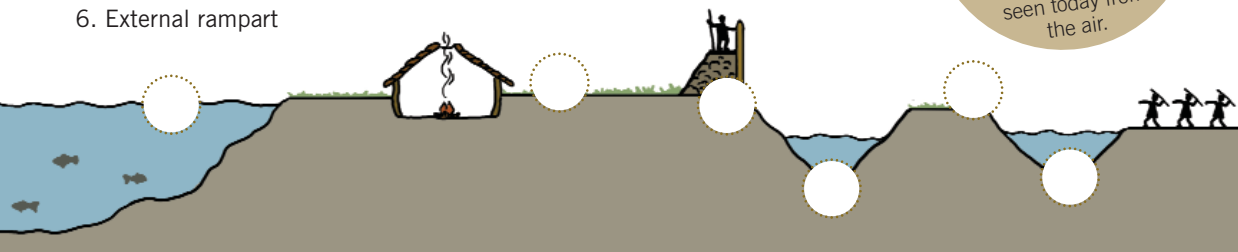
The interesting, double semi-circle shaped structure called the Nagy-Tatársánc (Great Tatar fortified settlements) can also be seen from the air. This is not a natural formation. It was built by people to protect the small village that once stood here from invading nomad Celt or Scythian tribes. Despite its name, the fortification does not date back to the period of the Tatar Invasion, it is much older, built in the Bronze Age. The small area of Tatársánc covered in primeval grassland has never, since the structure was built, been plowed. Real primeval grassland survives here providing a home for valuable and rare plant species.

This enormous embankment (3 km long) was built by hand with home made of deer antlers and other simple tools. Even with our modern machinery, it would have still taken several months to build.



With the help of the drawing, you can determine where the different parts once were. Put the right numbers in the circles.

1. Internal water trench dug by hand
2. External water trench dug by hand
3. Earthen rampart with wooden post palisade
4. A natural river
5. A protected village on the river's alluvial fan
6. External rampart

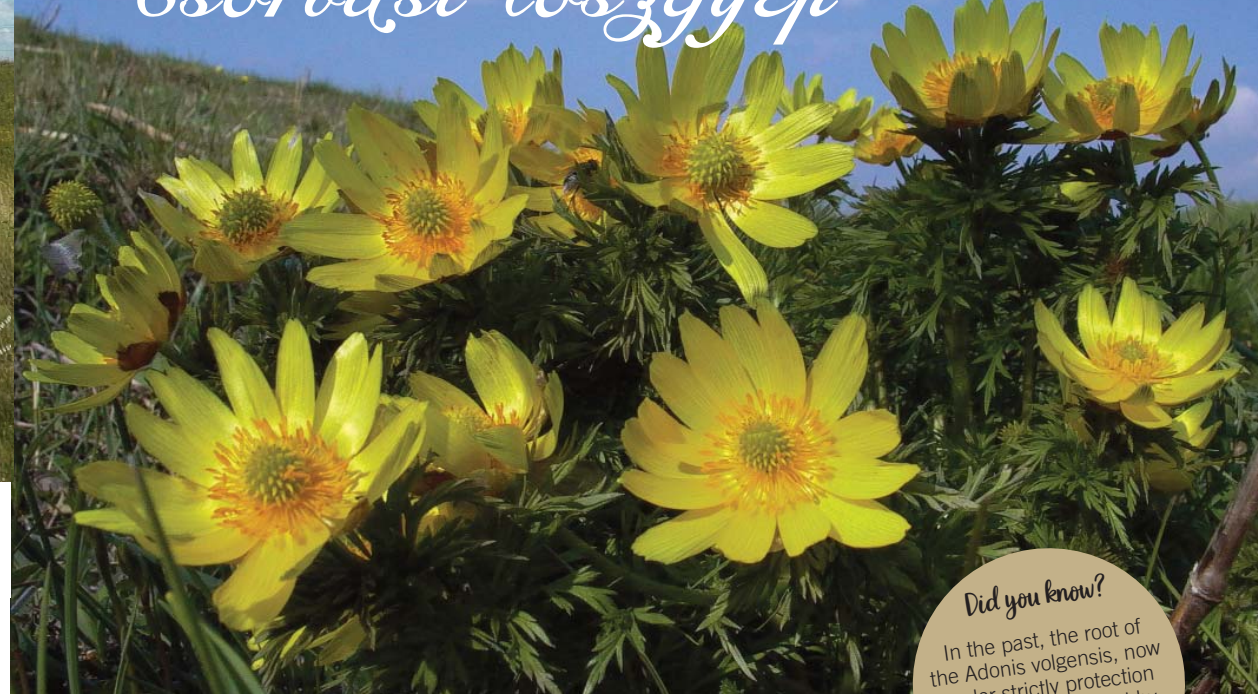


Did you know?

The semi-circular, two-fold rampart system of the 3000-year-old Nagy-Tatársánc (Great Tatar fortified settlements) can still be seen today from the air.

Csorvási lőszgyep

The Adonis vologensis species of pheasant's eye was the first plant given protected status in Hungary.



Did you know?

In the past, the root of the Adonis vologensis, now under strictly protection status, was collected by many people and used to heal sick animals.

Hungary's largest population of this strictly protected plant species.

This beautiful flower, with its habitat range reaching all the way to the steppes of Asia, can only be found in two places in Hungary.

Apart from the over-collection of plants, what may have caused such a great decrease in Adonis vologensis populations? And what can we do to save this rare plant?

Set the hands of the imaginary flower-clock to the times given. Then first read the syllables at the hour and then the ones at the minute to find out the answers.

The reason for such a large decrease:

..... TI

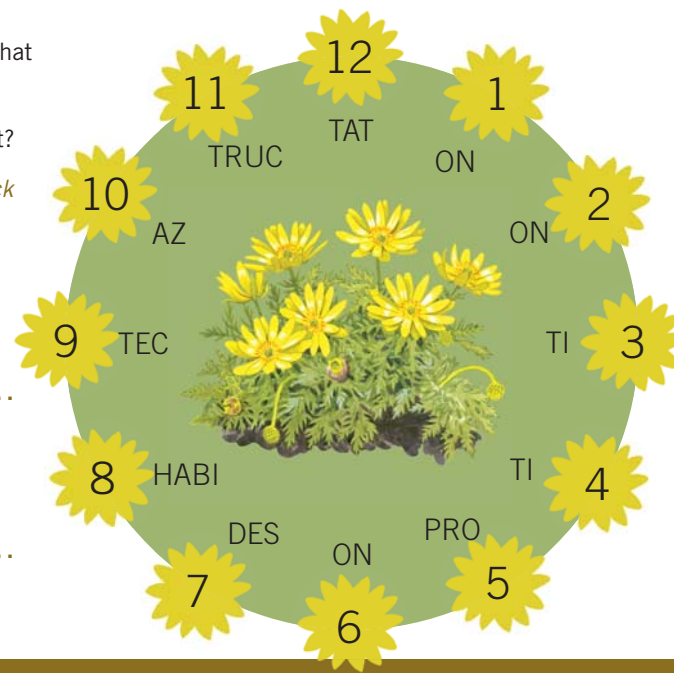
8:00 7:55 4:30

To save the plant:

..... ..

8:00 5:45 3:10

is necessary.



nodding sage

Did you know?

The westernmost habitat of the nodding sage, a plant species under strictly protection, can be found here in Hungary and only in the Southern Transisza region.

It is called nodding sage due to its flowers drooping downward.





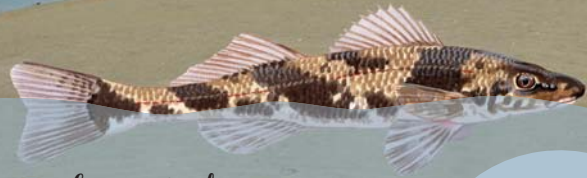
Maros-árter

Accompanied by islands, sandbars, alluvial meadows and forests, the river Maros runs along the southern border of the national park. It carries huge amounts of sediment of which valuable soil is left behind. The large quantities of sediment deposited by the river continuously alter the state of the riverbed. As the Maros originates in the Carpathians, several extraordinary mountain species have come along to this part of the Alföld with the river and settled here.

One of the largest populations of the strictly protected otter lives along the river Maros.



Eurasian otter



Common zingel



Thick shelled river mussel

Did you know?

The strictly protected common zingel requires a gravelly, pebbly riverbed to spawn so that the roes can develop protected by the pebbles.

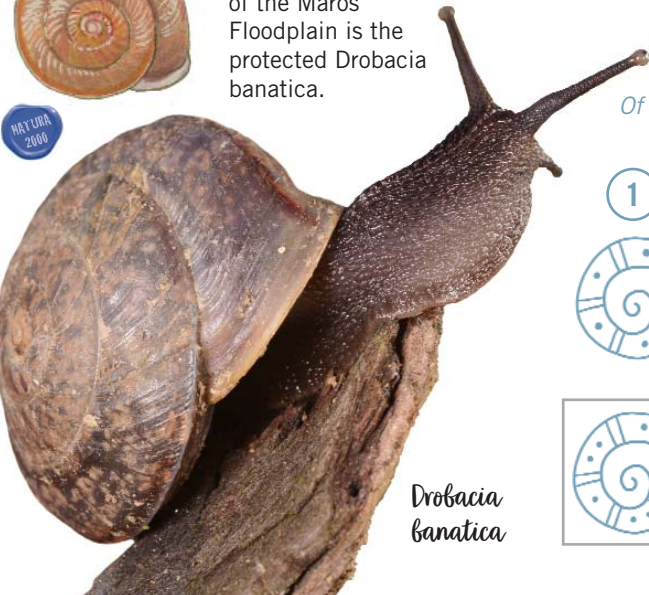
Did you know?

This species reproduces in a very special way. Its tiny offspring act as parasites for a while during their development attaching themselves to the gills of fish and feeding off the body of the host animal.



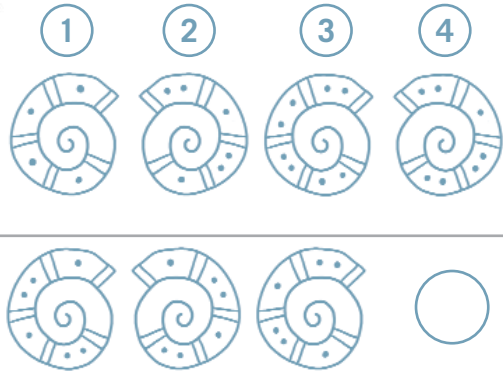
An interesting member of the snail fauna of the Maros Floodplain is the protected *Drobia banatica*.

NATURA 2000



Drobia banatica

Of these four, which snail belongs at the end of the line?



Did you know?

A sensational discovery! In 1996, a species new to science, the European stalk-eyed fly, a kind of fly, was discovered on the Maros Floodplains. Its closest relative lives in the tropics.



3-4 mm

European stalk-eyed fly



8-9 mm

Housefly

The colorful European bee-eater often nests in its tunnel in the loess walls of the Maros banks.

NATURA 2000

Can you find the 7 differences between the pictures?



European bee-eater

Did you know?

Hungary's greatest silveleaf poplar stood on the Maros Floodplain, it was called the Witness Tree of Vetnyehát. The circumference of its trunk was 11 meters.

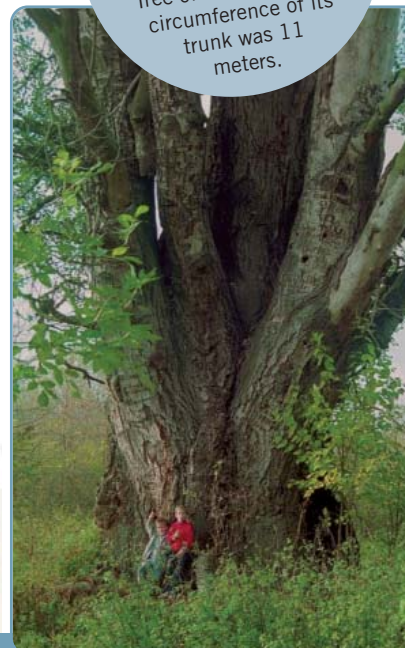
In 2002 this ancient tree was felled by a large storm. From its rings, it can be determined that the tree must have popped up some time at the beginning of the 1800s in the quiet of the alluvial forest, meaning that it lived about 200 years. Silveleaf poplar trees rarely live to such an ancient age.

Count the rings to see how old the tree in the picture is.



Scilla vindobonensis

This is an early spring flower, appearing in great numbers in many places in the forests along the Maros. You can smell its intoxicating fragrance from afar.



Gsanádi puszták

RAMSAR

This plain of the national park is where we can find the most diverse surface where even a few centimeters difference in ground level could mean a huge difference for the vegetation living there. You may find salt marshes, alkali mud surfaces, salt berms and at the highest points, we may encounter loess grassland.



Salt berms rise only a few centimeters above the soil surface, however, due to the differing salt and water content of the soil, different types of plants thrive on the **top of the berm (1), the edge of the berm (2) and the bottom of the berm (3).**

With the help of the pictures, try to figure out which description applies to which part of the berm.

The highest part of the salt berm is the most advantageous living habitat. The sea lavender grows here.

The side of the berm, also known as a salt subsidence, is most commonly a habitat of the chamomile plant.

The deepest, most disadvantageous form is the salt flat, an area where water stands still in spring for a longer period.

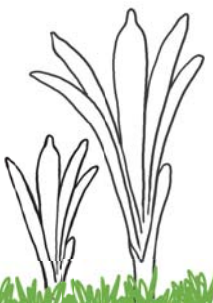


Thrives in limey soils. A member of the buttercup family.

Blooms from March to May. 10-40 cm



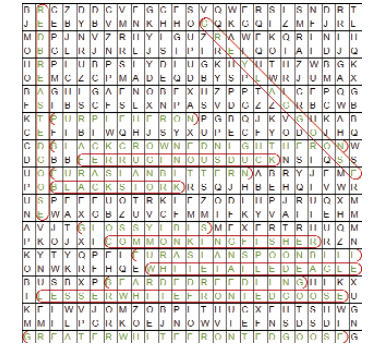
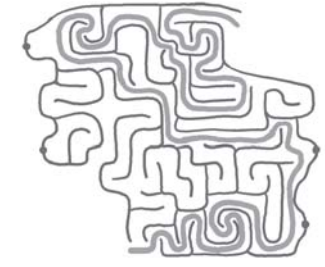
Did you know?
The autumn daffodil blooms in autumn, but only if there is some precipitation at the end of summer. However, even without blooming, it is capable of inseminating itself underground and growing fruit for next spring.



Solutions

Kis-Sárrét

- Otter: Crab, Fish, Burgundy snail
- European pond turtle: Fish, Dragonfly larva
- Geoffroy's bat: Mosquito
- Danube crested newt: Dragonfly larva



Mágor-pusztá

Corncrakes: 7 pc., nest: 3 pc.

- European fire-bellied toad
- European weatherfish
- European pond turtle

Kigyósi-pusztá

Phytocacia tigrina

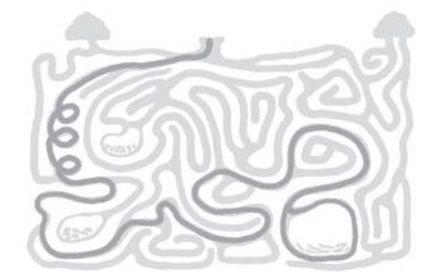
- Dead man's fingers: 1.
- Chinese wolf spider: 3.
- Black-winged stilt: 2.

- Schwarzenberg's Plaintain: 3.
- English oak: 1.
- Middle spotted woodpecker: 1.

Bélmegyeri Fáspusztá

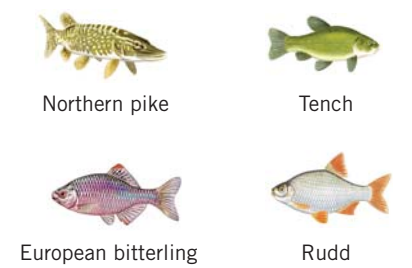


Tompapusztái Cöszgyep



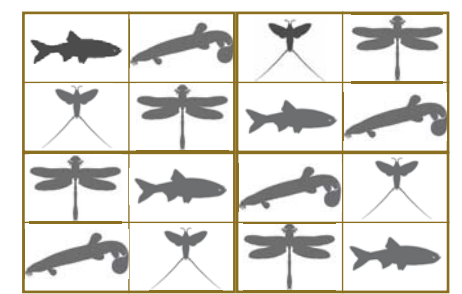
Déaványai-Ecsegi puszták

- The great bustard does not build a nest ...
- The chicks leave the nest ...
- In autumn, they form large groups ...
- Its most important source of food is ...



Körös-ártér

- 1 Floating freshwater kelp
 - 2 Rooted kelp
 - 3 Reeds
 - 4 Meadow foxtail
 - 5 Riverine willowscrub
 - 6 Willow-cottonwood gallery forest
- Eurasian beaver





Solutions



Gserebökény



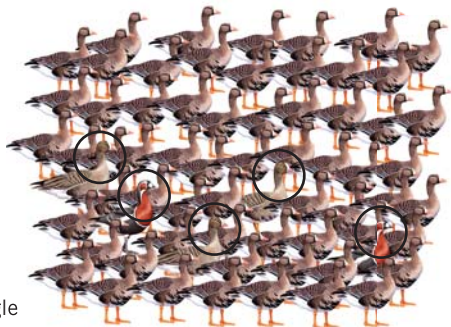
Greater white-fronted goose



Saker falcon



Montagu's harrier Short-eared owl Eastern imperial eagle



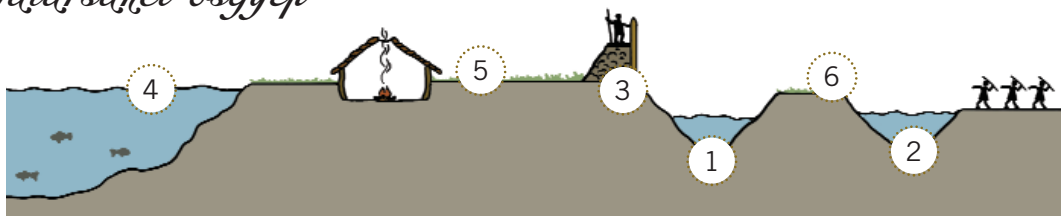
Kardoskúti Fehértó

Hungarian Grey Cattle - Black-tailed godwit és Peewit
Sheep - Kentish plover és Collared pratincole

1: Pied avocet, 2: Great egret, 3: Northern shoveler, 4: Eurasian crane, 5: Greylag goose, 6: Black-headed gull

3 hours x 60 minutes x 60 birds = 10 800 birds

Tatársánci ősgyep



Gsorvási lőszgyep

HABI	TAT	DES	TRUC	TI	ON	HABI	TAT	PRO	TEC	TI	ON
8:00		7:55		4:30		8:00		5:45		3:10	

Maros-ártér



15 years old



Gsanádi puszták

- 1: The highest part of the salt berm ...
- 2: The side of the berm, also known as a salt subsidence ...
- 3: The deepest, most disadvantageous form is the salt flat ...

Minidomino

Cut out the cards along the thick lines and begin the game.

If you do not remember the plants and animals, flip through the booklet and find them.

