Costa Nostrum Certified Sustainable Beach

Table of classification and certification of the beach

| | INDEX TYPE - CRITERIA Impo | ortance | RATE | |
|----|---|---------|------|--|
| | Recording and information of the public through signs and through the website www.costanostrum.org about: | | | |
| 1 | - The marine and land fauna and flora, as well as the wetlands inside the coastal zone | M/4* | 4 | |
| | - Issues of waste management, environment protection etc. | | | |
| 2 | Publication of a management plan, indices and all the relevant information. | M/4* | 4 | |
| 3 | Existence of appropriate bins for the regular garbage disposal | M/4* | 4 | |
| 4 | Application of a management plan for sustainable development of the beach | M/4* | 4 | |
| 5 | Cleaning of the beach regularly – at least 3 times a year. | M/4* | 4 | |
| 6 | Existence of a questionnaire in a printed form or in electronic form at www.costanostrum.org . | M/4* | 4 | |
| 7 | Yearly recording of the quality of the waters by the administrative authority and publication of the measurements to the general public through the website www.costanostrum.org and through signs. | | | |
| 8 | Existence of a lifeguard. | M/4* | 4 | |
| 9 | Existence of a person in charge at the beach. | M/4* | 4 | |
| 10 | Obeying the rules and demands, according to the legislation in force. | M/4* | 4 | |
| 11 | Existence of a prize for the beach by the program Blue Flag | 3 | 0 | |
| 12 | Existence of measures to protect endangered species. | 3 | 3 | |
| 13 | Methods and equipment to save water. | 3 | 0 | |
| 14 | The quality of the sand should be the best possible, that is, free of cigarette ends, rubbish and waste that come from the sea. | 3 | 2 | |
| 15 | Appropriate infrastructures like changing rooms, showers and WC. | 3 | 3 | |
| 16 | Existence of bus routes to and from the beach, at least 4 times daily. | 3 | 3 | |
| 17 | Cleaning of the sea near the beach at least 3 times a year. | 3 | 3 | |
| 18 | Existence of an emergency plan. | 3 | 0 | |
| 19 | Local - traditional products sold at the restaurants and bars inside the coastal zone. | 3 | 3 | |
| 20 | 50% and more of the guests visit the beach by bus or motorbike or on foot or with an electric vehicle. 2 | | | |
| 21 | CD players and other portable music devices not allowed at the beach. | 2 | 2 | |
| 22 | The noise produced should not exceed 50 decibel. | 2 | 1 | |
| 23 | Eco - friendly beach equipment that is in harmony with the natural beauty of the beach. | 2 | 1 | |
| 24 | Eco - friendly infrastructures in harmony with the natural beauty of the beach. | 2 | 0 | |
| 25 | Environmental education – sensitization of the public at least once a year by the administrative authorities of the beach. | 2 | 2 | |
| 26 | Infrastructures for persons with special needs, like parking spaces, easy access etc. | 2 | 2 | |
| 27 | Proper infrastructure for pregnant women and babies (like easy access, baby room etc.) | 2 | 0 | |
| 28 | Equipment like benches so that the beach can also be used in winter, for example for picnics | 2 | 2 | |
| 29 | All signs around the beach should be in harmony with the landscape. | 2 | 0 | |
| 30 | Actions for the preservation of the local vegetation in healthy ecotopes and actions for the increase of the local vegetation in destroyed beaches - ecotopes. | 2 | 2 | |
| 31 | The sea waters are evaluated as of good or excellent quality according to the framework directive 2006/7/EC of 15/02/2006. | 2 | 2 | |
| 32 | No anchoring and traffic of tourist motorboats near the beach. | 2 | 2 | |
| 33 | Availability of local products > 51%. | 1 | 0 | |
| 24 | Use of alternative energy sources for electricity | | | |





Η μωβ μολόχα είναι ένα χαρακτηριστικό φυτό της Ελληνικής άνοιξης.

8







στη θάλασσα.

12

resort & spa a member of cyan group of hotels

Apollonia

Life Guard

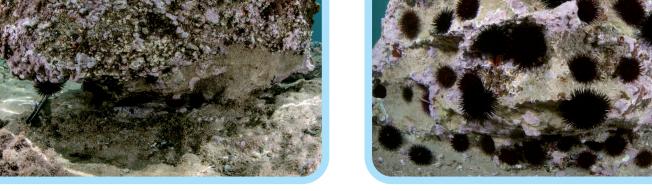
35°20'25.28"N

25° 3'31.86"E

≈ 12500m2

GRCR201912

Organized Beach with



Στη σκιερή πλευρά του βράχου, Βράχος στη θάλασσα καλυμμένος μωβ και πράσινα χρώματα ξεπηδούν με αχινούς, αγαπητός μεζές από τους οργανισμούς που ζουν. στη Μεσόγειο.

Ο αμμώδης βυθός, αν και με πρώτη ματιά φαίνεται άδειος, εντούτοις είναι γεμάτος μυστικά - Το μεγαλύτερο είναι η ηρεμία που κρύβει.

Στον υγρότοπο, η μικρή χελώνα

ξεπροβάλλει δειλά για να

αναζητήσει την τροφή της.

10

Ένα μικρό λιβάδι θαλάσσιου φυτού. Η καλόγρια είναι το πρώτο ψάρι που μπορείς να δεις όταν ξεκινήσεις Σημαντική η ύπαρξή του, δηλώνει εξερεύνηση με τη μάσκα καθαρότητα στη θάλασσα.

> The local folk tale says that the reef that runs along the entire Amoudara's beach to the estuary of Giofiros river was built by the Byzantines to curb the attempts of the Arabs and the Saracens to occupy Chandakas city around 600-700 AD.

Οι λιβελλούλες, τα ελικοπτεράκια κοινώς ονομαζόμενα, είναι δείκτες οικολογικής κατάστασης των υγρότοπων.

The "Myth" of the Beach

Malevizi- Crete Municipality Apollonia Beach Resort & Spa Administrator General Manager **Emergency phone**

Beach attributes

Name

Kind

Latitude

Longitude

Total Area

Code Number

Table of Existing Infrastructures

| | Type of infrastructure | Quantity/Item |
|---|--------------------------|---------------|
| 1 | Life Guard Tower | |
| 2 | Toilets | |
| 3 | Changing Rooms | |
| 4 | Umbrellas - Beach chairs | |

Marine Fauna and Flora of Apollonia Beach Resort & Spa

The coastal sea area at Apollonia Beach is made up of a sandy bottom with depths of no more than 3 meters, and then there is an extensive reef that runs along the entire Ammoudara beach to the estuary of the Giofiros river. It is a reef that hosts not only a significant number of flora and fauna but also interesting geological formations.

In reality of course it is an old shoreline sandstone rock (beach rock formations) structured by the existence of freshwater from the four rivers that flow into the sea and submarine vents and so by physico-chemical processes that take place the rock is formed

Small fishes pass by and live in search for food on the seaweed that grows on the reef. Larger as German and small sarguses form flocks swimming indolently. The sea urchins, hard-hooked, move slowly scraping the rock and eating the micro-algae. Crabs are circulating in the slits of the rocks. Although they are big in size, they fear

Land Fauna and Flora of the Beach of Appolonia Beach Resort & Spa

the presence of the man, disappearing when noticing him. Using a mask, a snorkel and a pair of flippers, a small lens and a small underwater camera, the visitor can see the life of the reef and capture it with the camera.

You can start from the shallows and see the small plaices in the sandy bottom and the king-fishes looking for food in the sand.

Starfish sprout out of the sand and start their afternoon sherry. Passing the reef, you will see a submarine landscape with seagrass meadows at depths of 5-6 meters. A unique marine plant, endemic to the Mediterranean that forms vast meadows and hosts a large number of species. If you are lucky, you may see skate rays resting in the meadow, and maybe odd large fish can reach you silently by running out of the blue of the open sea.



Ο επιβλητικός θαλασσόκρινος, Ένας νάρκισσος φιλοξενεί μια λευκή αράχνη που καραδοκεί ένα σπάνιο και ενδημικό φυτό για το επόμενο θύμα της. των αμμοθινών της Μεσογείου.

| 1 | 5 Ashtrays | The dunes are the result of the action of the sea and the wind. These are sensitive and | environment of dunes characterized by lack of fresh water and high salinity values of | coastal zone. | |
|---|--|--|--|--|-----|
| (| 6 Small Tables | dynamic ecosystems that harbor plenty of plants and animals. | the air. | Application of an ISO 9001 or ISO 13009 35 management system by the administrator of the | 1 |
| • | 7 Showers | Their ecological significance is great and is attributed to the dune vegetation, which has a primary structural role in their creation and preservation as this vegetation | At the same time, dunes protect the soil from the corrosive action of the sea. In the dunes we will find precursor plants close to the wave and first in the range of sand | beach. Application of the system ISO 14001 or EMAS or | |
| ł | 8 Waste Bins | retains the sand, stabilizes the coastline and the soil from the corrosive action of the sea and the wind and acts as a protective natural dam (seawater and salinization of | dunes that have adapted to this dry and hostile environment, having developed particular features such as small size, light green colors, thorns, hard and hairy leaves | 36 TRAVELIFE or Green Key by the administrator of the beach. | 1 |
| (| 9 Infrastructures for PWSN | the aquifer, wind intensity) for the hinterland. | as well as deep powerful root system. | 37 Environment friendly water activities. | 1 |
| 1 | 10 Water Sports | In addition, dams are fragile and fragile ecosystems that have adapted to changes caused by natural causes (wind, wave), and regardless of sandy deposits (extent, | Then we will find the sandy species. Plants needed to stabilize younger dunes thanks to their powerful and extensive root system. They prepare the ground for its | 38 WIFI available at the beach | 1 |
| 1 | 11 Protected Species of Coastal Flora | thickness, height), they play an important role in the underground hydrology of the wider region and this is due to the fact that they have considerable storage capacity with respect to the underground waters that they harbor in their mass. | colonization by other species such as the water lily (Pancratium maritimum). This is a characteristic and emblematic type of sand dunes because as it blooms the beaches acquire a unique beauty. It forms bulbs in deep depth and dense clusters in the sand. | On-line recording and availability of beach chairs and umbrellas as well as of the weather conditions at any moment, the results are shown in the site and the application. | 1 |
| | | Organisms living in dun-dwelling ecosystems are adapted to live in the hostile | | Total Rate for Organized Beach | 100 |

Wetland of Almyros near Apollonia Beach Resort & Spa

The wetland of Almyros Heraklion, coded GR431389000 and named "Artificial lake of Almyros", is located in the Municipality of Malevizi, about 1.5 kilometers northwest of the center of the municipal district of Gazi. It is a heterogeneous wetland system fed by two underground aquifers with seasonally changing salinity. In the area of discharge there is a lake which has undergone significant modifications over the years. Initially there were watermills, while in the 1970s a barrier was lifted to reduce the salinity of the water, something that was never achieved. At this point, the bed has been modified, and then the water follows a steady bed which locally forms saltwater ponds, seasonal ponds, reedbeds and eventually flows into the sea. Since the late 1960s, significant interventions have

been made that have changed the hydrological characteristics of the wetland and have significantly degraded the area. In the area of Linoperamata, north of the river, an electric power plant was built that exploits about 1/3 of the water to cool its engines. At the same time large hotel units were constructed by filling large wetland areas into the river's estuary and the national road was structured vertically to the river and there are also significant crop areas. As a result of all these anthropogenic interventions, the wetland has lost more than 40% of its land. Finally, efforts have been made to exploit the water of Almyros for water supply and irrigation. In the wetland as well as in the wider area, 21 different habitat types correspond to approximately ¼ of the total habitat of Crete. Next

to the river bank there are reed trout (Phragites australis and Arundo donax) and together with Tamarix parviflora are important habitats for the bird species. Naturally occurring wetlands are also Phoenix theophrastii palm trees. In the Almyros River and in the perimeter of the river, 11 species of mammals, 206 species of birds, 6 reptile species, 3 species of amphibians and 4 species of fish have been recorded. In the past, the wetland hosts large populations of riverturtles (Mauremys rivulata), but due to the degradation of their interests and their fishery, their current population is considerably reduced compared to what existed until some years ago. Unfortunately, the invertebrates in the area are very little studied.

BEACH REGULATION

General matters:

- The opening hours of the beach are from 10:30 to 18:30.
- For any complaints complete the special form at the entrance
- To help us increase the quality of the services provided please complete the relevant questionnaire which you can find at the reception or in our website www.costanostrum.org or by downloading the relevant application Costa Nostrum.
- The ashtrays, the beach chairs and the umbrellas are property of the beach management body.
- Only the guests owners of valuable objects that may be lost, are responsible for the loss.
- Hygiene and Safety, Environmental Protection and Cleanliness of
- the Beach • You should always follow the advice of the lifeguards.
- Swim parallel to the coastline and if possible never alone.
- It is prohibited to block the lifeguard's corridor and the range of
- vision of the lifeguard. • The consumption of alcohol or drugs is prohibited.
- It is prohibited to throw cigarettes into the sea or on the beach. • It is prohibited to throw glass objects or packaging on the beach or
- into the sea.
- It is prohibited to throw any object on the beach or into the sea.
- It is prohibited to light a fire.
- It is prohibited to use shampoo at the showers.
- All your rubbish should be placed with your own responsibility into the special waste containers.

• It is prohibited to destroy any kind of vegetation.

- The beach staff has the right to remove from the beach persons who
- are in a drunken condition or under the influence of drugs or behave
- violently/improperly to other visitors.
 - It is prohibited to take sand.

Emergency Cases

- In case of a person disappearance, you should immediately contact the beach manager.
- In case of a beach closure, please follow the instructions of the manager and lifeguards.
- In case of an accident, you should immediately inform the lifeguard and the beach manager.
- If a customer falls sick due to any possible cause, they are to immediately notify the beach manager, in order for all necessary

measures to be taken.

Sustainable Waste Management

Please dispose of glass objects, packaging and other waste only in the designated recycling containers. It is forbidden to throw any kind of objects into the sea or leave them on the beach.

Questionnaire

For even better upgrade of the provided services to the specific beach, please answer the appropriate questionnaire on our website www.costanostrum.org or, in addition you can download the questionnaire with the corresponding mobile application "Costa Nostrum".

Date of Evaluation: 8/30/2018 Number of Sea Horses of the Beach: 3 * Mandatory

Quality of Sea Waters Framework Directive 2006/7/EC of 15/02/2006

According to the specific EU framework directive waters can be classified into three categories for coastal and transitional waters, based on sample measurements, table below:

| Parameter | Excellent | Good | Sufficient | Reference methods of analysis |
|----------------------------------|-----------|------|------------|----------------------------------|
| Enterococci (cfu/100 ml) | 100 | 200 | 185 | ISO 7899-1 ή ISO 7899-2 |
| Escherichia Coli (cfu/100 ml) | 250 | 500 | 500 | ISO 9308-3 ή ISO 9308-1 |

Table: Sea Water Classification Based on Framework Directive 2006/7 / EC

The Karteros Beach - AKTI waters are judged as **EXCELLENT QUALITY** waters based on analyzes which carried out by an independent body. For more information and results of analyzes of the particular beach waters, please very visit our website:

www.costanostrum.org

