

Natura Trail Sf. Gheorghe

Experiencing
Nature between
River and Sea



Tracking Europe's
Natural Treasures



Mentha aquatica

"I've loved you,
tiny flower,
ever since
I've known
your name!"
Far Eastern
Saying
(TEUI)

Natura Trails: Tracking Europe's Natural Treasures

Europe is known for its diverse areas of outstanding natural beauty. The span extends from untouched mountain peaks to cultural landscapes shaped by people through the centuries – all of them home to an impressive variety of fauna and flora.

Many of these landscapes are protected by law to preserve them for future generations.

No matter whether they come under nature and landscape protection, whether they have been designated nature parks, national parks or biosphere reserves, the goal invariably is to ensure the long-term protection of important habitats while respecting the needs of the local population.

By creating Natura 2000, an EU-wide network of protected areas, the European Union has taken an important step forward in conserving endangered animals, plants and habitats across borders. Natura 2000 areas do not exclude people, but rather invite them to consciously experience nature.

Natura Trails are designed to give visitors a living experience of biological diversity and to make them aware of the nature around them – something which we also hope to achieve with the present brochure!

Andrea
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Adnana
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Head of Sf. Gheorghe School
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Sfântu Gheorghe a very special place



Mentioned for the first time in 1318 on a map of the Genoese Pietro Vesconte, the village of Sfântu Gheorghe is now a small fishing and touristic village of about 900 people, situated in the south-east of Romania at the end of the oldest branch of the Danube River.

Arriving in Sfântu Gheorghe does not mean the end of the journey but rather the beginning of a new one amid wild scenery spotted here and there by marks of civilisation.

Ten minutes before your boat reaches the shore, you can see the Black Sea opening its gates to the Danube River. The place has a unique wildlife of its own that can be discovered, following a 6 km trail along the river and the seaside and eventually crossing the village.

Sf. Gheorghe Natura Trail

The trail starts next to the landing stage of the passenger boat and for about one kilometre follows the dyke that surrounds the village. On the right side there is the Danube River across which you can see some fishing huts.

On the left side of the trail there are traditional houses with roofs and fences made of reed as well as boarding houses which



offer tourists accommodation and traditional food. The village is closed off by an expanding, exclusive tourism complex and a military base.

Along its entire length, this part of the trail is bordered by bushes, such as Saltcedar (*Tamarix ramosissima*) and diverse willows (*Salix sp.*), by herbs, such as Common horehound (*Marrubium vulgare*) and Water mint (*Mentha aquatica*), and close to or in the water, Reed (*Phragmites communis*), Reed-mace (*Typha angustifolia*) and Bur reed (*Sparganium erectum*), Yellow water iris (*Iris pseudacorus*) as well as White and Yellow water lilies (*Nymphaea alba*; *Nuphar lutea*).

Useful & beautiful: Plants at and on the water

All the plants which grow at the borders of or in the water have developed characteristics that enable them to survive in this special environment, which is marked by changing water levels.

Reed (*Phragmites communis*)

The Danube Delta holds the largest compact area of reed worldwide (approx. 1800 km²). It serves as a refuge for waterfowls and fish and at the same time as a natural filter that absorbs nutrients and heavy metals entrained by the waters of the Danube. Thus, if the pelican is the symbol of the Delta's fauna, the reed is its emblematic plant.

Its name is derived from the Greek "phragma", which signifies "braid". It is up to 4 meters high, with a hollow, jointed stem. The adventitious roots are pushed by nodes at the basis of the stem, while the leaves



are pushed by the nodes on the upper part. The flowers, called panicles, resemble an inflorescence with a main axis whose ramifications are getting shorter towards the top. Vigorous underground rhizomes cause the plant to spread quickly.

Since time immemorial, people in the delta have used reed for roofing, mats and fences, but also as fuel and forage. Its physical properties – it is heat-insulating and sound-absorbing, solid and yet light – make reed also an excellent raw material for the production of ecological construction material.



The White water lily (*Nymphaea alba*)

The White water lily is a perennial plant which is found in lakes and swamps, everywhere in the Danube Delta. As the roots are fixed in the ground, the length of the stem depends on the depth of the water. The leaves are large (10–30 cm diameter) and oval. They have a water-repellent surface and stomata on the upper side which enable the plant to breathe. The flower is white, with four sepals and 20–25 petals each. The fruit is oval and the seeds are sweet and edible. It blossoms from June to September. Nowadays it is an endangered species and protected by law.

There is also a Yellow water lily (*Nuphar lutea*) whose flower is smaller.

Once you leave the village, the trail takes you through wilder scenery: on the right, there is a small channel, which in summer is covered with White and Yellow water lilies, and a marsh. On the opposite side, old German bunkers from the Second World War testify to the tumultuous history of this part of the country. Examples of the totally different flora and fauna, typical of salted soils, are the Saltwort (*Salsola soda*, see title page), the Common glasswort (*Salicornia europaea*) and the Buckhorn plantain (*Plantago coronopus*).

The trail leads first to the main path and then turns right, onto a path that leads to the bank of the Danube. Here you can hear the songs and calls of many small birds or, if you are lucky, watch lizards, turtles and snakes basking in the sun. After about one kilometre, the path opens to a magnificent view of the river as it flows into the sea, while the sand becomes finer and is covered with plants typical of the sea shore. (Caution: Though it might be tempting, do not swim in the Danube at this place – there are dangerous vortices!)

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Traces in the sand

You will rarely see a snake or turtle. Most likely you will only find their traces in the sand.



Steppe Viper (*Vipera ursinii renardi*)

Although it is only a sporadic species in this area, you might see a venomous snake – the Steppe viper – on the trail. You can easily recognize it by the V drawing on the head. Good to know: The steppe viper bite is not deadly, but if it happens, please go immediately to the sanitary point in the centre of the village.

European pond terrapin (*Emys orbicularis*)

This turtle is found throughout Europe, in Western Asia and North-West Africa. In Romania, it used to be spread almost all over the country, but currently its numbers are dwindling alarmingly, due to habitat loss, pollution, hydrological constructions and human interference. In all the countries, where it is found, it is strictly protected by national and EU law (Habitat Directive).

Its favourite haunts are lake banks with rich water flora and marshes, where it enjoys basking in the sun. It is a very agile and ferocious species, feeding on shell fish, terrestrial invertebrates, rodents, even young birds, fish, insects, worms and very rarely on some plants. The bodies of adult turtles reach 15–25 cm in length. Their shell is dark brown to black with small yellow spots or lines. The same pattern is repeated on their heads, necks and legs.



From the end of autumn to April the turtle hibernates at the bottom of lakes and rivers. Between May and June, the female lays 3–16 eggs on the frequently flooded shores.

Walking along the river, you can admire Sahalin Island on the right, which is about 15 km long. By dint of its location at the mouth of the river it represents a very special biotope, which is called “meleaua” (from the Russian “malii” or “melkii” for small – in the given case referring to the shallowness of the water).

Where the salt water of the sea mingles with the fresh water of the delta, thousands of birds find a perfect habitat where they stop during their long migratory flights to rest or to breed.

Short-term guests – migratory birds in the delta

The Pelican

The pelican is the symbol of the Danube Delta, and you are very likely to see a flock of pelicans when walking on this trail: One of their favourite haunts is close to the river’s mouth on the opposite bank.

Two species of pelicans can be found in the delta: The White pelican (*Pelecanus onocrotalus*), which lives in colonies, and the especially rare Dalmatian pelican (*Pelecanus crispus*). The two species can be identified by the colour of their wings (dark flight feathers for the White pelican and greyish-white ones for the Dalmatian pelican), by the colour of their bill pouches (bright yellow-orange for the White pelican and yellow for the Dalmatian pelican) and by the colour of their eyes (yellowish-white for the Dalmatian pelican and red for the White pelican).



These big water birds feed on fish and nest in colonies in wetlands – most of the European population in the Danube Delta. Despite their weight, they fly easily at high altitudes with slow wing beatings followed by soaring. This can be watched especially in the early autumn when the pelicans prepare to migrate to the north-eastern coast of Africa where they spend the winter.

Centuries ago, nature was less polluted and there were millions of pelicans. Nowadays, the pelican is an endangered species.



The Common tern (*Sterna hirundo*)

Also known as sea swallow. Its plumage is white and grey, the head black; the legs are red and the thin bill is red with a black tip. The tern plunges for fish – an impressive performance accompanied by the characteristic shrill piping

– something which can be frequently watched when walking along the Danube. The Common tern breeds in colonies, the largest of which is found on Sahalin island in the Danube Delta.

The European roller (*Coracias garrulus*)

The only member of the roller family to breed in Europe. It is a pretty rare bird which prefers open country with tall trees full of hollows. Its wings and body are bright blue and the lower parts of the wings are blue-violet – which makes it a striking bird in its flight, with the brilliant blue contrasting with black flight feathers. Its back is light brown. In the Danube Delta it can be frequently seen on overhead wires or in tall trees.

Following the shore for another ten to fifteen minutes, you will observe millions of different shells shimmering in the sun and you will come upon the finest sand of the entire Black Sea seaside.



Farther out on the dunes a very delicate plant – the Sand morning glory (*Convolvulus persicus*) – opens its white flowers between Siberian Sea rosemary (*Argusia sibirica*) and Sea holly (*Eryngium maritimum*).

Sand morning glory (*Convolvulus persicus*)

The name of the plant genus is derived from the Latin *convolvere* (to twine), a term that refers to the plant’s climbing stem. It has a very long underground rhizome. The stem is about 50 cm high, velvety and greenish-white. The leaves are thick and big, velvety and covered with fine hair. The flowers are big, white and cup shaped.



“Just admire it and think it belongs to this place, not to a glass of water!”

(Dănuț)

The plant grows only in a few places in the country, on sandy habitats, such as the dunes along the Black Sea, especially on the seashore between Sf. Gheorghe and Sulina. Because of its beauty and of the dramatic population decrease, the plant is now protected by law.



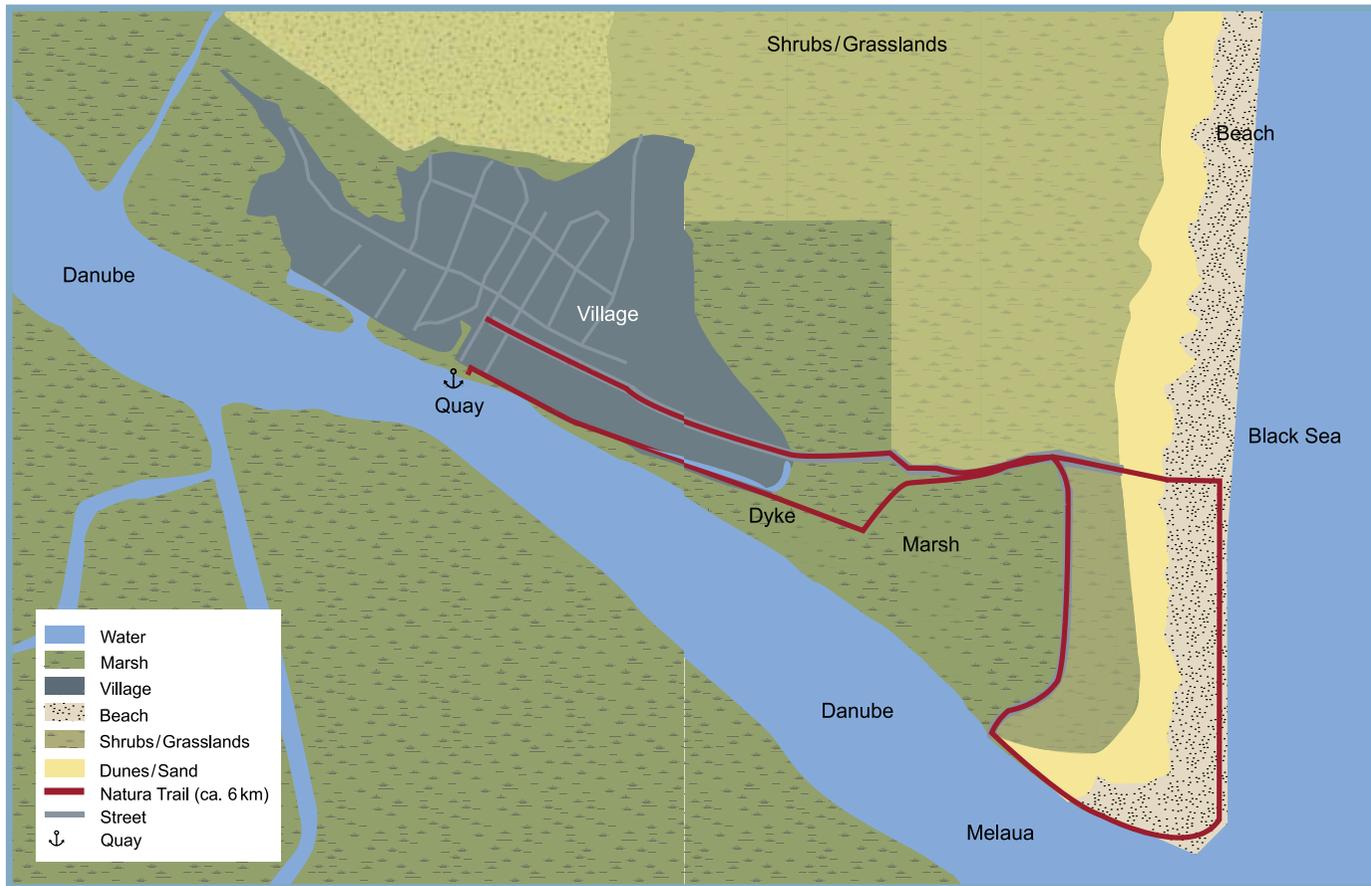
After a walk of about four kilometres, a swim and a rest may be indicated before returning to the village on a broad sandy path that takes you through open country with Matted sealavender (*Limonium bellidifolium*), shrubs of Salt cedar (*Tamarix ramosissima*), Sea berry or Sea buckthorn (*Hippophae rhamnoides*) and Russian olive or oleaster (*Elaeagnus angustifolia*).



The trail follows the way to the camping area, where you can have a cold drink and something to eat. The walk

through the village takes you back to civilization and offers you the chance to get in touch with local life.

Even at 120 km from the nearest town, Sf. Gheorghe is not the isolated community it might seem to be. Distance and difficult access, which is possible only by water, have preserved it as a unique place where people and nature have lived in harmony for centuries.



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Protected Areas

Biosphere Reserves

... form part of the worldwide network of UNESCO Biosphere Reserves, which comprises large-scale ecosystems of outstanding importance to the preservation of biodiversity. Biosphere Reserves are created to promote and demonstrate a balanced relationship between humans and the biosphere. This is why nature conservation is combined with the preservation of cultural diversity and the promotion of research and education. This calls for appropriate zoning and management. Hence, biosphere reserves include strictly protected areas, a surrounding buffer zone where the use of resources is limited, and a transition area, where sustainable resource management practices are developed in cooperation with and for the benefit of local people and communities. The Danube Delta Biosphere Reserve was established in 1990.

Natura 2000

... is a European programme aimed at the protection and management of vulnerable species and habitats in their natural territory, regardless of political boundaries. Natura 2000 areas are protected sites, designated in compliance with two EU Directives (Fauna-Flora-Habitat Directive and Bird Protection Directive) and forming part of a EU-wide network of protected areas. Natura 2000 is NOT a system of strictly protected reserves. There are no restrictions as long as the activities in the area do not endanger the habitats and the species for which the site was designated. Usually there is no ban on traditional agricultural and forestry operations. A management plan regulates possible activities and necessary conservation measures.



Natura Trails

The Natura-Trails project fosters nature experience and makes biodiversity more tangible, thus contributing in a major way to the international "Countdown 2010" initiative. In compliance with the UN Convention of Biodiversity, the initiative strives to significantly reduce biodiversity loss by 2010. Friends of Nature actively support Countdown 2010. www.countdown2010.net

