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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

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Open File: 2012/09

**Presumed degradation of nesting beaches in Fethiye and Patara
SPAs (Türkiye)**

-GOVERNMENT REPORT-

Document prepared by the Ministry of Agriculture and Forestry, Republic of Türkiye

Update report dated November 2025**REPUBLIC OF TÜRKİYE****Ministry of Environment, Urbanization and Climate Change**

SUBJECT: Update on Conservation Measures Concerning Complaint No. 2012/09: Open File: Türkiye: Presumed degradation of nesting beaches in Fethiye and Patara SPAs

Türkiye, Bern Convention Standing Committee decisions and recommendations regarding Complaint No. 2012/09 and the ongoing Open File process has continued implementing conservation and monitoring measures in Patara Special Environmental Protection Area (SEPA). Pursuant to national legislation and in alignment with the Convention's objectives, activities to ensure the protection of sea turtle nesting habitats have been reinforced and expanded. The following note provides an updated overview of ongoing measures and recent developments in Patara SEPA.

Executive Summary

Patara Special Environmental Protection Area is one of the key nesting sites for *Caretta caretta* and *Chelonia mydas* in the Mediterranean. The Ministry of Environment, Urbanization and Climate Change (General Directorate for the Protection of Natural Assets) continues to implement comprehensive conservation and monitoring programs in the area. During the 2025 nesting season, 757 nests were recorded and all were protected, resulting in 40,359 hatchlings successfully reaching the sea. Continuous beach patrols, night access restrictions, vehicle entry prevention measures, training for tourism operators, and enforcement actions are actively maintained. Additionally, Patara SEPA has been designated as a pilot site under the "Strengthening the Resilience of Ecosystems in the Mediterranean (RESCOM)" project conducted jointly with the IUCN Mediterranean Office, through which a new participatory Management Plan and Action Plan are being prepared for implementation in 2026.

Detailed Update on Patara SEPA Sea Turtle Conservation Activities**PROTECTION ACTIVITIES FOR SEA TURTLES IN THE PATARA SPECIAL ENVIRONMENTAL PROTECTION AREA**

Patara Special Environmental Protection Area (SEPA) is one of the 19 Special Environmental Protection Areas designated in Türkiye. The area is protected and managed by the Ministry of Environment, Urbanization and Climate Change (General Directorate for the Protection of Natural Assets), and represents one of the country's most important conservation sites. The General Directorate implements various projects each year to ensure the conservation and sustainable management of the area. One of the key ongoing projects is the "Monitoring and Conservation of Sea Turtles". This project is carried out annually through service procurement by the General Directorate. The objective is to continue the research, monitoring, and conservation activities for the sea turtle populations (*Caretta caretta* and *Chelonia mydas*) that were initiated in previous years during the 2025 nesting season. The project also aims to support the involvement of local communities, visitors, and tourism operators through awareness-raising and training activities, addressing challenges caused by the overlap of tourism activities and nesting habitats. Within this framework, the spatial and temporal distribution and density of nests along the Patara SEPA coastline are monitored, threats affecting nests, eggs, and

hatchlings are identified, and regular beach surveys are conducted. Adult turtles encountered are tagged as part of ongoing monitoring. During the 2025 nesting season, a total of 757 nests were recorded on Patara Beach, and all nests were protected with cages. A total of 40,359 hatchlings successfully reached the sea.

Sea turtle monitoring and conservation activities in Patara SEPA are conducted on behalf of the Ministry (General Directorate for the Protection of Natural Assets) between May and October under the coordination of a specialist (Prof. Dr. Eyüp Başkale), with a team consisting of three technical experts (a herpetologist, a fisheries engineer, and a veterinarian), and at least twelve volunteers including university students and graduates. The team works daily to mitigate potential disturbances, provide annual training to staff of daily-use beach facilities, and ensure their involvement in protection efforts. A night guard is also employed to restrict access to the beach after dark. Individuals found on the beach at night are first warned by the field teams; those who do not comply are removed by the gendarmerie.

Vehicle access to the beach has been detected at two locations (Eşen River area and Sand Dune area). Both access points were blocked with wooden stakes to prevent entry; however, due to high sand movement near the Eşen River mouth, some stakes were displaced. Additionally, between late July and September, sand accumulation occurs near the river mouth, which creates new dune-like surfaces and reduces the effectiveness of the physical barriers. Further upstream, natural sand erosion forms an additional barrier preventing vehicle access. Coordinates of areas at risk of erosion were previously identified by fieldwork, and nests located in these zones are relocated to safer areas when necessary.

Before the nesting season and at monthly intervals, training on sea turtle conservation and beach use regulations is provided to tourism operators (such as hotels, vehicle rental companies, and horseback safari companies). Despite these efforts, in cases where harmful activities occur on the beach and the individuals responsible are identified, legal action is taken.

Solar-powered security cameras have been installed at the Main Beach, Eşen River mouth, Patara, and the dune areas. Entry of vehicles, safari groups, or individuals accessing the beach at night is monitored, and legal action is taken when necessary. Additionally, in response to notifications, the gendarmerie conducts drone-assisted patrols and enforces relevant regulations.

Furthermore, within the scope of the “Resilience of Mediterranean Ecosystems (RESCOM)” project carried out under the cooperation protocol signed in 2024 between the IUCN Mediterranean Office and the Ministry (General Directorate for the Protection of Natural Assets), Patara SEPA has been selected as one of the project’s pilot areas. The project aims to enhance coordination among stakeholders for nature-based solutions, strengthen stakeholder capacity at regional, national, and local levels, prepare a Management Plan for Patara SEPA with participatory input, and implement nature-based pilot practices addressing biodiversity conservation and climate adaptation needs. Accordingly, the preparation of an Action Plan for Patara SEPA has been initiated, and the Management Plan is planned to be implemented in 2026. The past afforestation activities in the dunes have also been re-evaluated within the framework of the RESCOM project.

Regarding beach furniture use, the staff of the operating authority are regularly inspected. Sunbeds and umbrellas used by visitors are collected daily at 20:00. Compliance with these regulations is continuously monitored.

REPUBLIC OF TÜRKİYE

Ministry of Environment, Urbanization and Climate Change

Government Report on Follow-up of Recommendations No. 183 (2015) on Presumed degradation of nesting beaches in Fethiye SPA (Türkiye)

FETHİYE-GÖCEK SPECIAL ENVIRONMENTAL PROTECTION AREA AND THE ACTIONS TAKEN AND PLANNED TO BE TAKEN IN ACCORDANCE WITH THE RECOMMENDATION NO. 183 (2015)

- 1. Stop any further development of permanent structures (buildings, roads, shipyard, jetties/docks, etc.) along the entire coast of the nesting site complex, in order not to reduce further the nesting habitat;**

The Ministry of Environment, Urbanization, and Climate Change, the Provincial Directorate, and local authorities will enforce the following regulations throughout the 2024 nesting season: Activities such as sand extraction, sand spreading, sand leveling, and the use of heavy vehicles on the beach, which are in violation of the Coastal Law and the provisions of the “2009/10 General Directive on Sea Turtles and Nesting Beaches,” have been identified in the region. Thanks to the intensive efforts of the scientific team and volunteers participating in the project conducted annually in the region, the identification of nests in these areas has been largely accomplished. Regarding the deficiencies and issues in the region, the necessary notifications and matters required by law (Türkiye's Coastal Law No. 3621) have been communicated to the responsible authorities (Fig. 1-4, see Annex I for figures).

- 2. Remove any structure (wooden paths, wooden pavilions, bars, platforms, showers, carpets, patios, etc.) from sand zones, including those to be restored, especially in areas with relatively narrow beach width and/or in tracts with narrow sandy strips; and restore the sandy areas;**

The negative findings observed during the work in the nesting area, especially on Yanıklar and Çalış beaches, were immediately reported to all relevant institutions. In this context, in addition to all structures built in violation of the Coastal Law No. 3621, other structures (fences, railings, sidewalks, umbrellas, pergolas, pavilions, caravans, etc.) on the coastline that are not classified as buildings were built in violation of the Law No. 3621 on Coastal Regions. In order to prevent new construction, unauthorized activities and unauthorized businesses from operating, Zabıta teams carry out daily and continuous inspections without the need for complaints. In the official letter sent to the relevant units, it is requested to prevent unauthorized activities in the region and to take necessary actions against unauthorized businesses. (Figure 1-4, see Annex I for figures). Continuous notifications and inspections are carried out to ensure that businesses in the area remove beach furniture after 8:00 pm. There is constant communication with law enforcement to increase inspections in the area to ensure that tourism activities are carried out in accordance with conservation/use principles.

- 3. Stop sand extraction and ensure the application of deterrent penalties for these illegal activities;**

In accordance with the Coastal Law (No.3621) and the Sand Gravel Removal Regulation (2007/26724), any extraction of sand or gravel in coastal zones is prohibited. In case of violation, penalties are imposed according to the provisions of the Environmental Law (No. 2872).

Our Ministry ensures that the necessary inspections are carried out in accordance with the principles of protection/use regarding similar activities in the region. The work does not affect the nesting area and activities, and in Fethiye, one of the most popular tourist destinations, an increase in the number of hatchlings reaching the sea has been observed over the past 10 years.

4. Remove planted vegetation, acacia in particular, with a view to restore the remaining sandy beach;

Removing planted vegetation, acacia in particular, with a view to restore the remaining sandy beach is an action that is still in progress. The aforementioned trees were planted by the property owners in the above-mentioned areas, whose title deeds extend into the sea, in areas that have remained in their ownership for many years. Since the judicial process has been completed, local organisations have been instructed to remove the trees in these beach areas.

In this context, Muğla Provincial Directorate of Environment, Urbanization and Climate Change has made the necessary notifications requesting the removal of vegetation planted or grown by people in the area between the coastline and the shore edge line by the competent authorities. It was stated that if the relevant unit does not respond to the letter and the problems in the area remain unresolved, a report will be submitted to the Ministry of Interior regarding the negligence of the municipal authorities in accordance with Law No. 3152 and a criminal complaint will be filed in accordance with Article 257 of the Turkish Penal Code No. 5237.

5. Map the whole Fethiye coast using long-term data, maps and imagery to identify the past, current and potential most suitable zones for sea turtle nesting, and set a maximum percentage limit of sandy tracts where touristic structures are allowed on the nesting beach and define (A) coastal tracts less suitable for turtle nesting, where beach furniture is allowed at appropriate densities and (B) coastal tracts adequate for turtle nesting, where beach furniture and access at night are not allowed. Enforce beach furniture removal/stacking at night along the entire nesting beach complex during the nesting/hatching season;

Within the scope of Sea Turtle monitoring activities that have been carried out throughout the years, the 8.5 km long beach of Fethiye-Göcek SEPA is divided into three sections: Çalış, Yanıklar, and Akgöl. Çalış is 3.5 km long and is divided into two sections: Çalış A (Küçük Çalış - southern part), a section bordered by a walled promenade and tourist infrastructure, and Çalış B (Koca Çalış - northern part). Çalış Hill indicates the end of Çalış and the beginning of Yanıklar. Yanıklar extends 4 km northward, including Karataş Beach. Kargı Stream indicates the boundary between Yanıklar and Akgöl (1 km, also known as Karaot Beach).

The nesting zone was determined based on long-term nesting data for sea turtles in Fethiye-Göcek SEPA. The use of wooden poles to mark nesting zones on the beach and identify nesting sites continues (Fig. 1, see Annex II for figures). The activities of sea turtles (nesting, non-nesting, etc.) are recorded via GPS, and nesting area density maps are prepared by a team of experts working in the region (Fig. 2-4, see Annex II for figures)

In order to ensure that beach furniture is removed/stacked at night throughout the entire nesting area during the nesting/hatching season, the monitoring and protection project is being carried out in the field with the support of the relevant ministry. The studies involve identifying nesting sites, relocating nests at risk, caging nests in areas with predation risk, and installing prism cages in areas with heavy human use. The GPS coordinates collected during the studies will be used to prepare detailed nesting density maps. As a result of project monitoring in 2025, concrete information about the area will be sought.

All structures constructed in violation of the Coastal Zone Law No. 3621, as well as all other structures located in the coastal zone that do not fall under the category of buildings (fences, barriers, sidewalks, umbrellas, pergolas, pavilions, caravans, etc.), and the prevention of unauthorized construction, unauthorized activities, and unauthorized businesses are requested from the relevant units. The relevant municipality is requested to ensure that police teams conduct daily and continuous inspections without any complaints, prevent unauthorized activities in the area, and initiate legal proceedings against unauthorized businesses.

It was stated that if the problems in the region are not resolved, a report will be submitted to the Ministry of Interior regarding the negligence of municipal officials in accordance with Law No. 3152, and a criminal complaint will be filed in accordance with Article 257 of the Turkish Penal Code No. 5237.

As stated in Recommendation No. 13, teams from the Muğla Provincial Directorate of the Ministry of Environment, Urbanization and Climate Change also imposed an administrative fine of TL 3,343,272 on a hotel on Karataş Beach in Fethiye after finding that changing rooms, lifeguard towers, toilets and showers were illegally constructed on the beach in front of the hotel, as well as inappropriate landscaping.

6. Prohibit the use of beach furniture and other structures or facilities on the sandy zones of Akgöl beach, regulate use of the core nesting area in the sandy northern end of the beach, and carry out the necessary controls to check enforcement;

In order to ensure that beach furniture is removed/stacked at night throughout the entire nesting area during the nesting/hatching season, a monitoring and protection project is being carried out in the field with the support of the Ministry of Environment, Urbanization and Climate Change. Local authorities in the region are also continue monitoring in this regard.

It has been determined that nests in the Akgöl region are concentrated only at the westernmost tip, and that as one moves eastward, both the number of facilities increases and the beach structure changes. Discussions have been held with the facilities in the region, and an agreement has been reached to rectify practices before the 2025 nesting season. As it is mentioned in Recommendation No. 2, notifications and inspections are continuously carried out to ensure that businesses in the area arrange their beach furniture after 8:00 PM. In order to ensure that tourist activities are conducted in accordance with conservation/use principles, constant communication is maintained with law enforcement authorities to increase inspections in the area.

7. Reduce light pollution to a minimum along the whole coast during the nesting/hatching season:

(i) remove all lights not strictly necessary,

An official warning has been issued to the relevant District Governorate and Municipality regarding the fact that the events planned to be held on the sea turtle nesting beach must be arranged to end by 20:00 at the latest, that the event area must be changed or cancelled if the events do not end by 20:00, and that no events (concerts, weddings, parties, etc.) must be allowed in the sea turtle nesting areas between April 1 and September 30.

(ii) reduce the number of lights allowed for each business company,

Based on monitoring studies conducted in the region, it is known that the lighting of businesses and hotels in the region affects both the nesting of adults and the migration of young birds to the sea. Therefore, the relevant authorities were immediately informed about the negative effects identified in the region by both the relevant District Governorate and project team.

(iii) all lights considered as strictly necessary should be reduced in power and (iv) be red or orange-yellow,

In order to reduce light pollution in the area, the research team held meetings with the regional electricity distribution company, conducted feasibility studies in the area, and began replacing the lamps on lighting posts with red bulbs. The project, developed through collaboration between the expert team and a private company, has been implemented with the support of the ministry, and discussions are ongoing to replace the lighting across nesting beaches with red bulbs, with the local administration also involved in the process. The results of the pilot application, which began in 2025, will be rolled out across the Fethiye region in the upcoming nesting season. Additionally, discussions have been held with the tourism association in the Çalış region, and a verbal agreement has been reached to develop a partnership to begin implementing this initiative in tourism businesses during the next season (Fig. 5-7, see Annex III for figures).

(v) all lights should be shaded in the direction of the beach. Further reduce lights after a certain time in the night, for not less than 50% of the dark time. Where possible, reduce height of lights, use motion sensors and native bushes/plants as light buffers on roads and properties.

As a result of monitoring studies conducted in the region, the incorrect lighting at Çalış Beach was reported to the relevant municipality and corrected (Fig. 8-10, see Annex III for figures).

8. Build permanent barriers (not ditches) on the roads to prevent vehicles from accessing the beach, designate parking spaces and official picnic areas away from the beach;

The entrance to Karaot Beach in the Akgöl region has been closed off with concrete barriers, and caravans and vehicles are not allowed to enter the area. Day visitors can use the beach during the day (Fig. 11, see Annex IV for figures).

9. Regulate maritime traffic during the nesting/hatching season, by prohibiting any motorised traffic at appropriate distances near the coast, by setting speed limits and foreseeing marked corridors from the beach to open waters;

Within the scope of the circular numbered 2009/10 for the protection of sea turtles, water sports are prohibited within 1 mile from the shore towards the sea, and if there is a watercraft within this area, the speed per hour will be below 8 miles per hour.

Our law enforcement officers working in our seas continue to carry out strict inspections in this regard, and criminal proceedings are carried out against those who violate the prohibitions. The issue of establishing marked corridors from the coast to open waters will be evaluated in the future in accordance with relevant laws and protection/use principles.

10. Set up long-term research and conservation programs conducted by a permanent team recruited on a long-term perspective. This team should have adequate manpower to monitor the entire beach and protect all nests if necessary during the entire nesting/hatching season. The team should also assess across the years and using the same comparable methods:

(i) the disorienting effects of photo-pollution on hatchlings, (ii) disturbance of nesting females, and (iii) predation of nests (or attempts);

The Ministry of Environment, Urbanization and Climate Change, General Directorate for Protection of Natural Assets, ensures that sea turtle monitoring and protection activities are carried out by teams of experts in the field, and these activities will continue to be supported in 2025. The Ministry is supporting the monitoring and conservation project carried out in the field since May by Dr. Doğan SÖZBİLEN and his research team from Pamukkale University during the 2025 breeding season. The studies involve identifying nesting sites, relocating nests at risk, caging nests in areas with predation risk (Fig. 12, see Annex V for figures), and installing prism cages in areas with heavy human use. The GPS coordinates collected during the studies will be used to prepare detailed nesting density maps.

11. Prohibit camping and bonfires and set appropriate time limits for the operation of beach bars at night during the nesting and hatching season;

Camping and lighting fire are not allowed at any location on any beach in Fethiye. In addition, the Muğla Provincial Directorate of Environment, Urban Planning, and Climate Change has notified the relevant authorities of the need to remove all unauthorized structures (wooden walkways, wooden cafes, bars, platforms, showers, rugs, terraces, etc.) from nesting beaches in order to protect sea turtles.

In case of detection of persons who damage nesting areas or natural structures or who do not comply with the specified provisions, penal action will be taken in accordance with Article 20(k) of the Environmental Law No. 2872: "... Those who act contrary to the principles of protection and utilization determined for the declared Special Environmental Protection Zones and those who act contrary to the principles and procedures of protection and utilization determined by regulation for wetlands in accordance with the second paragraph of subparagraph (e), those who act contrary to the principles and prohibitions specified in subparagraph (f) shall be imposed an administrative fine of 20,000 Turkish Liras (557,212 TL), those who act contrary to the first paragraph of subparagraph (e) shall be imposed an administrative fine of 100,000 Turkish Liras (2,786,491 TL). ". The relevant units have been notified that the necessary work and procedures will be carried out in accordance with this provision.

12. Take measures to clean the beach and empty appropriately located bins on a daily basis, and ensure sewage is not discharged into the sea;

The garbage containers on and around the beach are emptied regularly. The collected waste is directed to the “Fethiye Solid Waste Landfill” facility. Although beach pollution is partially seen during periods when the number of visitors increases, there is no macro pollution on the beach in general (Fig. 13-15, see Annex VI for figures).

Teams from the Muğla Provincial Directorate of the Ministry of Environment, Urbanization and Climate Change conducted inspections at Fethiye Karataş Beach. A report was filed against the hotel, which lacked a treatment facility, for discharging untreated wastewater into the Değirmenboğazı Stream. Proceedings were initiated under Environmental Law No. 2782. Due to the establishment's location within a Special Environmental Protection Area (SEPA), the fine was doubled to 1,337,354 TL. Audits related to this matter are ongoing.

13. Set up adequate regulations and enforcement for the measures above, including regular day and night controls along the entire coast. Define and enforce fines for noncompliance with above regulations;

The laws of the Republic of Türkiye contain significant penalties in this regard. Environmental Law No. 2872 is specifically regulated concerning this issue. Penalties for those who damage biodiversity and ecosystems are regulated by this law. During the study, all relevant institutions were immediately informed of any negative findings in the region and solutions were attempted to be developed.

Teams from the Muğla Provincial Directorate of the Ministry of Environment, Urbanization and Climate Change also imposed an administrative fine of 3,343,272 TL on the same hotel at Karataş Beach in Fethiye after detecting illegal construction of changing rooms, lifeguard towers, restrooms, and showers, as well as improper landscaping work on the beach in front of the hotel. Audits related to this matter are ongoing.

14. Ensure that adequate financial and human resources are allocated to the control and management of the beaches;

Sea turtle monitoring and conservation studies have been conducted by Dr. Doğan SÖZBİLEN (Biologist) and their research team on Fethiye Beaches for several years. The Project designed by the Ministry of Environment, Urbanization and Climate Change to support the scientific team that carries out the activities for monitoring and conservation of sea turtles. In this context, conservation activities such as 24-hour monitoring (between 15th May – 30th September) of the beaches, raising awareness of beach users, and nest protection have been carried out.

15. Improve information to local community and tourists about sea turtle nesting and sustainable use of the beach. This should include effective communication of regulations (incl. regulations implementing the Recommendation) by the authorities to stakeholders and businesses, signs at all major beach entry points, and awareness campaigns aimed to the guests of the big resorts, in collaboration with the owners and managers. Encourage beach hotels and businesses to support scientific teams and involve the local community in the protection and management of the protected area;

The research team is developing collaborations to increase local participation in the conservation of sea turtles in particular through public awareness campaigns and meetings held in public areas in the region (Fig. 16, see Annex VII for figures). Discussions and meetings with local authorities, local NGOs, and the regional veterinary hospital are ongoing. So far, volunteers from the local community have been encouraged to participate in the work, and two volunteers have begun to participate regularly.

In addition to the region's natural predators, discussions have begun with animal protection associations to raise awareness among the local population about the risks posed by stray dogs.

The practice of collecting beach furniture at night also continues throughout the beach area (Fig. 17, see Annex VII for figures).

Information signs have been placed at regular intervals along nesting beaches. In addition, local NGOs and businesses have been encouraged to put up warning signs, and these signs have been placed on Çalış Beach (Fig. 18, see Annex VII for figures). Work is being carried out in coordination with local authorities regarding injured and dead individuals. The local community and tourists about

any incidents involving sea turtles inform research team in the field. A very good citizen science infrastructure has been established. Even reports about turtles made to our country's emergency hotline, 112, are directed to the team.

16. Continue to protect all nests with cages, until the different conditions obtained through the other measures above will allow again a more natural process;

In order to protect the sea turtle nests against especially predation, human-induced damage and other factors cages (prism-shaped above-ground cages and flat-shaped underground cages) are made every year (Fig. 19, see Annex VIII for figures).

[Annexes](#)

REPUBLIC OF TÜRKİYE**Ministry of Environment, Urbanization and Climate Change****Government Report on Follow-up of Recommendations No. 182 (2015) On The Conservation of *Caretta Caretta* and Its Habitat at Patara (Türkiye)****PATARA SPECIAL ENVIRONMENTAL PROTECTION AREA AND THE ACTIONS TAKEN AND PLANNED TO BE TAKEN IN ACCORDANCE WITH THE RECOMMENDATION NO. 182 (2015)****1. Urgently ensure that Patara nesting beach receives appropriate legal protection and management, in line with its exceptional, natural and ecological value**

A total of 197.1 km² (marine and coastal zone) area, including Patara beach, was declared as a Special Environmental Protection Area within the scope of law no: 383 in 1990. The region is also protected as a natural protected area since 1997 and an archaeological protected area within the scope of law no: 2863 (Fig.1) (See Annex I for figures). As stated in Recommendation 11, the biodiversity study that forms the basis of the management plan for the Patara Special Conservation Area has been completed. Management plan studies for Patara SPA are continuing rapidly with the participation of civil society organizations, local communities, and public institutions and organizations, with the aim of further improving the current situation over the next five years by identifying the ecological, social, and cultural values of the region, particularly biodiversity loss and climate change. (Figures 63-64, see Appendix for figures).

2. Urgently set up, enforce and monitor the implementation of strict regulations which:

(i) prohibit further development on the beach (including buildings, structures, roads) and enable the removal of abandoned illegal facilities and restoration of the dunes; during the nesting/hatching season:

Within the scope of the above-mentioned laws of Türkiye, no construction is allowed in the Patara beach area. The rules on this issue are strict and the implementation is in this direction. The closest settlement to the sea turtle nesting beach is 1.6 km away using air distance, and all kinds of construction is prohibited within this area (Fig.4-7) (See Annex II for figures).

(ii) regulate the extent and use of furniture on the beach and ensure furniture is removed from the nesting zone at night;

- There is a business on Patara beach to fulfill the needs of people who visit the area, such as eating and drinking. The furniture -such as umbrellas, sun beds- that in front of this business is located in a 250 m² area on the 12,000 m long beach.
- This business is open between 08:00 am and 08:00 pm, It does not provide service except of these hours.
- In addition, the business removes its furniture from the area designated for turtles after 20:00 pm.
- Against to consisted erosion on the beach during the winter season, necessary arrangements are made before spawning in May (Fig.8, 9, 10 and 11) (See Annex II for figures).

In addition, during the sea turtle monitoring and conservation activities projected by the Ministry of Environment, Urbanization and Climate Change, the area is regularly inspected at night by volunteer teams, necessary warnings are made especially regarding the wrong use of the beach by tourists, and the authorities are informed to ensure supervision in the area.

(iii) prohibit access of vehicles by placing barriers at the beach entrances;

Before the 2021 breeding season, barriers and warning signs to prevent vehicle entry were made on the beach at vehicle entry points, including the sand dunes. In 2022, additional barriers and signs were built. In 2023, no vehicle entrances were detected in these sections of the beach (Fig.12-17) (See Annex II for figures). In Patara, stakes have been driven into every part of the area to prevent vehicles from entering,

but due to the receding sea, the area has opened up and the stakes have been washed away, making the area accessible to vehicles. The project team plans to observe the movement of the wet zone using GPS every 15 days in order to observe the dynamics of the area.

In addition, the Ministry of Environment, Urbanization and Climate Change, the Demre Museum Directorate, and the Antalya Provincial Directorate of Environment, Urbanization and Climate Change have requested with an official letter that the lights on the road connecting the ancient city of Patara to the beach be turned off after 8:00 p.m., that vehicle access to the area be prohibited, that the area be regularly monitored, and that weekly garbage collection and beach cleaning be carried out. (Fig. 18) (See Annex II for figures).

(iv) prohibit illumination of the beach;

Since the nearest settlement to the beach is 1.6 km away, there is no light source reaching the beach from these settlements.

In addition, since all human activities on the beach are closed after 20:00 pm, there is no light pollution.

(v) prohibit fishing with nets in front of the beach;

Within the scope of the Fisheries Law No. 1380 all kinds of fishing activities are prohibited within 1 mile of the marine area in front of sea turtle nesting beaches. In this context, fishing is prohibited at this distance in the Patara marine area. Regular inspections are carried out in the region in relation to this matter.

(vi) prohibit camping on the beach and on riversides in view of the beach;

Camping is not allowed at any location on Patara beach, campers are removed from the area by security guard and gendarmerie (Fig.19) (See Annex II for figures).

(vii) prohibit horse riding and 4x4 or quad safaris on the nesting beach;

If people are spotted wandering around by riding horses at the beach, they are removed from the area by security officers. Since the vehicle entrances to the beach were closed with barriers, no vehicle entrances were detected in these sections of the beach in 2024.

In addition, a surveillance system consisting of cameras with face recognition and license plate recognition features has been installed at the point where the Eşen River flows into the sea and in the Patara and Sandune hill sections. The operation of this system is carried out in coordination with the Kaş District Gendarmerie Command (Figures 20-23) (see Appendix II for figures). The relevant units have been given the necessary warnings regarding the entry of 4x4 vehicles. **(viii) define fines for non-compliance with above regulations;**

The laws of the Republic of Türkiye contain significant penalties in this regard. Environmental Law No. 2872 is specifically regulated concerning this issue. Penalties for those who damage biodiversity and ecosystems are regulated by this law. Pursuant to subparagraph (k) of the Notice On Administrative Fine Penalties To Be Imposed In Accordance With The Environmental Law No 2872, the amount of fines related to Special Environmental Protection Areas was 387,141 TL in 2024 and now it is 557,212 TL.

3. Ensure that adequate financial and human resources are allocated for the control, management and enforcement of regulations;

The Republic of Türkiye allocates a budget for the protection of sea turtle nesting beaches, such as renewing the existing information and warning signs in the area, ensuring regular cleaning of the area, purchasing cages for the protection of turtle nests, as well as for the protection and monitoring of sea turtles every year.

As part of the monitoring activities, Patara SPA is monitored under the coordination of the Ministry of Environment, Urbanization and Climate Change in cooperation with local stakeholders. The dedicated monitoring team operates in accordance with monitoring standards, including daily morning patrols and night surveys during the nesting season (May-September). A structured field team of university researchers and trained volunteers is responsible for identifying and caging nests and monitoring hatchlings.

In the 2024 monitoring activities, all turtle nesting beaches within the boundaries of the Patara SPA were monitored, and nest coordinates were recorded (Fig. 22-27) (See Annex III for figures).

4. Continue to prevent uncontrolled human settlement behind the beach, particularly where these may result in making the beaches unsuitable for turtle nesting;

There is no construction right behind the beach, and new constructions are not allowed to built. Patara beach is protected from human affects, as it is completely closed to human activities during the nesting hours of sea turtles, and human activities are limited during the day.

As stated in subheading (i) of the second recommendation, the closest settlement to the sea turtle nesting beach is 1.6 km away using air distance, and all kinds of construction is prohibited within the area (Fig. 4) (See Annex I for figures). These structures are buildings constructed in accordance with the zoning plan, and illegal construction is not permitted in this area. In accordance with the Turkish Coastal Zone Law (No. 3621), new construction on nesting beaches within Special Protection Areas (SPAs) is strictly regulated. Circular No. 2009/10 also provides guidelines to local authorities on the protection of sea turtle nesting areas. The settlement in question has no direct impact on the nesting beach. The Research Team organizes meetings to raise awareness among stakeholders, vacationers, and business owners in the region, thereby increasing awareness of sea turtle conservation.

5. Ensure that litter is periodically removed from the beach and dunes;

Along with warning signs (Fig. 28, see Annex IV for figures), the areas where high human presence is seen are cleaned daily by the municipality, and the entire beach is cleaned weekly. Correspondence regarding the issue was conducted with the relevant authorities (Fig. 18) (See Annex II for figures). The project team has also determined that waste carried by the Eşen River is one of the main factors polluting the beach on a daily basis, and regular cleaning operations are being carried out in coordination with the relevant authorities in the region. So as to increase awareness, the beach is also cleaned with the participation of locals and daily visitors and non-governmental organizations (Fig. 29-30, see Annex IV for figures).

In addition, the Provincial Directorate was officially notified regarding the cleanup of waste in the Çayağzı region for the 2025 period, and the Provincial Directorate officially warned the relevant authorities (Fig 31, see Annex IV for figures).

6. Address the problem of predation, including through population control's programmes;

Despite the relatively low presence of predators on Patara Beach, all identified nests are secured using suitable protection methods aimed at preventing predation (Fig 32, see Annex V for figures).

Looking at the data on the number of nests obtained over 35 years at Patara Beach, the average number of nests is 170. This year, the number of nests is 604, exceeding the average. Parallel to the increase in the number of nests, an increase in the number of eggs and a decrease in predation have been observed. Compared to previous years, an increase in hatchling success has also been observed in 2024. The predation rate for 2024 has been calculated as 12.25%. On the other hand, when compared to previous years, a significant increase in hatchling emergence success was observed. The hatchling emergence success rate in Patara Beach in 2024 was calculated as 98.81% (excluding eggs affected by predation). The main predators were identified as wild boars, foxes, and stray dogs. Work continued throughout the night to increase the effectiveness of nest protection and population monitoring efforts. The high number of protected nests demonstrates the importance of nighttime work and effective caging methods. During the 2024 breeding season, camera traps were placed in two different areas of the beach. The devices, which recorded images 24 hours a day, night and day, were active throughout the season, allowing predatory animals such as foxes and pigs that damage nests to be captured on camera. The placement of the camera traps was specifically determined based on areas where predators could potentially access the beach, and their locations were set accordingly (Fig. 33-34) (See Annex V for figures).

7. Ensure the proper fencing of all nests in areas with high human presence during the day, so as to protect them from trampling and from beach furniture;

As mentioned in the third proposal, all turtle nesting beaches within Patara SPA were actively monitored during the 2024 season. The coordinates of the identified nests and their distances from vegetation were recorded.

To protect the nests from predators, human activities, and other threats, fencing was implemented immediately after the first nest was detected. Two types of fencing were used: prism-shaped surface fencing and flat underground fencing (Fig.35-37, see Annex VI for figures). Standard fencing is 1 meter wide and reinforced with stakes and 50 cm metal rods. Side fencing extends 15-25 cm below ground level to protect the edges of the nests.

In areas with high human activity, above-ground cages were installed to enhance protection and visibility. Information signs were also placed to raise awareness and reduce unintended interference.

8. Urgently set up long-term conservation and research programmes, entrusted to a permanent team that should be granted adequate man power to monitor the entire beach (north and south) during the entire nesting/hatching season and protect all nests if necessary;

Sea turtle monitoring and conservation studies have been conducted by Prof. Dr. Eyüp BAŞKALE (Biologist) and their research team on Patara Beach for several years. The Project designed by the Ministry of Environment, Urbanization and Climate Change to support the scientific team that carries out the activities for monitoring and conservation of sea turtles. In this context, conservation activities such as 24-hour monitoring (between 15th May – 30th September) of the beach, raising awareness of beach users, and nest protection have been carried out (Fig.38-40, see Annex VII for figures).

Fieldwork was conducted along the 12 km long coastline at the following times: between 6:00 a.m. and 12:00 p.m., between 10:00 p.m. and 1:00 a.m., and between 12:01 a.m. and 4:00 a.m. (twice). In 2024, a team of 27 people worked with the project team and volunteers, and for the 2025 season, the team capacity was increased to 40 people, including volunteer staff. The number of technical staff does not fall below 10, and monitoring is carried out continuously in coordination with local units.

9. Improve information to and awareness of tourists about sea turtle nesting and on correct behaviour for the sustainable use of the beach and install clearer signage to indicate the nesting zone

The nesting band consisting of wooden barriers in the Patara SPA area has been positioned by experts who have been monitoring and observing the area for years, and varies between 25 and 60 meters, taking into account the coastal structure of the area and the coordinates of previous nesting sites. Due to the high coastal mobility of the area, distances to the sea may vary. An example of this is the sand erosion observed in the Çayağzı region.

In the 2024 monitoring studies, a total of 604 nesting sites were identified, 18 of which were determined to be 45 meters or more from the sea. This constitutes 3% of the entire nesting area. Due to their proximity to the sea, 51 nesting sites that were at risk were also moved to safer locations (Fig.41, see Annex VIII for figures)).

Warning and information signs have been placed on Patara beach before the 2022 breeding season. The old signs have been renewed and 50 new information signs also have been placed on the beach. In this way it was ensured that visitors were informed (also from information kiosk frequently (Fig.48, see Annex IX for figures)) about how to use beach, and awareness has been gained about the protection of sea turtle breeding grounds and nests.

10. Improve information and education of the local community about sea turtle nesting, correct behaviour for the use of the beach, and intrinsic value of nature; and involve them in the protection, conservation, and management of the nesting beach;

In order to raise awareness and inform people who use the area about sea turtles and their protection, presentations are regularly held at some guesthouses and hotels in Patara, Kalkan, and Kaş, as well as at the information office located on the beach. Within this scope, awareness-raising activities aimed at informing the public about the protection of sea turtles have been carried out in the form of one-on-one meetings at the information office on the beach for local and foreign tourists who use the beaches. For the purpose of protecting sea turtles, seminars for tourism facility managers in Patara, Kalkan, and Kaş are being held throughout each monitoring period, with ongoing discussions with facility managers.(Fig.42-56, see Annex IX for figures).

11 Keep the Standing Committee annually informed about the implementation of this Recommendation.

11.1 Determination of Sea Turtles Nesting Areas and Beach Zoning on Patara Beach by Placing Wooden Posts

As mentioned in the ninth proposal, The borders of the nesting zone on the whole beach of Patara were drawn with wooden posts by the study carried out in 2021. Thus, physical factors that affect the number of nests are prevented. Human activities are restricted (no sunbathing, digging sand etc.) and beach furnitures (including sunbeds, umbrellas, pavilions) are not allowed in the nesting zone (Fig.57-59, see Annex X for figures).

11.2 Smoke Free Airzone And Zero Waste Project

In order to protect the dune habitat, the area has been declared as a smoke-free air area, and zero waste implementation has also been carried out in the region (Fig.60-62, see Annex X for figures).

11.3 Conservation Management Plan Studies for Patara Special Environmental Protection Area

Patara Special Environmental Protection Area has been declared as protection areas in line with international conventions (such as the Bern Convention) to which our country is a party, and with the participation of different stakeholders such as official institutions, non-governmental organizations, universities and local people in order to protect the region and ensure its sustainability for all areas. In the management plan, special studies are carried out in line with the recommendations made specifically for Patara by the Bern Secretariat.

The biodiversity study, which is the base of the management plans, has been completed. Management plan studies continue rapidly with the participation of non-governmental organizations, local people, public institutions and organizations in order to improve the current situation further in the next 5 years by revealing the ecological, social and cultural values of the region, especially the loss of biodiversity and climate change (Fig.63-64, see Annex X for figures).

11.4 Strengthening The Resilience of Ecosystems in The Mediterranean Cooperation Protocol (Pilot Site: Patara Special Environmental Protection Area)

To promote the development of the Patara SPA, designated as one of the pilot sites for the “Strengthening the Resilience of Ecosystems in the Mediterranean (RESCOM)” project by the International Union for Conservation of Nature and Natural Resources (IUCN), a cooperation protocol has been established. This protocol is signed between the IUCN Mediterranean Office and the Ministry of Environment, Urbanization, and Climate Change (General Directorate for the Protection of Natural Assets) (Fig. 65, see Annex X for figures). Its goal is to prepare a Management Plan that identifies and implements nature-based solutions in collaboration with various stakeholders. This protocol outlines the following objectives:

- Enhance the capacities of stakeholders at regional, national, and local levels to protect ecosystems.
- Develop the Patara SPA Management Plan with stakeholder participation, promoting the implementation of nature-based solutions in the Mediterranean region.
- Plan and execute exemplary nature-based solutions and activities aimed at ecosystem conservation, prevention of biodiversity loss, addressing climate change issues, and responding to related social challenges and needs within the Patara SPA Management Plan studies. The General Directorate for the Protection of Natural Assets (TVKGM) and IUCN will collaborate in the development of projects within the Patara SPA pilot area.

Update Report dated March 2025

REPUBLIC OF TÜRKİYE

Ministry of Environment, Urbanization and Climate Change

27.03.2025

Government Report on Follow-up of Recommendations No. 183 (2015) on Presumed degradation of nesting beaches in Fethiye SPA (Türkiye)

Background Information:

Complaints about the degradation of sea turtle habitat on the nesting beach in Fethiye-Göcek Special Environmental Protection Area (SEPA) have been ongoing for many years. An on-the-spot appraisal (OSA) was carried out by the Standing Committee and Recommendation No.183 was prepared following the OSA. The Turkish authorities continue their efforts to fulfill the relevant recommendations. However, it has been fulfilling the recommendations throughout the process, although delays in implementation have occurred due to situations in the legal status.

FETHİYE-GÖCEK SPECIAL ENVIRONMENTAL PROTECTION AREA AND THE ACTIONS TAKEN AND PLANNED TO BE TAKEN IN ACCORDANCE WITH THE RECOMMENDATION NO. 183 (2015)

1- Determination of Sea Turtles Nesting Areas and Beach Zoning on Fethiye Beach by Placing Wooden Posts

As mentioned in the previous report, a nesting zone was determined according to the long-term nesting data of sea turtles in Fethiye-Göcek SEPA. This zone is delimited by wooden barriers (Photos 1.1-4). In the area between the sea and the nesting zone, human activities, including beach furniture, are prevented. In the upper part of this zone, beach furniture is collected and stacked at night and relocated during the daytime (Photos 1.5-6) Sea turtle activities (nest, non-nesting emergence etc) are recorded via GPS. In addition, from 2021 to date, wooden barriers have also been used for determining the nest location.

2- Information and Warning Signs:

There are warning and information signs at many points on the beach. These signs are checked at the beginning of each season. The damaged or collapsed ones are replaced or repaired (Photos 2.1-5). Those that collapse due to various factors (such as weather events) during the nesting season are restored to their original condition.

3- Sea Turtle Monitoring and Conservation Studies:

The research team, supported by The Ministry of Environment, Urbanization and Climate Change, carries out conservation, monitoring and research activities. This year, field studies were started on May 1st in anticipation of the early start of nesting period. Sea turtle population conservation, research and monitoring activities are carried out by a team of 6 staff. All of the research staff are conducting academic studies on sea turtles. They have been in the field full time since the beginning of the project.

Within the scope of the project, not only monitoring of sea turtle activities and conservation of sea turtles but also informing local people, tourists and tourism facilities are realized (Photos 3.1-6). As *in situ* protection, caging of nests and relocation of nests close to the sea are carried out (Photos 3.7-10). The effects of human-induced global climate change are also examined (Photo 3.11). All basic data about the nests are taken (Photos 3.12-13). An information desk also operates in Çalış, which has a dense tourist population (Photos 3.14-17). The research team, which is permanently present in the field within the nesting season, responds immediately to all kinds of notifications from all over the region.

4- Measures Against Predation:

In the SEPA nesting beach parts, especially in areas where predation is intense, a strict caging effort is carried out. Prism cages are also used to increase awareness in certain areas (Photos 4.1-3). Stray dogs on the beach try to predate more intensively on the prism cages used to increase awareness (Photo 4.4). The use of subsurface straight cages was increased this nesting season to increase protection. The limited number of predations that have occurred so far (6%) have generally occurred during egg laying process.

5- Conservation Management Plan Studies for Fethiye-Göcek Special Environmental Protection Area:

The most important priority of the study has been to ensure the widest participation of stakeholders in the Fethiye-Göcek SEPA Management Planning process and to ensure that all parties contribute to the process by sharing their knowledge and experience at every stage of the process. A total of 2 stakeholder meetings were organized on 14-15-16 December 2022 and 11-12 October 2023 in order to facilitate the active participation and contribution of participating stakeholders in the management plan planning process. Central and local organizations of all relevant public institutions and organizations, governorship, district governorship, relevant municipality, mukhtars, representatives of relevant associations, relevant chambers took part in these meetings.

In the process of preparing the Management Plan, the characteristics that make the area important were identified, ideal (long term) targets for the management plan, factors affecting management, implementation targets and activities that will bring the management to these targets were determined and activity plans were prepared for each activity. As a result of the study, 5 ideal targets, 9 implementation targets and 35 activities that will bring the management to these implementation targets were defined. In order to realize these activities, 44 stakeholder groups supported and contributed to the project. Within the scope of the prepared activities, mutual meetings were held with the relevant institutions on November 21-22, 2023. As a result of the meetings, activity plans were finalized.

IDEAL TARGET-3 is “Ensuring Ecosystem and Habitat Integrity and Sustainability of Biodiversity”. There are three “implementation targets” under this objective.

Implementation Target 3.1: Updating and protecting the Biodiversity data of the region

Implementation Target 3.2: Carrying out sea turtle conservation and monitoring activities

Implementation Target 3.3: Ensuring the management of areas subject to overuse pressure in Fethiye-Göcek SEPA in a way that does not exceed the carrying capacity limit

A total of 14 activities were planned within the scope of the implementation targets. These activities are as follows.

- Activity 3.1.1. To conduct biodiversity inventory studies within Fethiye-Göcek SEPA
- Activity 3.1.2. To carry out regular control and inspection activities to prevent illegal fishing activities
- Activity 3.2.1. Updating the nesting areas for sea turtles on Fethiye Beach
- Activity 3.2.2. To install a sufficient number of Information and Warning Signs to protect sea turtles on the nesting beach and to indicate the importance of the beach.
- Activity 3.2.3. Ensuring that Sea Turtle Conservation and Monitoring Activities are carried out by the same scientific team every year
- Activity 3.2.4. Control and follow-up of tourism-oriented buildings and other coastal structures on the coast of Fethiye-Göcek SEPA within the scope of Circular No. 2009/10 issued for the protection of sea turtles
- Activity 3.2.5. Removal of contrary practices (Wooden Roads, Wooden Cafes, Bars, Platforms, Showers, Carpets, Terraces, etc.) in sea turtle nesting areas
- Activity 3.2.6. Preventing Light Pollution, which is an important obstacle for sea turtles to nest and change direction
- Activity 3.2.7. Construction of Permanent Barriers to Prevent Vehicle Entry to the Beach
- Activity 3.2.8. Compliance with Circular No. 2009/10 in the control of maritime traffic and maritime spatial planning
- Activity 3.2.9. Ensuring that the beach is cleaned at regular intervals during the nesting season

- Activity 3.3.1. To revise the Procedures and Principles for the Protection and Use of Göcek Bay and Göcek- Dalaman Bays within 2 years
- Activity 3.3.2. Conducting regular inspections to prevent illegal practices within the boundaries of the area
- Activity 3.3.3. To update the carrying capacity projects for the Gulf of Fethiye and Gocek bays

6- Actions on Tourism Buildings, Roads, Shipyard, Pier etc. on Fethiye Beach:

Since the declaration of Fethiye-Göcek beaches as a Special Environmental Protection Area, construction on the coast has been prevented. However, construction has occurred in areas with legal rights and official registered properties title deeds acquired before this special status. These structures, which have been built due to their prior rights, are required to be used in a way that does not affect sea turtles.

As stated in the previous report, the requests for a shipyard and a pier to be built in one part was rejected due to its possible effect on the nesting beaches.

Official information and warnings are also provided to all facilities within the SEPA. Finally, the letter sent by the Muğla Governorship Provincial Directorate of Environment, Urbanization and Climate Change on July 11, 2024, is presented as an annex (Appendix2).

7- Actions to Remove All Structures on Fethiye Beach (Wooden Roads, Wooden Cafes, Bars, Platforms, Showers, Carpets, Terraces, etc.):

As stated in the previous report, the court decision on this issue is in force. The process of implementing the decision continues through legal legislation.

8- Sand Extraction:

Since 2010, the sand extraction from beaches has been banned by law throughout Türkiye. This situation is strictly controlled. There are serious penalties for this illegal action.

9- Remove Planted Vegetation, Acacia in Particular, with a View to Restore the Remaining Sandy Beach:

This is an action that is still in progress. The aforementioned trees were planted by the property owners in the above-mentioned areas, whose title deeds extend into the sea, in areas that have remained in their ownership for many years. Since the judicial process has been completed, local organisations have been instructed to remove the trees in these beach areas.

10- Light Pollution:

Facilities and businesses in Fethiye-Göcek SEPA are inspected, and necessary warnings are given about the lighting in the area. The research team is working in cooperation with the local administration for applications regarding the colors and locations of street lighting (Photos 10.1-4). Negotiations are ongoing with the local administration for applications regarding the colors of street lighting. Step-lights are implemented in hotels (Photo 10.5)

All street lighting along Fethiye beach, especially on Çalış beach, is in the form of screens and the light is not reflected on the beach.

11- Barriers for Illegal Vehicle Entrance

Vehicle entrance to beach part is completely blocked in many areas with permanent barriers. The barriers are provided by curbstones, low walls, blocking posts and chain barriers on the roadsides (Photos 11.1-6). However, in the event of illegal entries, the research team directly informs law enforcement (municipal police, gendarme etc.) and ensures that the vehicles are removed.

12- Marine Traffic:

Within the scope of the circular numbered 2009/10 for the protection of sea turtles, water sports are prohibited within 1 mile from the shore towards the sea, and if there is a watercraft within this area, the speed per hour will be below 8 miles per hour.

Our law enforcement officers working in our seas continue to carry out strict inspections in this regard, and criminal proceedings are carried out against those who violate the prohibitions.

13- Beach Clean Up:

The garbage containers on and around the beach are emptied regularly (Photo 13.1). The collected waste is directed to the “Fethiye Solid Waste Landfill” facility. Although beach pollution is partially seen during periods when the number of visitors increases, there is no macro pollution on the beach in general (Photos 13.2-5).

14- Marine Spatial Planning

Within the scope of the Barcelona Convention, legal infrastructure studies have been initiated for spatial planning studies in all Mediterranean waters of Türkiye, especially in protected marine areas.

Appendix: [Site Images - Fethiye](#)

REPUBLIC OF TÜRKİYE
Ministry of Environment, Urbanization and Climate Change

27.03.2025

Government Report on Follow-up of Recommendations No. 182 (2015) on Presumed degradation of nesting beaches in Patara SPA (Türkiye)

ACTIONS TAKEN AND PLANNED TO BE TAKEN REGARDING THE RECOMMENDATIONS ON CONSERVATION OF SEA TURTLE HABITATS IN PATARA SPECIAL ENVIRONMENTAL PROTECTION AREA RECOMMENDATION NO. 182 (2015)

1- Legal Regulations For The Protection Of Beach Area Of Patara Special Environmental Protection Area

A total of 197.1 km² (marine and coastal zone) area, including Patara beach, was declared as a Special Environmental Protection Area within the scope of law no: 383 in 1990. The region is also protected as a natural protected area and an archaeological protected area within the scope of law no: 2863 (Fig.1).

2- Conservation Management Plan Studies for Patara Special Environmental Protection Area:

Patara Special Environmental Protection Area has been declared as protection areas in line with international conventions (such as the Bern Convention) to which our country is a party, and with the participation of different stakeholders such as official institutions, non-governmental organizations, universities and local people in order to protect the region and ensure its sustainability for all areas. Purposeful management plans studies were initiated in 2022 and 2023, still continue in 2024. In the management plan, special studies are carried out in line with the recommendations made specifically for Patara by the Bern Secretariat.

The biodiversity study, which is the base of the management plans, has been completed. Management plan studies continue rapidly with the participation of non-governmental organizations, local people, public institutions and organizations in order to improve the current situation further in the next 5 years by revealing the ecological, social and cultural values of the region, especially the loss of biodiversity and climate change (Fig.2).

3- Prohibit Further Construction (Including Buildings, Structures, Roads) On The Beach, Remove Illegal Abandoned Facilities, And Ensure Restoration Of Dunes During The Nesting/Hatching Season:

Within the scope of the above-mentioned laws of Türkiye, no construction is allowed in the Patara beach area. The rules on this issue are strict and the implementation is in this direction. The closest settlement to the sea turtle nesting beach is 1.6 km away using air distance, and all kinds of construction is prohibited within this area (Fig.3-6).

4- Situation Of Beach Furniture On The Beach, Regulating Their Use And Ensuring That Items Are Removed From The Nesting Area At Night:

- There is a business on Patara beach to fulfilment of needs people who visit the area, such as eating and drinking. The furniture -such as umbrellas, sun beds- that in front of this business is located in a 250 m area on the 12,000 m long beach.
- This business is open between 08:00 am and 20:00 pm, It does not provide service except of these hours.
- In addition, the business removes its furniture from the area designated for turtles after 20:00 pm.

Against to consisted erosion on the beach during the winter season, necessary arrangements are made before spawning in May (Fig.7-8).

5- Placing Barriers to Prevent Vehicle Entry to the Beach:

Before the 2021 breeding season, barriers and warning signs to prevent vehicle entry were made on the beach at vehicle entry points, including the sand dunes. In 2022, additional barriers and signs were built. In 2023, no vehicle entrances were detected in the beach (Fig.9-13).

6- Prohibit Lighting Of The Beach:

Since the nearest settlement to the beach is 1.6 km away, there is no light source reaching the beach from these settlements.

In addition, since the all human activities on the beach is closed after 20:00 pm, there is no light pollution.

7- Prohibition of Fishing Activities by the Coastal Zone:

Within the scope of the Fisheries law no. 1380 all kinds of fishing activities are prohibited within 1 mile of the marine area in front of sea turtle nesting beaches. In this context, fishing is prohibited at this distance in the Patara marine area.

8- Prohibiting Camping On The Beach And On Riverbanks Overlooking The Beach:

Camping is not allowed at any location on Patara beach, campers are removed from the area by security guard and gendarmerie (Fig.14).

9- Prohibiting Horse Riding And 4x4 Vehicle Safaris On Nesting Beaches:

If people are spotted wandering around by riding horses at the beach, they are removed from the area by security officers. Since the vehicle entrances to the beach were closed with barriers, no vehicle entrances were detected in the beach in 2024.

10- Administrative Sanctions And Imposed Penalties For Non-Compliance With The Above Regulations:

The laws of the Republic of Türkiye contain significant penalties in this regard. Environmental Law No. 2872 is specifically regulated concerning this issue. Penalties for those who damage biodiversity and ecosystems are regulated by this law.

11- Ensuring That Sufficient Financial And Human Resources Are Allocated For Control, Management And Enforcement Of Regulations

The Republic of Türkiye allocates a budget for the protection of sea turtle nesting beaches, such as renewing the existing information and warning signs in the area, ensuring regular cleaning of the area, purchasing cages for the protection of turtle nests, as well as for the protection and monitoring of sea turtles every year.

12- Ensure That Litter Is Periodically Removed From The Beach And Dunes:

The areas where high human presence is seen are cleaned daily by the municipality, and the entire beach is cleaned weekly. So as to increase awareness, the beach is also cleaned with the participation of locals and daily visitors and non-governmental organizations.

13- Continue to Prevent Uncontrolled Human Settlement Behind The Nesting Area Of Patara Beach:

There is no construction right behind the beach, and new constructions are not allowed to built. Patara beach is protected from human affects, as it is completely closed to human activities during the nesting hours of sea turtles, and human activities are limited during the day. In this context, Patara beach is one of the best conservation nesting beach in Türkiye.

14- Ensuring That All Nests in Populated Areas Are Protected with Appropriate Equipment To Protect Them From Being Crushed by Human Activities and Beach Furniture:

In order to protect the sea turtle nests against especially predation, human-induced damage and other factors cages (prism-shaped above-ground cages and flat-shaped underground cages) are made every year (Fig.15-18).

15- Sea Turtle Monitoring and Conservation Studies:

Sea turtle monitoring and conservation studies have been conducted by Prof. Dr. Eyup BAŞKALE (Biologist) and their research team on Patara Beach for several years. The Project designed by the Ministry of Environment, Urbanization and Climate Change to support the scientific team that carries out the activities for monitoring and conservation of sea turtles. In this context, conservation activities such as 24-hour monitoring (between 15th May – 30th September) of the beach, raising awareness of beach users, and nest protection have been carried out (Fig.19-20).

16- Public Awareness, Sharing Information with Stakeholders and Warning Signs

Warning and information signs have been placed on Patara beach before the 2022 breeding season. The old signs have been renewed and 50 new information signs also have been placed on the beach. In this way it was ensured that visitors were informed about how to use beach, and awareness has been gained about the protection of sea turtle breeding grounds and nests. In addition, the Project team provides continuous training to visitors, business owners and other area users, especially local people, about the importance of protecting the area and about sea turtles (Fig.12-13-14-15-16-17-18).

17- Determination of Sea Turtles Nesting Areas and Beach Zoning on Patara Beach by Placing Wooden Posts:

The borders of the nesting zone on the whole beach of Patara were drawn with wooden posts by the study carried out in 2021. Thus, physical factors that affect the number of nests are prevented. Human activities are restricted (no sunbathing, digging sand etc.) and beach furnitures (including sunbeds, umbrellas, pavilions) are not allowed in the nesting zone (Fig.32-34).

18- Smoke-Free Airzone and Zero Waste Project:

In order to protect the dune habitat, the area has been declared as a smoke-free air area, and zero waste implementation has also been carried out in the region (Fig.35-37).

19- Strengthening The Resilience Of Ecosystems in The Mediterranean Cooperation Protocol (Pilot Site: Patara Special Environmental Protection Area):

To promote the development of the Patara SPA, designated as one of the pilot sites for the “Strengthening the Resilience of Ecosystems in the Mediterranean (RESCOM)” project by the International Union for Conservation of Nature and Natural Resources (IUCN), a cooperation protocol has been established on November 2024. This protocol is signed between the IUCN Mediterranean Office and the Ministry of Environment, Urbanization, and Climate Change (General Directorate for the Protection of Natural Assets). Its goal is to prepare a Management Plan that identifies and implements nature-based solutions in collaboration with various stakeholders. This protocol outlines the following objectives:

- Enhance the capacities of stakeholders at regional, national, and local levels to protect ecosystems.
- Develop the Patara SPA Management Plan with stakeholder participation, promoting the implementation of nature-based solutions in the Mediterranean region.
- Plan and execute exemplary nature-based solutions and activities aimed at ecosystem conservation, prevention of biodiversity loss, addressing climate change issues, and responding to related social challenges and needs within the Patara SPA Management Plan studies. The General Directorate for the Protection of Natural Assets (TVKGM) and IUCN will collaborate in the development of projects within the Patara SPA pilot area.

Appendix : [Site Images Patara](#)