

# CONSTANTA COUNTY A DISCOVERY THAT IS ALWAYS RECENT

# FLORA AND FAUNA OF CONSTANTA COUNTY AND THE BLACK SEA

The Particularities of Dobrogei determined over time the development of a characteristic flora and fauna, a mix of elements of Mediterranean, Pontic, Pontic-Caspian, European and Eurasian origins.

In the ecosystems specific for these areas, where the swampy and flooded surfaces alternate with the river - marine banks, the vegetal carpet is very heterogeneous, made of a mosaic of hydrophilic, hygrophilic (swamps), mesophilic and meso-hygrophilic, meso-hygrophalophilic (subhygrophilic), psamophilic, halophilic, xerophilic, segetal and ruderal vegetal associations, to which are added the forest ones.



Red-breasted goose

As Spring is colder and shorter and Autumn longer and warmer, the vegetation has a late development in comparison to the other areas of the country. The geological and climate particularities determined at the level of the flora and fauna the formation of numerous endemism or rarities, which can be best observed in the large number of natural reservations (in the county).

In Constanta county there is a number of **38 natural protected areas**, with a total surface of 19.617,1 ha, which represent 2,77% of the surface of the county (the reference surface of 707.129 ha) and 0,082% of the surface of the country (the reference surface of 23 839 200 ha).

Of the total of 38 natural protected areas, 21 are natural reservations, 12 are natural monuments, and 5 are scientific reservations, 36 protected areas are declared at a national level, and 2 are declared at the level of the county, by local decisions

The first natural scientific reservation declared in Dobrogea at the insistence of professor loan Borcea, the creator of the marine research zoological resort from this locality, placed under the protection of the law in 1939, was the one named the Maritime Dunes from Agigea. In this mixed reservation (flora and fauna) of only 8 ha, formed by the continuous deposits of sand brought by the wind from the north, one can meet extremely rare species for the flora of our country like: sand bindweed (Convolvus persicus), sand convolvulus (Allysum borzeanum), cramp (Ephedra distachia), a very interesting gymnosperm, but also fauna elements like the turtle from Dobrogea (Testudo graeca ibera)-protected by the law and the sand lizard (eremias arguta deserti), spy sparrow (Paser hispaniolensis) and from the insects the nun (Manti religiosa) and lion of ants (Myrmeleon formicarius).





Sand bindweed

The Turtle of Dobrogea

The second natural reservation declared in 1945 in Constanta county was the Rocks from Harsova. The beauty of the landscape is given by the rocks made of reddish limestone and the historic importance of the upstream area, where there is another archaeological site for the Roman-Byzantine city, built in the 2nd century by the Romans.

Another well known reservation in the county is Hagieni Forest, situated at the border with Bulgaria, only 10 km from Mangalia city. The reservation is situated on a bumpy field, with small hills and canyons and a small pond with aquatic and swamp vegetation.

Here we meet a vegetation with Mediterranean, Balkan or Pontic origin with numerous rarities, containing 119 species included on the red list. Among the predominant Mediterranean species there are trees and shrubs like Carpinus Orientalis, Cotinus Coggygria, Fraxinus Ornus, Turkish Sour Cherry Tree, Wild Jasmine and Paliurus Spina, the herbaceous species like the snowdrop from Dobrogea and the saffron with vellow and white flowers. In the waters of the pond

one can notice one of the smallest ferns of the world, with leaves of 1 mm (*Azolla caroliniana*). From the specific fauna we enumerate the horned viper from Dobrogea (*Vipera ammodytes montandoni*). natural monument, the southern frog, the lizard from Dobrogea and the bad snake.

One of the most famous and studies reservations from Constanta county is the scientific reservation Fantanita Murfatlar. This reservation has 515 species of plants and many species of animals, all characteristic for South Dobrogei. Among the species of animals characteristic to the reservation, we mention: the steppe polecat, stained ferret and grivan.



The Rocks from Harsova

An area with a special landscape is the natural scientific reservation Rock of the Girl, due to the wild canyon aspect parts, of the rocks like city towers and caves. This area was once an arm of the Danube. Thanks to the softer climate, here are numerous sub-Mediterranean and Baltic flora and fauna elements, like: the thorn, bedstraw with yellow flowers, a specie of crow onion, saffron, greysh oak, sky, silver linden, Carpinus Orientalis, Turkish Sour Cherry Tree, pot-bellied cricket, Mediterranean spiders, striped green lizard from Dobrogea, horned viper from Dobrogea, white eagle (declared natural monument), black eagle, big owl and raven (also natural monument). Among the mammals characteristic to the area we mention: small tree parse, stone marten, stained ferret (only in Dobrogea).

Constanta county can also brag about its speologic reservations like the caves La Adam and Mouth of Dobrogea ("Bats").

"La Adam" cave is known beyond the borders because inside it were found numerous skeleton remains of over 65 species of mammals of quaternary age and fossil remains of over 80 species of animals from the Jurassic. In this cave was also discovered a molar belonging to *Homo sapiens fosilis*.



The Cave of La Adam

"The Mouth of Dobrogea" Cave is almost 500 meters long and here were found proofs of some old human activities (silex tools, fragments of Neolithic ceramics, metal objects from the iron age). The cave hosts large colonies of bats and a rich cave fauna.

Constanta county also contains the only protected marine area from the country, the seaside-marine acvatory "Vama Veche - 2 Mai". In this area there is an abundance of marine creatures, in comparison with the northern part of the Romanian seaside. Here there are numerous rare species and recently an invasive specie was found, the blue American crab.

Until the lands are cleared and used for agricultural purposes, the entire surface of central and southern Dobrogea belongs to the steppe area. However, the natural vegetation is met only fragmentary, as steppe vegetation meshes. Besides the steppe vegetation, in Dobrogea you can meet on smaller surfaces areas with forest-steppe vegetation and areas with woods. In the maritime area is predominant the costal vegetation as well as swamp vegetation with reed and sedges.

The shore is especially varied, made of slightly curled forms, with accentuated capes and deeply extended gulfs on Dobrogea's valleys, with cliffs, beaches and sand cords. The sea, in its erodent action, made the shore to withdraw continuously, either by the transformation of gulfs in creeks and lagoons, or by the abrasion in front of the promoters.

The cliffs, being two thirds of the seaside length, have height that vary between 20 and 40 m: from Singol Cape (entrance in Mamaia), the cliff grows towards the south up to 35 m only to decrease then to 10-15 m, to reach to Eforie and Tuzla Cape to almost 40 m, so that towards Costinesti and Mangalia to drop again to 10-20 m and then to grow towards Vama Veche.

The surface of the Romanian continental platform is of 25000km2. The main marine resources are represented by the invertebrates and fish. The invertebrate resources exploitable for commercial purposes are made of the mussels from the seaside rocky areas and those from the area of the swampy offshore facies, the Rapane gasteropod and shrimps from the algae fields from the areas with rocky biotope.

The fish resources can be divided according to areas of existence in gregarious pelagic fish like the spirit, anchovy and mackerel, demersal fish like the shark, gobius and turbot and anadromus fish (doing reproduction migrations from the sea in the Danube and Razim-Sinoe Complex) like Alosa Caspia, the Danube Scomber, and sturgeon.

Constanta county has the central and southern area of the seaside, marine and coastal area from the south of Portita Mouth, where the fish reserve is lower compared to that from the mouths of the Danube. Generally, the marine fishing ensures 2000-2500t/years. The most important species quantitatively speaking for Constanta county are the sprat, anchovy and mackerel.



The Large Cormorant

Besides the great richness of fish, the Black Sea also presents agglomerations of algae which in some areas equal those of the Sargasso Sea. On the beach, from Costinesti until Navodari we meet green algae with vegetative organ widened and the edges curled - sea salad (*Ulva lactuca*) and narrower green algae of enteromorpha type. However, those which will capture most our attention are the red algae which form large fields offshore (*Dasya elegans and species of Ceramium*) and brown algae like *Cystoseira barbata*. In the rocky region you can find lobsters, snails, mussels, oysters, crabs. The sandy parts are the favorite habitat of shells (*Tellina*, *Donax*, *Cardium*, *Solen*).

We can notice the herring seagull (*Larus cachinans*), Sterna.sp (*Sterna.sp*.) and other birds flying over the seaside of the Black Sea.

Among the sand dunes near the sea one can identify over 120 characteristic plants like the cramp (*Ephedra distahia*), sand cabbage (*Crambe maritima*), sand raddish (*Cakile maritima*), sand knotgrass (*Polygonum maritimum*) and rarities like sand bindweed (*Convolvulus persicus*) and *Alyssum borzeanum*.



The Seagull

# **Techirghiol Lake**

It is situated on the administrative territory of Techirghiol, at south of North Eforie and at west of the seaside cord that connects South Eforie and North Eforie, being a part of the mixed reservation of Techirghiol Lake. It is the widest salt water lake in Romania, being 7,500 m long and 9 m deep. The sapropelic mud on the bottom of the lake has remarkable curative qualities. The water and mud qualities have determined the development of balneary resorts on the lake shore: North Eforie, South Eforie, Techirghiol.



Techirghiol Lake

# Oltina Lake

It is situated at west of Oltina locality, being included in the Mixed Natural Reservation of Oltina Lake. The lake is a part of the meadow lakes category.

# Siutghiol Lake

It occupies a surface of 1900 ha, being 7 km long and it is separated from the sea by a coastal band - Mamaia beach.

The water of the comes from fresh water springs situated on its bottom and in its western end.

Siutghiol Lake is popular because here people can practice aquatic sports like yachting or water skiing.

The lake shore is mainly constuted of limestone resulted from the Jurassic, Cretacic and Sarmatian deposits

In its vicinity there is another fresh water lake - Tabacaria Lake.

### Istria Lake

It is a huge lake, situated on the west side of Istria locality, being connected to Sinoe Lake through Histria channel.

Swans in the summer

### Since Lake

Sinoe is a lake from Razim-Sinoe lacustrine complex. By its position in the complex and by the distance from the mouths of the Dunavat and Dranov channels (which bring fresh water), Sinoe Lake has a large concentration of salts, about 15g/l. It has a total surface of about 135 km² and a maximum depth of 1.6 m. On the lake shore there are the ruins of the ancient city of Histria.

### Corbu Lake

**Corbu Lake** is on the administrative territory of Corbu.

The lake has been long known by the fishermen to be a good fishing lake with a lot of fish species. Corbu Lake with Chituc Sand Bank are in a strictly protected area, where the Common Tern (*Sterna Hirundo*) has its favourite place for fishing and



Cheia Mountain

hatching, competing with the Herring Gull (*Larus Argentus*) and the Black Headed Gull (*Larus Ridibundused*).

Ornithologists everywhere find in this place a field for research and observation.

# Tatlageac Lake

The lake is in the north of Olimp resort, in the unincorporated area of 23 August.

Tatlageac Lake is a sea-river bank, where aquatic sports can be practiced. The lake has a special importance, mainly due to the therapeutic mud.



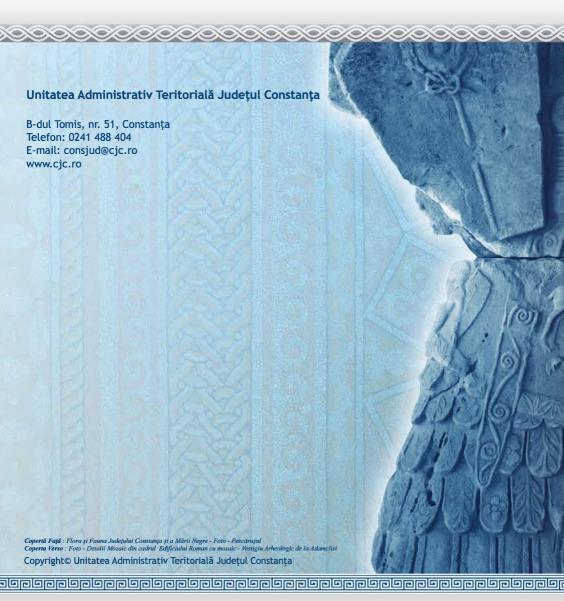
Quays of Dobrogei

# "Cheia Mountain" Natural Reservation

The reservation is situated on the territory of Cheia Village, the left bank of Casimcea Valley being a mixed botanical and geological reservation. Its total surface is 387.95 ha, being one of the most interesting geological and landscape formations in Dobrogea.

The reservation is composed of

organogenous limestone shaped like columns and towers; the formations have the diameter between 15 and 30 m and the height of 30 m. Here were discovered about 600 species of plants, many of them being considered rarities; the fauna is varied and its characterized by a large number of protected species; among these we mention the Chiroptera species and daylight raptors.



# JUDEŢUL CONSTANŢA O DESCOPERIRE MEREU ACTUALĂ

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