

Atanasovsko Lake



A small guide
for the lagoon

► Where do we want to take you to?

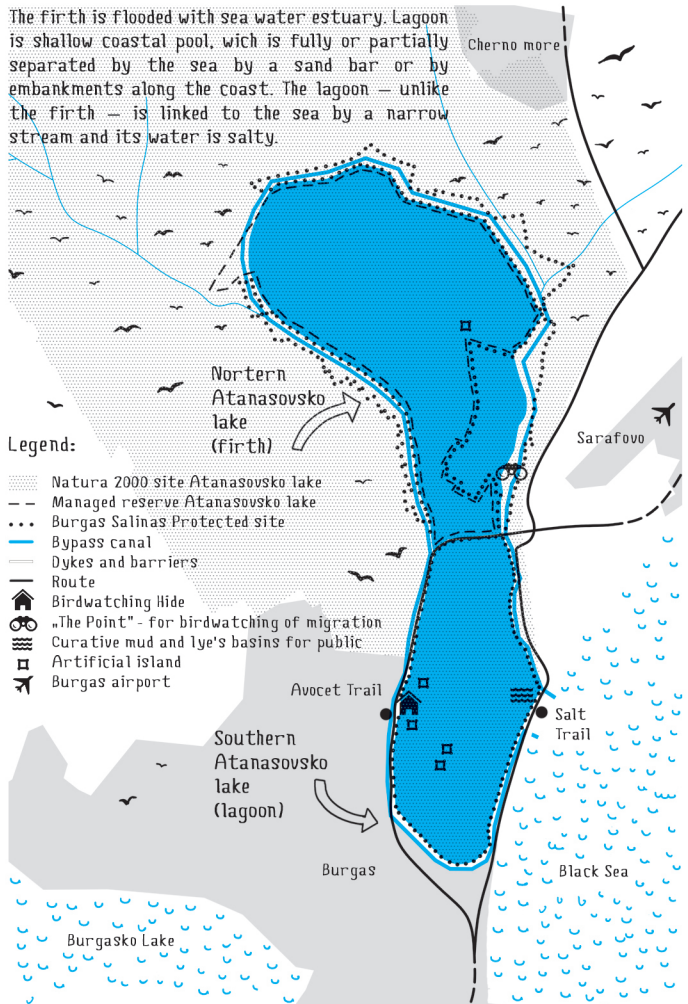


On the Eastern part of Bulgaria, close to the famous town – Burgas, a town with great atmosphere and surrounded by 3 lakes and a sea. We'll jump into one of the lakes – the saltiest and most interesting – Atanasovsko Lake.

The total area of the lake is 1690 ha, it is approximately 9 km long, and 4.3 km wide.



The firth is flooded with sea water estuary. Lagoon is shallow coastal pool, which is fully or partially separated by the sea by a sand bar or by embankments along the coast. The lagoon – unlike the firth – is linked to the sea by a narrow stream and its water is salty.



Legend:

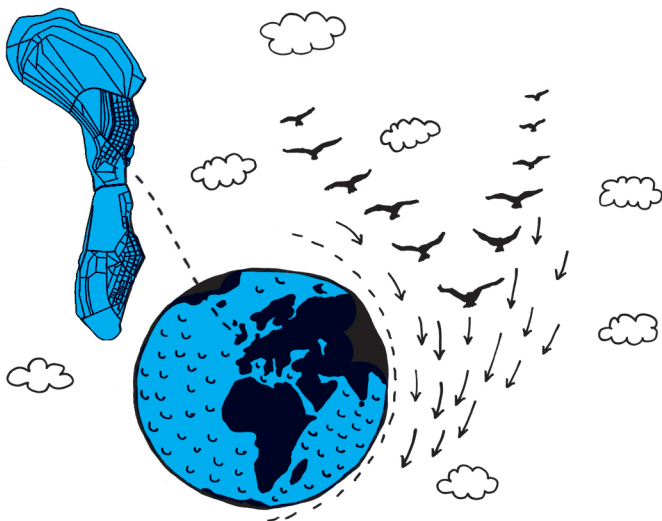
- Natura 2000 site Atanasovsko lake
- Managed reserve Atanasovsko lake
- Burgas Salinas Protected site
- Bypass canal
- Dykes and barriers
- Route
- Birdwatching Hide
- "The Point" - for birdwatching of migration
- Curative mud and lye's basins for public
- Artificial island
- Burgas airport

► A protected lake

In 1980 with the enthusiasm put of many people the Northern part of Atanasovsko lake is declared as a maintained reserve, and the Southern one as a buffer zone, which in 2007 is turned into a protected area.

Over the years the value of the lake has gained more recognition and today it is already:

- A wetland of international importance, included in the Ramsar Convention list;
- Globally important bird area, announced by BirdLife International;
- A site of European importance for the conservation of rare and endangered bird species according to CORINE biotopes;
- Natura 2000 site, a part of the European Ecological Network.



BEFORE



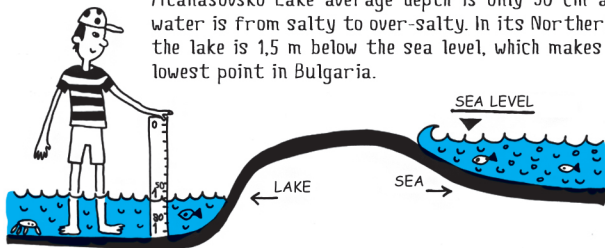
► Why Atanasovsko Lake

In the past the lake was a shallow coastal natural lake, named after the nearby village Atanasovo, nowadays Izgrev quarter in Burgas. Like the other lakes around Burgas, it was a breeding ground for many mosquitoes and in order to protect the town from malaria, the lake was used to produce salt from 1906. This is the reason the lake to become one of the most valuable wetlands in Europe.



TODAY

Atanasovsko Lake average depth is only 30 cm and its water is from salty to over-salty. In its Northern part the lake is 1,5 m below the sea level, which makes it the lowest point in Bulgaria.



VIA PONTICA



► The miracle of migration

Since ancient times the migration road of the birds Via Pontica (2nd largest in Europe) passes above the lake and the Black sea. Birds migrate primarily to look for food. In the winter Europe is stifled by the cold weather and birds are forced to fly thousands of kilometers to warmer climates, where their food is abundant.

During their flight they orientate themselves by the position of the stars, sun, and the magnetic field of the Earth and the peculiarities of the relief - mountains, rivers, and seashores.

Every year more than 1,5 mil of birds pass through Via Pontica flyway – storks, pelicans, raptors, waterfowls and song birds. Via Pontica gathers flocks of birds from Central, Eastern and Westerns Europe, as well as birds from Northern Asia and a part of Siberia. The air highway above Atanasovsko Lake narrows considerably, as it forms the so called a bottle neck, where the birds gather and fly away from North to South and in the spring they fly back.

In order their migration to be successful, birds need enough energy, which they get in the form of fat in their body. Apart from the abundant food and strong plumage, they need also to rest in quiet and safe places, where they prepare for their long journey. One of the most important stops of their trip between the continents is Atanasovsko Lake.

► The richest place of birds in Bulgaria

The various habitats offer ideal conditions for feeding, breeding and roosting of many bird species. This is the richest in birds place in whole Bulgaria:

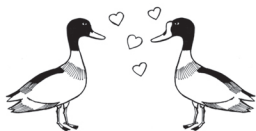
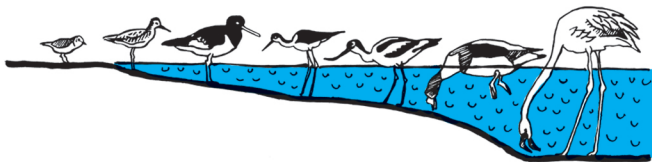
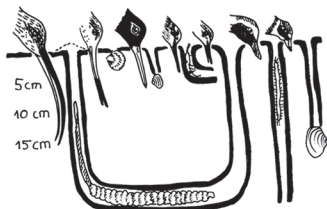


}}}} species of total 420 for the country



Despite its closeness to the city, the lake is full of life – among the most typical inhabitants of the lagoon are Waders.

Their legs length allows them to walk in basins with various depth, where they search for their food. The form and length of their beak allow them to catch food in different depth of the water or at the bottom of the lake.

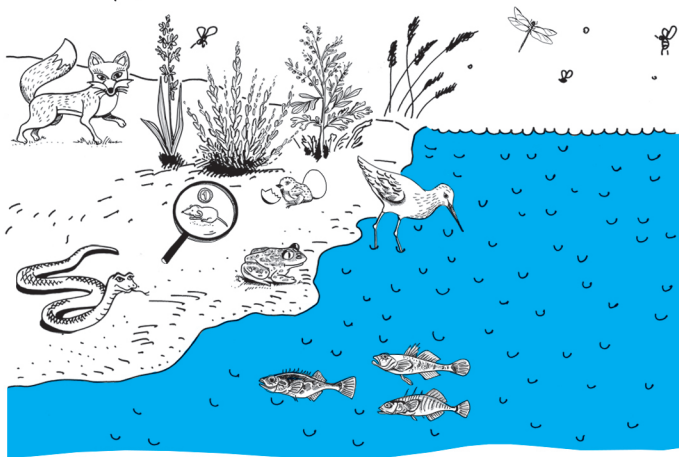


The salty Atanasovsko Lake freezes only during the coldest winters, so it is a favorite place for roosting and wintering of Dalmatian pelicans, Greater white-fronted geese, Northern pintails, Green-winged teal, etc. The lake is the most significant breeding place for the Common shelduck in our country.

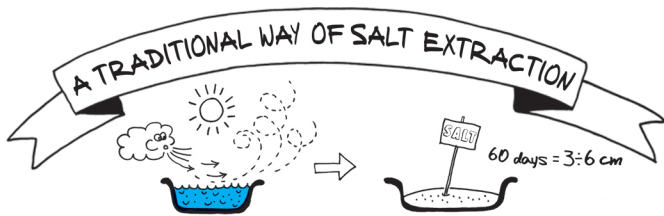
► What else lives in the lagoon and around it?

Glasswort and sea wormwood cover vast territories on the mainland and decorate the lake with their pastel colors. The elegant green-veined orchid has chosen exactly this place for its largest habitat in the country. Around the Atanasovsko Lake is found one of the smallest mammals in the world – Etruscan pygmy shrew.

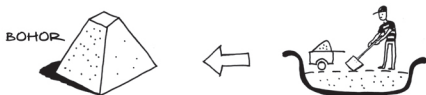
In the lake are found 22 fish species, as more interesting are the Caucasus goby, three-spined stickleback and Ukrainian stickleback. It is impressive, that fish manage to live and reproduce in the extreme lake conditions: the great amplitude of salinity, different oxygen content, great temperature amplitudes and the complex labyrinth of movement in the multiple basins. The Caucasus goby has adapted most successfully of all species. At the end of its reproduction period its number reaches up to 44 million specimens!



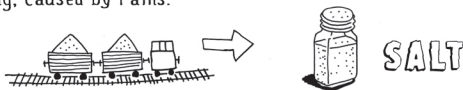
The brine shrimp is one of the most tolerable inhabitants to the high salinity lake. Here is its largest habitat in Bulgaria.



The water moves along a chain of basins, while gradually evaporates and condenses under the influence of the sun and the wind until it becomes salt. From one basin salt is obtained only once annually.



The salt is collected manually with special wooden shovels, washed out and transported to the place for storage in the open. It is piled on cut pyramids called *bohors*, which protect it from the wind and melting, caused by rains.



The salt is removed out of the lake in the wooden wagons of the narrow-gauge line, whose rails surround part of the water basin, and after that is transported to covered warehouses for final processing and packaging.



The healing mud and medicinal lye are by-products of the salt-production. The difference between them is the organic substances, which are a characteristic feature only for the mud. The lye is water with high concentration of salt, in which

people could swim without sinking – just the same as in the Dead Sea. The lye has strong anti-inflammation and anti-septic action and cures a number of diseases. The black mud is a proven remedy for alleviation and healing of joint ailments. It heals almost all skin diseases, acts in a beautifying and rejuvenating way to the skin and heals even wound scars. The mud is formed by the decaying of various organisms, as 1 cm of it is formed for about a hundred years.

► Atanasovsko Lake – The Salt of life

The lake offers excellent opportunities for studying birds, sports, entertainment and outdoor treatment. Every season it attracts thousands of visitors, who enjoy its biodiversity, healing characteristics of its water or just stroll alongside its shores.



Bird watching

The Point, situated in the Northern part of the Lake, is a world known place for bird watching. People from all over the world come in the autumn to watch the large flocks of storks, pelicans, raptors, which fly long distances in their trip to faraway Africa.

Sports

The roads around the Lake are favorite place for the cyclists and athletes.



Entertainment

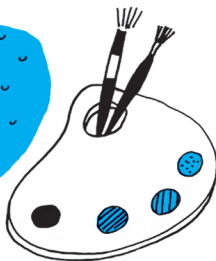
At the end of August, an extraordinary event takes place on the very shore of the lagoon - the Salt Festival, which gathers people with ideas, challenges and adventures for birds, salt and the lake.





The brigade and islands

The existence of the Lake in its current form depends entirely on the human beings. In 1989 volunteers built for the first time in Bulgaria artificial islands for birds nesting, thus securing more safe places for breeding. Every year at the end of August, volunteers from all over the country arrive here to help the reserve during the Atanasovsko Lake Nature Protection Brigade. Many artists are inspired by the remarkable lake forms and colors, by the queer salt traces, by birds' flight, by the fascinating sunrises and sunsets.



The water colors

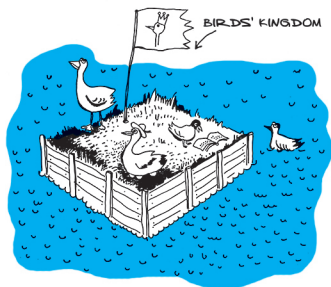
During the summer the water in the saltiest basins gets a dense pink-red color. The incredible colors of the waters of the Atanasovsko Lake are due to the water flourishing and the brine shrimp. During the warm months the water is enriched with nitric and phosphoric compounds, which causes intensive algae growth. The microscopic algae in the lake reproduce so much, that their enormous biomass becomes visible for the human eye. The pink and reddish color comes from the specific pigments, contained in them.

Bird watching shelter

It is situated at the roundabout of the exit of Burgas to Sarafovo, just before Lukoil petrol station. The place offers excellent conditions for birds watching, even without binoculars. There is also a pavilion. In this part of the shallow lagoon there are several artificial islands (platforms) for nesting and resting of Terns, Black-Winged Still, avocets and other feathered inhabitants.

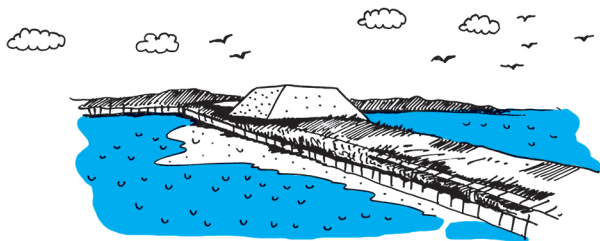
The Avocet Trail

It starts from the shelter and continues in the direction of the city. It is suitable for groups, interpretations, bird-watching, games and resting. From The Nest (woven with a wicker from a local artist) you can easily watch the nearest basins and their inhabitants. The photo shelter in the other part of the path gives an excellent opportunity for taking pictures of birds all over the year.



The Salt Trail

It is located in the Southern Salinas between the sea and the lake. The trail gives a chance for the visitors to get acquainted with the salt extraction process, to learn more about the lye and healing mud and get to know Atanasovsko Lake – the largest Salinas in Bulgaria.



► Today Atanasovsko Lake is:

- One of the most valuable and most rich in biodiversity areas;
- The largest habitat of Salicornia, Elegant orchid and Artemia;
- The richest bird place in Bulgaria - 333 of all 420 species of birds in Bulgaria meet here;
- The place with the most bird species - 126 species or 81.3% from the Red Book of Bulgaria;
- The place of the largest nesting of Avocet, Black-winged Stilt, Kentish Plover and the Common Tern and the only home of the small-headed Gull and gull-billed tern in Bulgaria;
- The area with the largest concentration of migrating birds in Europe and the Balkan Peninsula;
- A place, where we can see one of the smallest mammals in the world – Etruscan pygmy shrew;
- A place with the highest yield of sea salt;
- The largest deposit of healing mud;
- A place, where the oldest environmental brigade in Bulgaria (since 1988) takes place.



► Threats

Floods

Most of the birds at Atanasovsko Lake make their nests not on the trees, but in small holes or straight on the ground. That's why they are so vulnerable from heavy rains and floods. The high water floods the nesting places and the newly fledged birds or eggs are left under water. In addition, when fresh water enters the lake, the salt-loving inhabitants, living in it quickly die.



It is important the lake to be protected. For this purpose there is the bypass channel which, if in good condition, prevents from floods and takes the fresh water into the sea. The sudden change in salinity leads to the death of salty inhabitants, which leads to a significant loss of food for the birds, which inhabit it. That's why it is important to clean the channel and maintain it in a good condition.



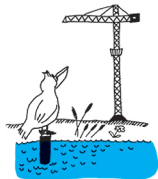
Wandering predators

Abandoned by their owners, dogs and cats, jackals and foxes walk around the dikes of the lake in search of easy prey - the eggs and the small birds of the birds. The frightened parents move away from the nests and the little ones fall into the predators' paws. Wandering predators are the most serious menace to the nesting success of the birds at the moment.



Construction around the lake

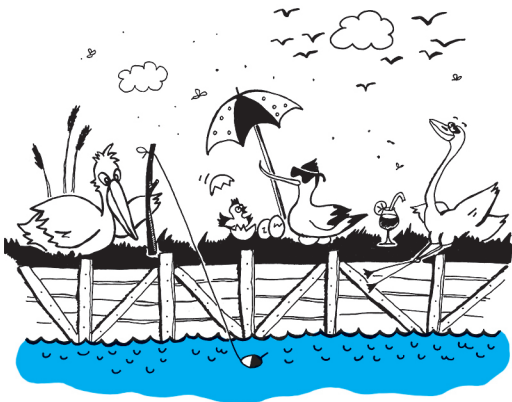
It changes the environment so much, that the animals are forced to leave their homes forever. But the plants can't leave. Constructions pollute the soil and water, many species are directly extinguished, while the places for life are significantly reduced



Wind power parks

Although near the sea is very windy, the area around the lake is the most inappropriate place for building wind power parks, because this is the place, where are the "roads" of the birds, using the migration highway Via Pontica. It is used for many ages and the propellers become their sure killers.





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www.saltoflife.biodiversity.bg



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