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Presumed Degradation of Nesting Beaches in Fethiye and Patara SPAs (Türkiye)

- REPORT BY THE COMPLAINANT -

Document prepared by MEDASSET – the Mediterranean Association to Save the Sea Turtles

UPDATE REPORT BY THE NGO

Marine Turtle Conservation in the Mediterranean

LOGGERHEAD SEA TURTLE (CARETTA CARETTA) CONSERVATION MONITORING IN FETHIYE AND PATARA SPAs, TÜRKİYE

31 July 2024

Document presented by MEDASSET - the Mediterranean Association to Save the Sea Turtles

for the 44th Standing Committee Meeting of the Contracting Parties to the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)

MEDASSET hereby submits an update report to the second Bureau Meeting of the Bern Convention (September 2024) on the conservation status of sea turtle nesting beaches in Fethiye and Patara Specially Protected Areas (SPAs) in Türkiye.

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SUMMARY

MEDASSET visited Patara and Fethiye SPA in July 2024 to assess and document the conservation status of the nesting beaches. The survey was funded by Aktionsgemeinschaft Artenschutz (AGA), <u>www.aga-artenschutz.de</u>. The following presents the survey findings in relation to each of the measures under Recommendation No. 183 and 182 (2015).

Fethiye Specially Protected Area: Recommendation No. 183 (2015)

The loggerhead sea turtle (*Caretta caretta*) nesting beaches in Fethiye (Muğla Province, Türkiye) are among the 12 most important nesting beaches in Türkiye.¹ The nesting beaches belong to the Fethiye-Göcek Special Environmental Protection Area (SPA) established in 1988. Scientific studies have shown that nest numbers in Fethiye are declining.²

The habitat destruction due to the developments directly on or behind the nesting beaches continues. Development continues in the Çalış B section of the beach. The channel mouth near Çalış Hill was reshaped with boulders probably causing the coastal erosion we observed, extending until Petunya and Surf Café. The section near Çalış Hill, at the southern side of the channel, now has coffee shops and bars set up in front of caravans along the road. Facilities in Çalış B enlarged their beach usage areas. The rows of high poles observed in 2023 in front of the mesh barrier were fitted with umbrellas, and with sunbeds. The newly finished facility run by Fethiye Municipality is now operational. The facility has horizontal and vertical wooden walkways, a lifeguard tower, two blocks of dressing cabins, toilets and showers, and visitors can freely use their personal beach furniture. It also has a scaffold for

¹ Türkozan 2000; Margaritoulis et al. 2003; Canbolat 2004

² Ilgaz et al. 2007; Katilmis et al. 2013; Başkale et al. 2016

the impaired, fixed by chains, large stones and cement. A new water sports area (Fethiye Water Sports) was set up next to Sunset Beach.

In Yanıklar, Liberty Fabay enlarged its beach usage area. Construction of the new hotel we reported in 2023 is also almost finished. **The marshy habitat that once existed in this section is now entirely demolished and occupied**. Tuana also enlarged its beach area

Unfortunately, we report little or no improvement in 2024! In Fethiye sea turtles face serious threats, necessitating immediate actions for improvements and corrections. New information signs bearing the name of Turkish Ministry of Environment, Urbanisation and Climate Change were erected along the entire SPA. However many were on the ground and the monitoring team stated that they keep falling despite their efforts to put them back up. Visitors ignored the warnings written on them. Personal umbrellas were seen stuck in the sand at almost every location. There were no restrictions for beach usage at night, apart from the old signs stating general rules including the beach should only be used between 08:00 and 20:00. People freely use the beach, have picnics, and even swim at night.

Sunbed stacking at night was observed in a few spots in Calis A, but in an ineffective way and always within the nesting zone. Furniture stacking was not seen anywhere else in the SPA. While wooden posts mark the nesting zone border in large sections of the SPA, in many areas the zoning is incorrect. In Çalış B, wooden posts supposedly marking the nesting zone mostly mark the semi-wet zone, while the dry zone (including the nesting zone) is almost entirely occupied with beach furniture. Wooden walkways, both vertical and horizontal, exist in many locations, and AstroTurf carpets were still being used at Surf Station/Mavi Beach and Surf Café/Surf Centre.

Camping, bonfires, planting on the nesting beaches, severe light pollution and human presence at night are extremely problematic (Rec. Points 2, 4-7, 11, 15). Vehicle control has improved even though vehicle tracks were observed in the pristine section, close to the vehicle entrance point in Akmaz picnic area (Rec. Point 8). No guards were seen and there was no enforcement of the rules in the protected area (Rec. Points 13, 14).

Only two prism cages were seen in Çalış and none in any other sections –including the hot spot in Akgöl. We were informed by the EKAD team leader that most of the prism cages were stolen and the remaining ones were frequently replaced or removed, so they stopped placing cages all together. No demarcations were seen on the promenade wall or on umbrella poles, suggesting that proper triangulation is not done -which can be a concern for the safety of eggs inside the nests considering the heavy usage of the nesting beach. In Yanıklar, nests in front of the hotels were protected with prism cages. Nests in the pristine section were properly caged against predation (Rec. Point 10, 16).

Nine years since the adoption of Recommendation No. 183 (2015), the implementation of the measures either have been partially or have not materialized. The destructive development occurring over the past years in complete disregard of the Bern Convention's Recommendation has severely affected the sea turtles and their habitat. The few improvements for some recommendations cannot reverse the damage. Actions must be taken immediately to **fully implement** the recommended measures.

Patara Specially Protected Area: Recommendation No. 182 (2015)

In 2024, we observed certain improvements; however, the improvements are limited primarily around the Main Beach, while the rest seem neglected and the conservation problems that are negatively affecting the nesting beaches remain. As a result, additional measures must be applied to all of Patara SPA to provide the entire Patara nesting beach the appropriate protection and management it needs.

At the time of our survey, entry to the archaeological site at the southern end of the SPA (Patara Main Beach) was supervised only during the day. The Gendarmerie now monitors the site via solarpowered camera towers erected at two entry points—one at the top of the dunes and another at Çayağzı Beach. Although the protection and management of the South Beach, particularly around Patara Main Beach, have significantly improved, other sections appeared neglected in terms of protection. The new borders of Patara SPA are finally shared online. All articles of the Master Development Plan for Patara can also be found online (in Turkish). (Rec. Point 1). Access to the beach at night was enforced more effectively. Despite a large number of people gathering at the top of the dunes, the Gendarmerie arrived around 20:30 to warn the crowd off the dunes. At the time of our survey, horses were still being rented at the top of the dunes and horses were seen taking people all the way down to the nesting beach and then back up. Several motorised vehicles and their tracks were seen on the nesting beach, in all sections except Patara Main Beach. (Rec. Point 2).

At the North Beach, the campsite at the Eşen River mouth on the Letoon Beach side was fully occupied, despite the absence of permanent structures, indicating its use as an unofficial camping place. Abandoned wooden structures from the former SPA facility remain on Letoon Beach. There was no dune restoration as recommended, even though the dunes are slowly self-repairing. As a result there is an **alarming spatial increase in coastal erosion in the northern part of the South Beach**, which we believe is related to the river dynamics and to the disturbed overall dune statics in the region.

Rod fishing was observed near Eşen River and Özden River. At the latter section, net fishing and fishing boats were also encountered. Fishing nets were seen on the nesting beach near Letoon, posing serious threat to sea turtles.

With the exception of the Main Beach, there **insufficient nest monitoring** and protection from trampling or predation due to lack of resources. The research team monitoring the SPA must be granted sufficient funds and manpower for monitoring, especially North Beach which lacks any zoning and marking or protection of the nests. The topography and characteristics of the South beach must be considered in order to correct the erroneous zoning. (Rec. Point 4, 7, 8 and 9). Poor beach furniture management was observed at the SPA's single beach facility, which is located within the nesting hotspot (Rec. Point 2).

To date, Recommendation No. 182 (2015) is only partially implemented. As we have previously indicated, improvements in the management and control for effective implementation of the Recommendation, over both sections of the beach, will allow this unique natural and heritage site to become a showcase example, similar to the much renowned nearby Dalyan SPA (İztuzu beach). It is of high priority for authorities to take further action and resolve the remaining unresolved conservation and management problems with no delay.

MEDASSET calls upon the Turkish authorities to:

- Urgently fully implement Recommendations No. 182 & 183 (2015) through a comprehensive and updated action plan.
- In relation to Fethiye, provide an official map of the beach and adjacent land area that are under dispute, and of the areas that have been permitted for development. As per Measure 1 of the Recommendation, declare a building moratorium to prevent any further development (hotels, jetties, etc.) on or directly behind the nesting beaches and correct the zoning errors.
- Provide the necessary resources for the effective protection of the beach)
- In relation to Patara, ensure that the entire nesting beach (North and South sections), the nearshore areas and the entire sand dune areas are appropriately zoned and protected against any further development.
- Address the concerns raised in MEDASSET's complaint regarding the Patara now largely completed summer house construction project, its scale, the associated impacts, the lack of an EIA and of a carrying capacity study. Provide detailed information on the additional houses constructed outside the summer house construction project.

MEDASSET calls upon the Bern Convention Standing Committee to:

- Discuss the case file at the 44th Meeting of the Standing Committee.
- Keep the case file open for further monitoring.
- Urge Turkish authorities to implement all Recommendations No. 182 & 183 (2015) <u>as soon as possible.</u>

ANNEX:1 FETHIYE SPA, TURKEY

Nesting beach description (Fig.1): The 8 km beach is split in three sections: Çalış, Yanıklar, and Akgöl. Çalış is 2.5 km long and divided into two sections: Çalış A (Küçük Çalış - southern part), which is the section that is bordered by a wall and a promenade lined by tourist infrastructures, and Çalış B (Koca Çalış - northern part). Çalış Hill marks the end of Çalış and the start of Yanıklar, which extends northward for 4.5 km, including the so-called "small beach (Karataş beach)". Kargı Stream marks the border between Yanıklar and Akgöl (1 km, also known as Karaot beach). For a detailed description of the Fethiye SPA nesting beaches see MEDASSET 2009.

MEDASSET visited Fethiye SPA in July 2024 to assess and document the management and conservation status of the nesting beaches. The following presents the survey findings in relation to each of the measures under Recommendation No. 182 (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 channel mouth near Çalış Hill was reshaped with boulders (Fig.2a-b), and this is possibly the cause for the coastal erosion observed in Çalış B, extending until Petunya and Surf Café (Fig.3a-c). The section near Çalış Hill, at the southern side of the channel, now has coffee shops and bars set up in front of caravans along the road (Fig.3a, Fig.4). Some facilities in Çalış B enlarged their beach usage areas (see Article 2 and 5). The rows of high poles observed in 2023 in front of the mesh barrier were fitted with umbrellas, with sunbeds placed on both sides behind the zoning posts, but without enough bins (Fig.5a-e). The newly finished facility run by Fethiye Municipality is now operational³. The facility has horizontal and vertical wooden walkways, a lifeguard tower, two blocks of dressing cabins, toilets and showers, and visitors can freely use their personal beach furniture (Fig.6a-b). It also has a scaffold for the impaired, fixed by chains, large stones and cement (Fig.7a-b). A new water sports area (Fethiye Water Sports) was set up next to Sunset Beach, coordinates are added to Table 1.

In Yanıklar, Liberty Fabay enlarged its beach usage area⁴ (see next Article). Construction of the new hotel is also almost finished (Fig.8a-d). The marshy habitat that once existed in this section is now entirely demolished and occupied (Fig.9a-b). Tuana also enlarged its beach area (see next Article).

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;

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;

We hereby report on both of the above measures jointly (No.2 and No.5) in order to better reflect the updated situation of nesting beaches after new arrangements in 2021.

New information signs bearing the name of Turkish Ministry of Environment, Urbanisation and Climate Change were erected along the entire SPA (Fig.5b-c, 6a-b, 10a-f), frequently in Çalış A and B,

³ <u>https://shorturl.at/VfOnr</u> and <u>https://shorturl.at/B5oxx</u>

⁴ Vids/Yaniklar_Liberty_Beach.mp4

less in the southern part of Yanıklar, none in Akmaz Beach and the pristine section, few in Akgöl. Some were on the ground (Fig.5b, Fig.11) and the monitoring team stated that they keep falling despite their efforts to put them back up⁵. Still, the people seemed to be ignoring the warnings written on them. Personal umbrellas were seen stuck in the sand at almost every location (Fig.6a-b, 10e, Fig.12a-l). There were no restrictions for beach usage at night, apart from the old signs stating general rules including the beach should only be used between 08:00 and 20:00 (Fig.13a-c). Some of the old signs stated between 9:00 and 18:00 (Fig.10f, Fig.14a-b). People freely use the beach, have picnics, and even swim at night.

In Çalış A, the layout of sunbeds differ between rows of 1 to 3 (Fig.14a-b, Fig.15a-d). Sunbed stacking at night was observed in a few spots, but in an ineffective way and always within the nesting zone (Fig.15c-d, Fig.16a-b). Furniture stacking was not seen anywhere else in the SPA. Even though umbrellas of facilities in the entire SPA are fixed in the sand, people are still free to use their personal umbrellas as they please inside the nesting zone (12f, 14a). At the entrance points along the promenade area, hoses and feet-washing stands directly drain onto the nesting beach (Fig.10f, 15b, Fig.17a-b). A large pipe was seen half-buried under the sand (Fig.10f, 16b, Fig.18), possibly carrying water to the hoses and changing/showering cabins. The cabins also drain directly onto the nesting beach⁶ (Fig.19a-b).

In Çalış B, wooden posts supposedly marking the nesting zone mostly mark the semi-wet zone, while the dry zone (including the nesting zone) is almost entirely occupied with beach furniture (Fig.3b-c, 4, 5c-e, 6a-b, 13b, Fig.20a-j). Wooden walkways were encountered at some locations (Fig.7a, 13b, 20a), and AstroTurf carpets were still being used at Surf Station/Mavi Beach and Surf Café/Surf Centre (Fig.4, 20h, Fig.21a-b). Zentara⁷, Jiva Beach and Terrace Café (Now grey Beach?)⁸ entirely occupy the nesting beach with their furniture. Jiva Beach expanded its beach area with new sunbeds and pavilions⁹. A volleyball court adjacent to Jiva poses entangling threat to sea turtles. Some visitors were seen using their own umbrellas directly inserted in the sand within the nesting zone (Fig.6a-b, 12k). No furniture stacking/removal was seen in this section at night. The inclination of the beach at the caravan parking spot adjacent to Çalış Hill was flattened (Fig.22).

In Yanıklar, Karataş beach (now Wooden Stage Beach, Fig.23) spared a small section to its west, where locals can freely use (Fig.12a). The facility occupies the entire nesting zone¹⁰, but did not make aerial light shows at night this year. Deniz İncisi¹¹ did not have any sunbeds (Fig.10e, Fig.24), and people were using their own equipment including umbrellas randomly inserted in the sand (Fig.10c, 24). The café next to it had only a single row of sunbeds. No cages were seen in this section.

Liberty Fabay¹² added new sunbeds and umbrellas, pavilions, a showering space, a new beach bar, an additional water sports area, two more lifeguard towers, and wooden walkways extending into the nesting zone, and they also moved the zoning posts forward to make space for their new furniture (Fig.10c, Fig.25a-h). Sand flattening is possibly done by unsuitable machines, as the tracks on the sand suggest (Fig.25d-e). They still share a jetty with TUI (Fig.26a-b). Wooden stakes in front of TUI's pavilion area do not mark the nesting zone correctly (Fig. 10b, Fig.27) and there is an extra lifeguard tower at their side now (Fig.28).

Akmaz Beach was heavily used during the day (Fig. 12e, Fig.29a-d). There are still no signs regarding sea turtles, and no wooden posts demarcating the nesting zone. The erosion effect in this section was considerably softened¹³. Lykia Botanika removed its volleyball court on the nesting beach but the swing remains (Fig.30a-b). They also changed the sign bearing wrong statements regarding proper nesting beach usage, and put up a Blue Flag. Club Tuana's water sports rails extend all the way

⁵ Personal communication

⁶ Vids/Calis_Promenade_Showers.MOV

⁷ <u>https://shorturl.at/xYoj3</u>

⁸ <u>https://shorturl.at/frREj</u> and <u>https://shorturl.at/kVOdK</u>

⁹ https://shorturl.at/4pUwD and https://shorturl.at/MdFdI

¹⁰ Vids/SmallBeach.MOV

¹¹ Vids/Yaniklar_Denizincisi.mp4

¹² Vids/Yaniklar_Liberty_Beach.mp4

¹³ Vids/Yaniklar_AkmazBeach.mp4

into the sea (Fig.31). They have added new sunbeds and a Tiki bar, and two scaffolds for the impaired on both sides of the quay. Yonca Lodge removed its volleyball court but their showers are still inside the nesting zone (Fig.32). Towards the end of this section, the beach is almost entirely covered with beach furniture or boats (Fig.33a-f).

In Akgöl, the southernmost part of the section was used by caravans (Fig.11, Fig.34), also utilising the toilets and showers of the Municipality's facility nearby, which drain directly onto the beach (Fig.35a-b). The facility occupies much of the nesting zone (incorrectly demarcated by wooden posts) and their vertical walkway extend all the way to the sea (Fig.36a-b). They also put up a volleyball court on the nesting beach (Fig.35b).

The core nesting area at the northern end was exposed to heavy beach usage, and a lot of visitors had their personal umbrellas inserted in the sand (Fig.10e, Fig.37a-b). All of the old pavilions at the rocky end were finally removed, with only the concrete base left behind (Fig.12j, Fig.38).

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

The piles observed at the mouth of main channel outlet near Çalış Hill in 2023 were used in reconstructing the river mouth (Fig.2a-b). Signs of new sand extraction were only observed in front of the new hotel construction in Yanıklar (Fig.39a-b).

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

Planted vegetation in the SPA remains and new ones are added in front of facilities. The only positive move was made by Lykia Botanika, which uprooted the volleyball court right on the nesting beach. (Fig.30a).

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 carryout the necessary controls to check enforcement;

At the time of our survey, the section was not too crowded, but people were freely using personal beach equipment, including umbrellas inserted into the sand (Fig.10e, 12j, 37a-b). A few tents were seen in this section¹⁴. All of the pavilions at the northernmost point were removed (Fig. Fig.12j, Fig.38). No prism cages were observed in the core nesting area this year.

7. Reduce light pollution to a minimum along the whole coast during the nesting/hatching season: (i) remove all lights not strictly necessary, (ii) reduce the number of lights allowed for each business company, (iii) all lights considered as strictly necessary should be reduced in power and (iv) be red or orange-yellow, (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. Prohibit light show equipment use;

In Çalış (both A and B) light pollution continues to be a problem. Visitors at the promenade area heavily use the beach at night and a crowded group was seen sitting on towels covering a large portion of th beach¹⁵. A few of the street lights were illuminating the nesting beach, particularly one at the

¹⁴ Vids/Akgol_Evening.mp4

¹⁵ Vids/Calis_Promenade_Night1.MOV

beginning of the promenade that was turned towards the sea, along with an excursion stand using two overly bright spots to draw attention¹⁶. People also freely used flashlights, especially on their phones¹⁷.

In Çalış B, weddings continue and there was one at Bahar Beach (Fig.40a-c). A couple was seen watching a movie on their laptop directly on the nesting beach at Jiva Beach. Worrisome incidents have been reported regarding the staff of Jiva Beach intentionally flashing lights towards the beach to scare off sea turtles crawling out the sea to nest¹⁸. Even though most of the facilities in Çalış B use orange lights, some are very close to the sea, particularly the orange hanging lights of Surf Café. The northernmost part of this section, used by caravans, continue to produce much light pollution at night (Fig.41)

In Yanıklar, Wooden Stage Beach (Fig.42), Deniz İncisi and the facility next to it had dim lights, which did not reach the nesting zone. The new hotel construction was visible from the entire SPA at night -even from Çalış A and Akgöl Beach, as the construction machines operate for 24 hours straight, causing severe light pollution with overly bright white spotlights (Fig.43a-f). Liberty Fabay creates extreme light and noise pollution with its beach bar and disco¹⁹ (Fig.43b-c, Fig.44), and the bright lights they installed at the newly enlarged area cause heavy illumination (Fig.45). The shared jetty had semi-dim green lights (Fig.43d) but the bright security lights between the two hotels continue to be a problem²⁰. TUI Barut installed two bright spotlights on top of the front row of pavilions, towards Akmaz Beach (Fig.46), justifying their presence with the threat from immigrants when they were encouraged to refit them with red or orange bulbs.

The facility at Akmaz Beach was still operating around 00:00, with bright white lights (Fig.47a-c), and customers randomly entering the pristine section with their flashlights. A few groups were seen sitting on the beach at the pristine section at night, and 3 were seen putting up a tent, using their flashlights (Fig.48). Yonca Lodge dimmed its lights this year, but children were watching a movie right on the nesting beach (Fig.49). The restaurant next to it still has too bright orange lights close to the sea (Fig.50a-b). Tuana took a few measures to somewhat conceal the problematic security light, making use of vegetation and shaders over a newly placed Tiki bar (Fig.33f, Fig.51). All other facilities to the north of the pristine section had dim orange lights (Fig.52a-c).

In Akgöl, caravans still use dim orange lights. The lights of Hayal Café and the Municipality's facility were also orange and dim (Fig.53). One light right on top of the Municipality's facility was bright pink, differing from the orange light posts bordering the road (Fig.54). The restaurant closed at 8pm, indicating adequately following the regulations of beach access hours.

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 new permanent barrier (mesh scaffold filled with large stones) in Çalış B looks effective in preventing vehicle access to the beach. However, the northernmost part of Çalış B is still used by caravans, where people can park their vehicles close to the water line and have picnics (Fig.3a, 4, 41).

In Yanıklar Beach, all facilities to the south of the pristine section control vehicle entrance, although some tracks were seen in front of the new hotel's construction site (Fig.39a). Akmaz picnic area still occupies the entire nesting beach (Fig.29a-d, Fig.47a-c). Few vehicle tracks were observed in the pristine section, close to the vehicle entrance point in mid-section (Fig.55a-b).

Despite the lack of actual permanent barriers in Akgöl, vehicles refrain from entering the nesting zone. Caravan parking was mostly retracted towards the back this year, further away from the beach, even though a few caravans were still located behind the wooden posts wrongly demarcating the nesting zone and a few vehicle tracks were seen on the beach (Fig.37a, Fig.56).

¹⁶ Vids/Calis_Promenade_Illumination.mp4

¹⁷ Vids/Calis_Promenade_Night2.mp4

¹⁸ Personal communication with EKAD team members.

¹⁹ Vids/Yaniklar_LibertyFabay_Bar.mp4

²⁰ Vids/Yaniklar_Night.mp4

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;

Fishing boats and speed boats were seen in all parts of the SPA, even the pristine section²¹ (Fig.5c, 8a-c, 12d, 12i, 20e-h, 25a, 25d-h, 26a-b, 31, 33a-f, 39b, 52a-c, Fig.57a-g). Their traffic during the entire sea turtle nesting/hatching season is regulated by a number of laws, and are subjected to fines, but the level of control and enforcement remains vague. Open water borders were marked with floating ropes in all sections.

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 entre 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);

Monitoring of the SPA was assigned to EKAD this year, by a last-minute decision of the Ministry, and EKAD sent a team of four, which is definitely inadequate for the entire SPA.

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

Campers seen in all sections were in designated areas, with either tents or caravans (Fig.3a, 4, 5d, 11, 22, 32, 34). Sporadic tents outside the designated camping areas or facilities were only seen in the pristine section (Fig.48, Fig.58a-c) and Akgöl, at the part where there used to be pavilions.

Bonfire remains were observed only in Yanıklar, frequently at the pristine section (Fig.59a-f).

Almost all beach bars and facilities in Çalış and Yanıklar were open until at least 00.00.

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;

Beach litter was problematic in the entire SPA, although slightly less than previous years. Çalış A and B had litter left behind by visitors (Fig.5d, 6a-b, 10f, 12k, 14b, 18, 20g, Fig.60a-c). Ungulate droppings, litter, and bonfire remains were frequently encountered along Yanıklar²² (Fig.24, 29a, 55b, 58a-c, 59a-f, 61a-j), except for the hotels section. Akgöl also had beach litter due to visitor use (12h).

Drainage channels reaching the sea remain as serious sources of pollution, and the construction site of the new hotel in Yanıklar had a pipe draining directly into the channel bordering the area, further contributing to habitat damage (Fig.62). Mucilage was observed on the sea surface (Fig.63).

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;

No controls and/or reinforcements were observed during our survey.

²¹ Vids/PristineArea_Night_Fishing.MOV

²² Vids/Yaniklar_Litter.mp4

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

The Ministry wanted only three people for the fieldwork, including night shifts²³. The financial resources allocated for the team hardly covers the expenses of rent and transportation, which explains the obligatory decision for having a limited number of team members.

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;

An information kiosk has been placed on the promenade area (Fig.64a) but working hours are not written on it, and it was closed around 17:30 in the afternoon even though the team stated it opens in the afternoon and stays open until the night shift hours. Çalış section needs more visibility and engagement by the team for effective protection, as they lack the authority for enforcement of regulations. The information kiosk next to the Municipality's facility in Akgöl was abandoned and used as a beverage storage space instead (Fig.64b).

No businesses seemed to support or get involved in the conservation efforts. The staff of Hotel TUI Barut were aware of EKAD's involvement in monitoring the region this season, and seemed willing to help.²⁴

The number of signs in the SPA increased substantially, with new information/warning boards bearing the Ministry's name frequently placed in most sections, even though some had fallen on the ground (Fig.5b-c, 6a-b, 10a-f, 11). The signage in Lykia Botanika was finally changed. There is still no information sign regarding sea turtles in the public picnic facility on Akmaz Beach (Fig.29c).

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;

Only two prism cages were seen in Çalış (Fig.5a, 5d), and none in any other sections –including the hot spot in Akgöl. When this situation was communicated with EKAD, the team leader stated that most of the prism cages were stolen and the remaining ones were frequently replaced or removed, so they stopped placing cages all together. No demarcations were seen on the promenade wall or on umbrella poles, suggesting that proper triangulation is not done -which can be a concern for the safety of eggs inside the nests considering the heavy usage of the nesting beach.

In Yanıklar, nests in front of the hotels were protected with prism cages (Fig.12e, 25d-e, 27). Liberty group had its own wooden prism cages and info/warning signs (Fig.25a, Fig.65a-b), one of which was protecting a nest under a pavilion (Fig.66a-b). Nests in the pristine section were properly caged against predation (Fig.61g, Fig.67a-c). Communication with the team revealed the presence of around 50 nests in that section only, 15 of which were predated immediately. No predated egg shells were encountered during our survey, indicating proper treatment of predated nests.

Observations on other activities and impacts:

• Rod fishing was observed at several locations in the entire SPA, in the morning and at night. Fishing boats were seen in Çalış A early in the morning.

²³ Personal communication with EKAD's team

²⁴ An inadvertent encounter with the night manager resulted in a brief dialogue, where we asked them about the new spotlight illuminating the beach, and warned them about its possible effect on hatchlings

- There was considerable alteration of the beach topography (erosion?) at Tuana Beach (Fig.33d).
- Scutes likely belonging to a juvenile sea turtle was seen near Surf Café (Fig.68).
- Liberty Group apparently sends e-mails to certain NGOs through an agency for a clean-up in Fethiye.
- Stray dogs were common in Çalış A and B, although they displayed no predatory behaviour, possibly due to constant care they receive from the locals and the NGO's.
- Strange white crosses were seen in a few locations, meaning and purpose unknown (Fig.69).

TABLES

Table-1. GPS data of important locations in Fethiye SPA. Records were taken by GPS Coordinates, developed by Fundroid 3000, with an accuracy of 4-10 m. (*=added or updated in 2024)

	COORDINATES	DEFINITION
ÇALIŞ -A	36°39'24.23"N - 29°06'37.87"E	South end of section and the promenade area
	36°39'33.18228"N - 29°06'35.59716"E	Sign at beach entrance ("Makri Beach")
	36°39'37.55664"N - 29°06'33.25860"E	Sign at beach entrance ("Motto Bar")
	36°39'45.16272"N - 29°06'30.03840"E	Sign at beach entrance ("Çalış Taxi")
	36°39'57.07188"N - 29°06'22.82364"E	Sign at beach entrance ("Uras Beach")
	36°39'58.0"N - 29°06'22.5"E *	Sea Turtle Info-Desk
	36°40'05.1"N - 29°06'17.8"E *	Beginning of the promenade area
	36°40'05.4"N - 29°06'16.8"E	Sign right before promenade stairs
	36°40'20.2"N - 29°06'04.7"E *	Municipality's facility + 4 signs in Turkish
	36°40'22.9"N - 29°06'01.0"E	Water sports ramp
	36°40'23.1"N - 29°06'02.5"E *	Fethiye Water Sports
	36°40'23.2"N - 29°06'00.5"E	The small pier in of "Jiva Beach"
S-B	36°40'25.4"N - 29°05'59.5"E	Sign in front of "Sunset Beach (Hanel Houses)"
ÇALIŞ -B	36°40'29"N - 29°05'53"E	Jetty near "Surf Cafe"
Č	36°40'43.98708"N - 29°05'32.24940"E	Abandoned concrete platform
	36°40'43.40532"N - 29°05'33.50256"E	North end of the facilities ("Mavi Beach")
	36°40'44.9"N - 29°05'31.6"E	Approximate end of zoning stakes
	36°40'44.51988"N - 29°05'31.21836"E	Large drainage channel and stones at its mouth
	36°40'46.73"N – 29°05'23.95"E	Caravan area used by "Zirkon Beach"
	36°40'40.72728"N - 29°04'58.82592"E	South end of "Deniz İncisi"
	36°40'43.1"N - 29°04'55.8"E	Sign at "Deniz İncisi"
	36°40'43.77612"N - 29°04'52.48776"E	North end of "Deniz İncisi"
	36°40'51.6"N - 29°04'33.3"E	Water sports ramp between 2 hotels
AR	36°40'52.6"N - 29°04'31.6"E	Jetty and Lifeguard in front of "TUI Barut"
YANIKLAR	36°40'55.0"N - 29°04'23.5"E	End of pavilions and sign at "TUI Barut"
	36°40'50.3"N - 29°04'04.6"E	Polluted drainage (north end of Akmaz Beach)
	36°40'57.0"N - 29°03'17.1"E	Vehicle access point in pristine section *
	36°41'02.5"N - 29°03'06.2"E	Starting point of zoning stakes
	36°41'07.73160"N - 29°02'58.06068"E	Northernmost facility in Yanıklar Beach
	36°41'10.1"N - 29°02'55.3"E	Jetty and information sign at "Lykia Botanika"

	36°41'12.7"N - 29°02'51.5"E	Drainage channel near "Doğa Camping"
	36°41'16.5"N - 29°02'46.8"E	Drainage channel near "Kafi"
	36°41'20.14584"N - 29°02'41.52624"E	Jetty and water sports equipment ("Tuana")
AKGÖL	36°41'24.0"N - 29°02'35.4"E	Kargı Stream, bridge, vehicle entrance point (Yanıklar-Akgöl border)
	36°41'32.2"N - 29°02'28.8"E	New sign in front of Municipality's Facility
	36°41'38.9"N - 29°02'21.8"E	Information sign ("Hayal" - former Karaot Bf.)
	36°41'49.03548"N - 29°02'08.39040"E	Information sign, near parking spot
	36°41'48"N – 29°02'07"E	Old pavilion area, section's north end *

MAPS & PHOTOGRAPHS

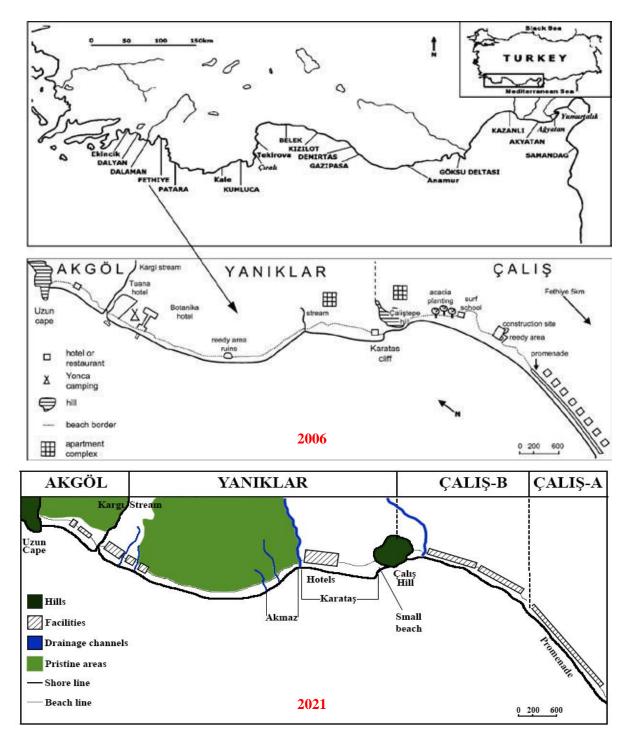


Fig.1. TOP: Fethiye SPA among important nesting beaches. MIDDLE: Fethiye nesting beach subsubsections and development until 2006. *Source: Ilgaz et al., 2007.* BOTTOM: Fethiye nesting beaches sub-subsections and development as of 2021.



Fig.2. Fethiye SPA, Çalış B. Channel mouth near Çalış Hill reshaped with boulders.



Fig.3. Fethiye SPA, Çalış B. Coastal erosion extending until Petunya and Surf Café. Note the zoning post only two metres away from the water and beach furniture occupying the entire nesting zone (3c).



Fig.4. Fethiye SPA, Çalış B. Coffee shops and bars set up along the road. Note the caravans used by the businesses and the picnickers at both sides of the road.



Fig.5. Fethiye SPA, Çalış B. Poles seen in 2023 in front of the mesh barrier now fitted with umbrellas next to the new Municipality facility. Note barely visible prism cages in 5a and 5d (the only two cages seen in this section) and litter, and the fallen new sign in 5b. Not enough bins provided for sunbeds.



Fig.6. Fethiye SPA, Çalış B. Newly finished facility run by Fethiye Municipality. Note the use of personal beach equipment, litter, and the scaffold for the impaired.



Fig.7. Fethiye SPA, Çalış B. Scaffold for the impaired, fixed by chains, large stones and cement. Note the walkway extending all the way to its back (7a).



Fig.8. Fethiye SPA, Yanıklar. Construction of the new hotel almost finished. Note the boats, the cranes, the enlarged beach usage area of Liberty Fabay invading the nesting zone in 8c, and the artificially planted trees of Deniz İncisi in 8d.

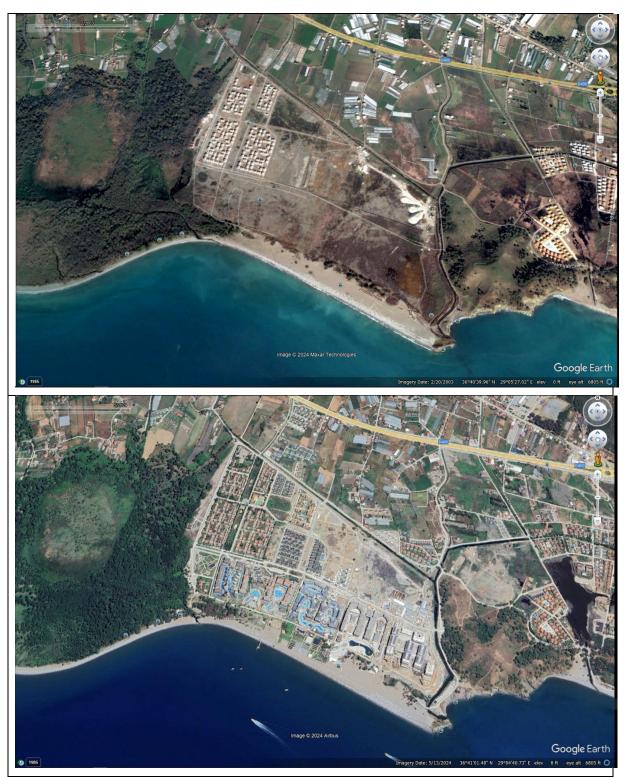


Fig.9. Fethiye SPA, Yanıklar. The wetland/marsh habitat that once existed now entirely demolished and occupied. Images taken from Google Earth Pro, for 2003 (a) and 2024 (b).



Fig.10. Fethiye SPA. New information signs bearing the name of Turkish Ministry of Environment, Urbanisation and Climate Change erected along the entire SPA. 10a) In front of the pavilions of Liberty Fabay, note the walkway right behind zoning posts, artificial grass around the pavilions, and the excavated sand although the sign prohibits it; 10b) TUI hotel beach, towards Akmaz Picnic Area, note the zoning posts only a few metres from the shoreline; 10c) In front of the enlarged beach area of Liberty Fabay, note the new pavilions and the water sports place, and the wooden posts moved forward to make space; 10d) Aerial view of Deniz İncisi, note the artificially planted trees and the complete lack of sunbeds; 10e) The hot spot in Akgöl, note the use of personal umbrellas randomly within the nesting zone, the lack of pavilions, and the crowd despite the photo was taken at 20:30 PM; 10f) In Çalış, note the hose at the stairs, the water pooling up on the beach, the exposed water pipe on the ground, and also the old sign.



Fig.11. Fethiye SPA, Akgöl. One of the new Ministry sign boards, on the ground.



Fig.12. Fethiye SPA. Personal umbrellas randomly used on the nesting beach. a) Small beach strand left for the locals next to Wooden Stage (former Small Beach); b-d) Deniz İncisi; e) Empty area to the north of facility at Akmaz Beach, note the cage behind so-called zoning posts on TUI's beach.



Fig.12 (continued). Fethiye SPA. Personal umbrellas randomly used on the nesting beach. 12f) Çalış A; g-h) Municipality's facility at Akgöl, note the fishing rod; i) Yanıklar, note three fishermen; j) The hot spot in Akgöl; k) Çalış B.



Fig.13. Fethiye SPA. Old Ministry signs stating the beach should only be used between 08:00 and 20:00. 13a) Akgöl, 13b) Çalış A-B border. Note the sunbeds of Terrace Café occupying the beach.





Fig.14. Fethiye SPA, Çalış A. Older signs stating the beach should be used between 08:00 and 18:00.

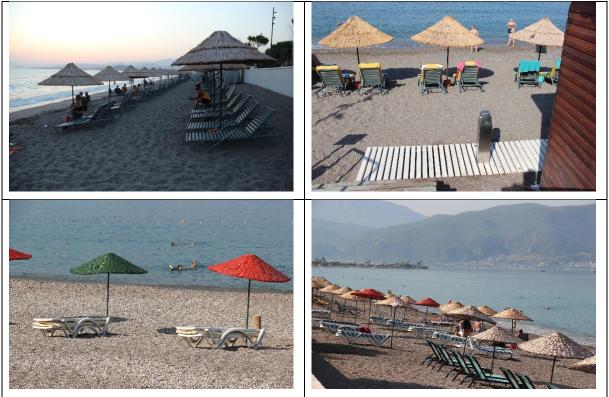


Fig.15. Fethiye SPA, Çalış A. Sunbeds in the section placed in rows. Note the feet washing stand in 15b (Sundia Liberty), and the ineffective stacking of sunbeds in 15c and 15d.



Fig.16. Fethiye SPA, Çalış A. Sunbeds stacked ineffectively, and left inside the nesting zone. Note the water pipe exposed from beneath the sand, possibly carrying water to hoses and cabins by the entrance points.



Fig.17. Fethiye SPA, Çalış A. Hoses installed at the entrance points from the promenade area. Note the water draining all the way to the nesting zone in 17b.



Fig.18. Fethiye SPA, Çalış A. Large pipe half-buried in the sand.



Fig.19. Fethiye SPA, Çalış A. Shower cabins draining directly onto the beach.



Fig.20. Fethiye SPA, Çalış B. Wooden posts far from marking the nesting zone, which is almost entirely occupied with beach furniture. Note the vertical walkways in 20a, Zentara Beach covering the entire nesting zone in 20b, pavilions by the sea in 20c and 20e, wedding altar (Bahar Beach) in 20f.



Fig.20 (continued). Fethiye SPA, Çalış B. Wooden posts far from marking the nesting zone, which is almost entirely occupied with beach furniture. Note the Surf Café occupying the entire nesting zone in 20g, AstroTurf carpets of Surf Centre in 20h, and Jiva's new pavilions in 20i.



Fig.21. Fethiye SPA, Çalış B. AstroTurf carpets on the beach. A) Surf Station/Mavi Beach, b) Surf Café/Surf Centre.



Fig.22. Fethiye SPA, Çalış B. Caravan parking spot adjacent to Çalış Hill, now with less inclination.



Fig.23. Fethiye SPA, Çalış B. Aerial view of Wooden Stage Beach, occupying the entire nesting zone.



Fig.24. Fethiye SPA, Yanıklar. Deniz İncisi does not have any sunbeds, and people still use their personal umbrellas as they please. Note the new Ministry sign board at the back, and ungulate droppings on the beach.

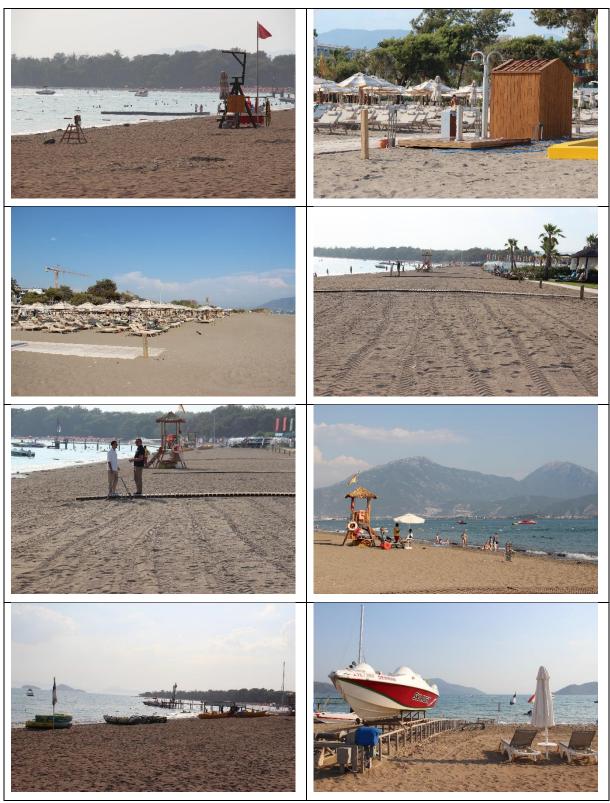


Fig.25. Fethiye SPA, Yanıklar. Enlarged beach of Liberty Fabay. a) A new lifeguard tower, custommade prism cage, and jet-skis in the sea; b) new sunbeds, umbrellas, and a showering space draining onto the beach; c) general view of enlarged area, another lifeguard tower, and replaced zoning stakes; d-e) vertical walkways, sand flattening tracks, an old prism cage and jet-skis in the sea -note the artificial plantations in (d); f) the new lifeguard tower and jet-skis in the sea; g-h) water sports equipment.



Fig.26. Fethiye SPA, Yanıklar. Jetty shared with TUI. The lifeguard tower close to the sea by the jetty now only belongs to TUI.



Fig.27. Fethiye SPA, Yanıklar. Zoning stakes in front of TUI's pavilion area, incorrect zoning.



Fig.28. Fethiye SPA, Yanıklar. A new lifeguard tower beside TUI's pavilions.



Fig.29. Fethiye SPA, Yanıklar. Akmaz Beach heavily used during the day. Note some personal umbrellas in 29a, planted trees in 29b, signage regarding beach usage without any mention to sea turtles in 29c, and umbrellas with fixed bases and bins in 29d.



Fig.30. Fethiye SPA, Yanıklar. Lykia Botanika removed its volleyball court but the swing remains.



Fig.31. Fethiye SPA, Yanıklar. Club Tuana's water sports rails extending all the way into the sea.



Fig.32. Fethiye SPA, Yanıklar. Showers on the beach at Yonca Lodge.

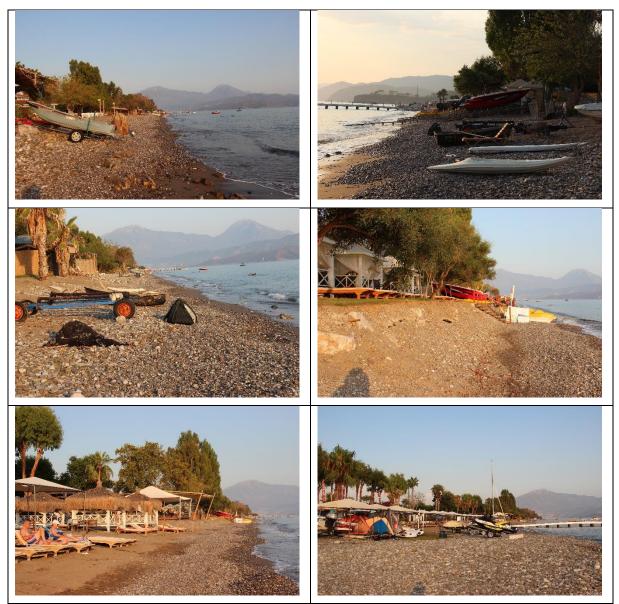


Fig.33. Fethiye SPA, Yanıklar. Beach furniture and boats occupy the nesting zone towards north. Note the Tiki bar of Tuana, used for concealing the security light at night in 33e.



Fig.34. Fethiye SPA, Akgöl. Caravans using the southernmost part of the section.



Fig.35. Fethiye SPA, Akgöl. Toilets and showers of the Municipality's facility. Note the hoses draining directly onto the beach in both, the vehicle entrance barrier in 35a, and the volleyball court in 35b.



Fig.36. Fethiye SPA, Akgöl. Vertical walkway of the Municipality's facility extends all the way to the sea. Note the rod fishing in 36b.



Fig.37. Fethiye SPA, Akgöl. Beach usage at the core nesting area. Note the personal umbrellas in 37a, the old Ministry sign and the barbecue attempt in 37b.



Fig.38. Fethiye SPA, Akgöl. Old pavilions at section end no longer exist. Note personal umbrellas.



Fig.39. Fethiye SPA, Yanıklar. Sand extraction in front of the new hotel construction (Liberty).



Fig.40. Fethiye SPA, Çalış B. Weddings by the sea at night (Bahar & Petunya).

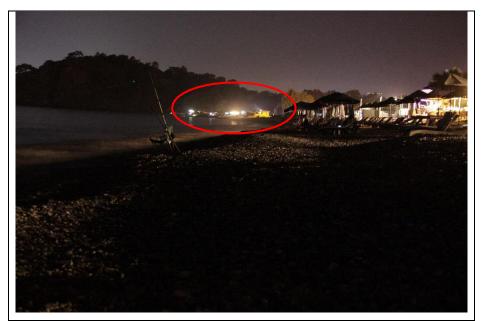


Fig.41. Fethiye SPA, Çalış B. At the northernmost part of section, caravans produce light pollution at night. Note the rod fishing at the foreground.



Fig.42. Fethiye SPA, Yanıklar, Small Beach. Dim lights of Wooden Stage Beach at night.

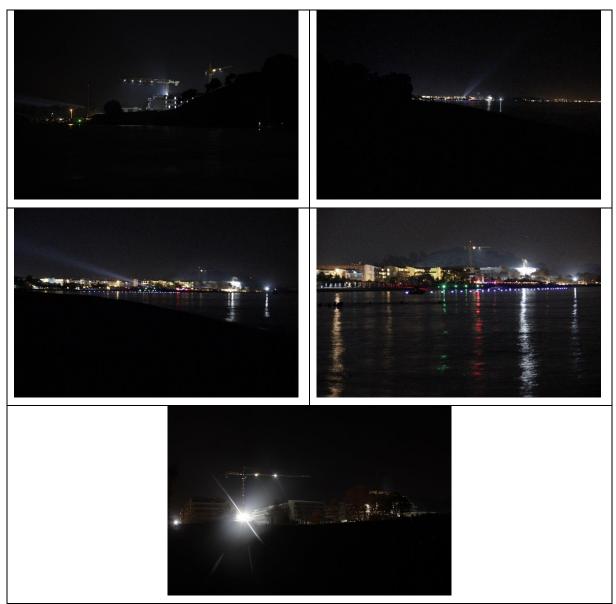


Fig.43. Fethiye SPA, Yanıklar. The new hotel construction at night. Aerial light shows by Liberty in 43b-c, green lights of the jetty in 43d.



Fig.44. Fethiye SPA, Yanıklar. Liberty Fabay creates extreme light and noise pollution with its beach bar and disco.



Fig.45. Fethiye SPA, Yanıklar. Bright lights installed at the newly enlarged area of Liberty Fabay causing heavy light pollution.

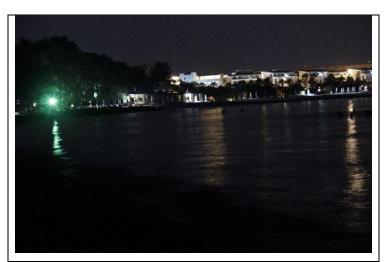


Fig.46. Fethiye SPA, Yanıklar. Bright spotlights on top of the front row of pavilions of TUI Barut, said to have been installed to deter immigrants. Another green light in the recreational area.



Fig.47. Fethiye SPA, Yanıklar. Lights of the Akmaz picnic area, facility still open at midnight. Note the unstacked sunbeds in 47b.



Fig.48. Fethiye SPA, Yanıklar. A group putting up a tent in the pristine section.



Fig.49. Fethiye SPA, Yanıklar. Children watching a movie right on the nesting beach at night.



Fig.50. Fethiye SPA, Yanıklar. Bright orange lights of a restaurant close to the sea. Note the acacia trees.



Fig.51. Fethiye SPA, Yanıklar. Tuana uses vegetation and shaders to conceal a problematic security light over its Tiki bar.



Fig.52. Fethiye SPA, Yanıklar. Dim lights of other facilities. Lykia Botanika's jetty in 52a-b, rod fishing in 52b-c.



Fig.53. Fethiye SPA, Akgöl. Dim lights of the Municipality's facility.



Fig.54. Fethiye SPA, Akgöl. A bright pink light over the Municipality's facility. Note rod fishing.



Fig.55. Fethiye SPA, Yanıklar. Vehicle tracks in the pristine section, close to the vehicle entrance point in mid-section.



Fig.56. Fethiye SPA, Akgöl. Vehicle tracks (possibly motorcycle) on the nesting beach.



Fig.57. Fethiye SPA. Fishing boats and speed boats. Note the nests in 57a (Liberty Fabay).

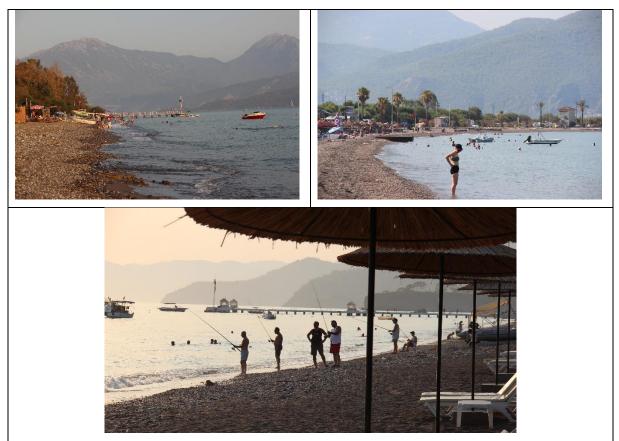


Fig.57 (continued). Fethiye SPA. Fishing boats and speed boats. Note the rod fishing in 57g.



Fig.58. Fethiye SPA, Yanıklar. Tents of campers in the pristine section.



Fig.59. Fethiye SPA, Yanıklar. Bonfire remains.



Fig.60. Fethiye SPA, Çalış. Litter on the beach.



Fig.60 (continued). Fethiye SPA, Çalış. Litter on the beach.



Fig.61. Fethiye SPA, Yanıklar. a-c) Ungulate droppings; d-f) Litter left behind by beach visitors.

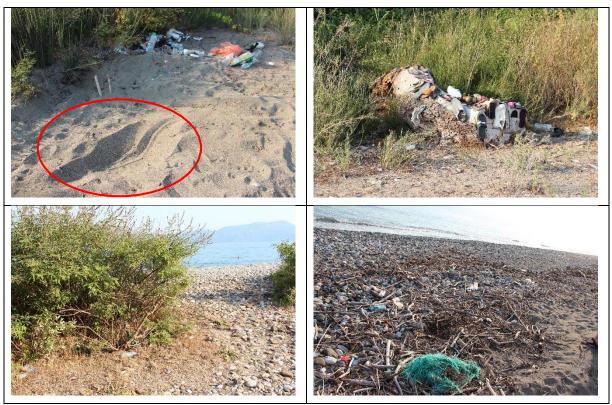


Fig.61 (continued). Fethiye SPA, Yanıklar. Litter left behind by beach visitors. Note the nest, and the surface grill buried under the sand for protection against predation (61g), a shrine made out of flip flops and shoes (61h), and fishing nets (61j).



Fig.62. Fethiye SPA, Yanıklar. A pipe draining directly into the channel bordering the construction site of the new hotel of Liberty Group, further contributing to habitat damage.



Fig.63. Fethiye SPA, Yanıklar. Mucilage on sea surface.



Fig.64. Fethiye SPA. Information kiosks in Çalış A (64a) and Akgöl (64b). The latter now used as a storage area for the beverages sold at the Ministry's facility.



Fig.65. Fethiye SPA, Yanıklar. Liberty Groups's own prism cages and the information signs on them.



Fig.66. Fethiye SPA, Yanıklar. A nest under a pavilion, protected by a prism cage (Liberty Fabay).





Fig.67. Fethiye SPA, Yanıklar. Nests properly caged against predation with subsurface grills.

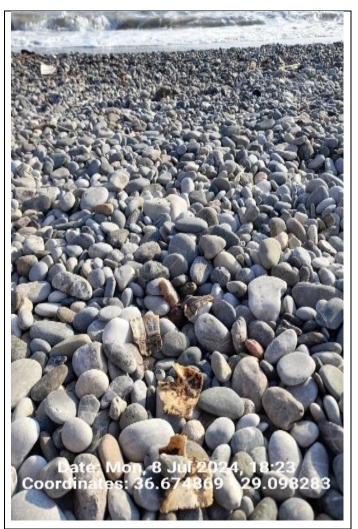


Fig.68. Fethiye SPA, Çalış B. Vehicle entrance to the nesting beach. Note the cages around.



Fig.69. Fethiye SPA. Strange cross shapes seen in a few locations, meaning and purpose unknown.

ANNEX 2: LOGGERHEAD SEA TURTLE (CARETTA CARETTA) CONSERVATION MONITORING IN PATARA SPA, TURKEY

Patara nesting beach description (Fig.1-2): The 12 km beach is split in a <u>north and south section</u> by Eşen River that meets the sea in the middle of the SPA. At its northern end, the beach is bordered by Özden River. There are 5 access points. The <u>North Beach</u> has an entry point at the Özden River outlet (<u>Özden Beach</u>) and another entry point nearby Eşen River (<u>Letoon Beach</u>). The <u>South Beach</u> has three entry points: one at the Eşen River mouth (<u>Çayağzı Beach</u>), one at the middle of the beach through the top of the dunes, and one at the south end of the beach (<u>Patara Main Beach</u>).

MEDASSET visited Patara SPA in July 2024 to assess and document the management and conservation status of the nesting beaches. The following presents the survey findings in relation to each of the measures under 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;

At the time of our survey, entry to the archaeological site at the southern end of the SPA (Patara Main Beach) was supervised only during the day. A watchman stood guard at the main beach entrance in almost complete darkness but did not hesitate to use a bright white light whenever he heard a sound. The Gendarmerie now monitors the site via solar-powered camera towers erected at two entry points—one at the top of the dunes (Fig.3a) and another at Çayağzı Beach (Fig.3b-c).

Despite a large number of people gathering at the top of the dunes to watch the sunset²⁵ (Fig.4a-f), the Gendarmerie arrived around 20:30 with a patrol car, using their lights and sirens to warn the crowd off the dunes²⁶, and waited until everyone left the area (Fig.5). Personal communication with the gendarmerie officers revealed that they disperse the crowd every night after 20:00 and conduct additional patrols around the dunes as needed throughout the night. The newly installed cameras on observation towers provide live, 360-degree monitoring of the area 24/7 (Fig.3a-c).

Although the protection and management of the South Beach, particularly around Patara Main Beach, have significantly improved, other sections appeared rather neglected in terms of protection.

The new borders of Patara SPA is finally shared online²⁷. All articles of the Master Development Plan for Patara can also be found online (in Turkish)²⁸.

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;

The facility on the southern end of Patara Main Beach, and Green Park directly behind the northern end of Özden Beach remain the only two permanent structures in the area. On the South Beach, a crane was still present in the restoration area but was not operating at night and had no lights on (Fig.6a-b). Entry to the archaeological site was extended until midnight, with the entire site illuminated by dim lights that did not reach the nesting beach. At the northern end, near Eşen River on Çayağzı Beach, makeshift structures and bungalows used by local fishermen had increased in number (Fig.3b,

²⁵ Vids/Dunes_Evening.mp4

²⁶ Vids/Dunes_Gendarm.mp4

²⁷ https://www.resmigazete.gov.tr/eskiler/2020/09/20200926-2.pdf and

https://webdosya.csb.gov.tr/db/mugla/duyurular/patara-ozel--8230-76375-20230221162221.jpg

²⁸ https://webdosya.csb.gov.tr/db/mugla/duyurular/patara-ozel--8230-76374-20230221162209.pdf

Fig.7a-d), with their lights impacting the nesting beach. Additionally, a shower stand was constructed (Fig.3b).

At the North Beach, the campsite at the Eşen River mouth on the Letoon Beach side was fully occupied (Fig.8a-d), despite the absence of permanent structures, indicating its use as an unofficial camping place. Abandoned wooden structures from the former SPA facility remain on Letoon Beach, now buried up to mid-height with sand, with one appearing to be used as a shelter (Fig.9a-c). Green Park at Özden Beach still stands deserted²⁹, with no confirmed plans regarding its future (Fig.10). A few shacks were erected at the northernmost part of the North Beach (Fig.11a-b).

The dunes along the South Beach appeared healthy, even though there has been no visible effort towards their restoration over the years. Wave erosion continues to affect the northern part of the South Beach (Fig.12a-f), altering the topography of the entire nesting zone in some areas (Fig.12d). Acacia trees planted along this section seem to have stabilised the sand, disrupting the dynamic nature of the dunes (Fig.12a).

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

Beach furniture is only present in front of the facility at Patara Main Beach³⁰. Sunbeds were somewhat stacked at night, leaving some passage for the sea turtles, but all were left within the nesting zone (Fig.13). Umbrellas continue to be a problem in this section, as they do not have fixed bases, allowing visitors to insert them into the sand as they please (Fig.14). The majority of the umbrellas for rent are kept on a table behind the nesting zone (Fig.15a-b). The lifeguard tower remains on the nesting beach (Fig.13, 14, 15, Fig.16), but no kayaks or boats were present. The vertical wooden walkway in front of the facility still extends to the beginning of the nesting zone. The Main Beach is now designated as a smoke-free area, with a special booth placed on the beach for smokers (Fig.15a, Fig.17).

People were also free to insert their personal umbrellas in other sections (Fig.12a-b, 12d, Fig.18a-c), except for Özden Beach where the sand is extremely hard to penetrate (Fig.19a-b).

(*iii*) prohibit illumination of the beach;

At the South Beach, the facility on Patara Main Beach was near dark (no photo available) and the only lights were used at the mouth of Eşen River, mostly coming from vehicles (Fig.20).

In the North Beach, people using the campsite on Letoon Beach were freely using lights on the side facing the river (Fig.8d), and lesser on the nesting beach (Fig.21a-b). Some buildings impacted Özden Beach with their lights (Fig.21b).

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

Rod fishing was observed near Eşen River (Fig.18c, Fig.21b) and Özden River (Fig.22). At the latter section, net fishing (Fig.8c) and fishing boats were also encountered (Fig.23a-b). Fishing nets were seen on the nesting beach near Letoon, posing serious threat to sea turtles (Fig.24a-b).

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

²⁹ Vids/GreenPark_Evening.mp4

³⁰ Vids/PataraMain_Morning.mp4

The only campers were seen at the camping site near Eşen River on Letoon Beach (Fig.8a-d).

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

At the time of our survey, horses were still being rented at the top of the dunes (Fig.3a, 25a-c). During our personal communication, the gendarmerie officers stated that the horse rentals are known by the Ministry of Culture and Tourism, and are subjected to partial permit from them -provided the horses do not take people on a ride along the nesting beach. A few horses were seen taking people all the way down to the nesting beach and then back up³¹ (Fig.25b-c), but none galloped along the beach. Beach survey next morning confirmed this information, upon observing horseshoe prints around a small section (Fig.26).

Five horses were seen galloping along Özden Beach and crossing the river (Fig.11a, Fig.27).

Several motorised vehicles and their tracks were seen on the nesting beach, in all sections except Patara Main Beach (Fig.8a-b, 12d, 18a-c, 20, Fig.28a-l). Patara Main Beach had no vehicle tracks or horseshoe prints (Fig.29a-b).

(vii) define fines for non-compliance with above regulations

Entry to the 20 sea turtle nesting beaches on the Mediterranean coast, including Patara, which are under the responsibility of the General Directorate of Nature Conservation and National Parks (DKMP) and the General Directorate for the Protection of Natural Assets, is banned from 20:00 to 08:00 between 15 May and 30 September. On these beaches, it is also prohibited to light bonfires and barbecues, set up tents, and drive vehicles. As of 2024, the administrative fine for those who violate these bans is 387,141 TL.

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

The team monitoring the SPA has been led by the same person for a long time, but they do not have the authority of enforcement. A single person from the monitoring team was seen dealing with the existing nests on Patara Main Beach early in the morning³². Nests along this section were properly marked and caged, but those in all other sections seemed largely unattended. Several two-day old sea turtle tracks at the northern part of the South Beach were not attended (Fig.30a-f) as there were no crossing marks on them, which the teams usually make to indicate they have been counted and recorded down (Fig.31). Some hatchling tracks were also visible during our evening survey, which should have normally been erased in order to effectively follow consecutive emergences (Fig.32a-d).

There seems to be no management on Letoon Beach, where visitors are able to enter the beach from several points. The entrance point near Green Park at the northern end of Özden River is still equipped with a tall sliding door, which was chained and locked at the time of our survey (Fig.33a-b).

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

³¹ Vids/Dunes_Horses.MOV

³² Vids/PataraMain_Morning.mp4

Construction works in Gelemiş village seem to have finished, with no new constructions in sight during our survey. Satellite images of the same location from 2003 and 2024 reveal the development in the region over the course of 21 years (Fig.34a-b).

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

Litter was seen on all sections of the SPA, although the least at Patara Main Beach. The amount of litter increases towards Çayağzı³³. Although the majority of litter is possibly washed ashore by the high tide (Fig.12a-b, 18b, 19b, 24a-b, 28i-k, 30a, Fig.35a-b), some were apparently left by daily visitors (Fig.36a-j). Thick ropes were seen at a few locations along Patara Main Beach (Fig.37a-b).

New bins were placed at the Main Beach (Fig.16, Fig.38), top of the dunes (Fig.3a), the entrance point by Eşen River (Fig.3b), and on Özden Beach (Fig.29a-b, Fig.39a-b).

The dunes were partly littered, mostly with cigarette ends and horse droppings (Fig.5, Fig.40). The gendarmerie officers also stated that the dunes are regularly cleaned by the Kaş Municipality.

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

Crab predation is problematic in the entire SPA (Fig.41a-e), as protective grills fail to protect the nests from crabs³⁴ (Fig.41c-e). Predated egg shells were seen in all sections including Patara Main Beach (Fig.42a-e). Dog tracks were seen in a few locations although they were not around predated nests (Fig.43). No hoof prints were observed this year.

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;

All of the nests around the facility on Patara Main Beach were protected with prism cages bearing signs and with protective grills underneath (Fig.16, 32b-d, 36i, Fig.44a-d). Over 55 cages were counted around the facility alone and some nests had sticks instead of cages (Fig.45a-d). A few cages were seen near the Eşen River on Çayağzı Beach, which did not have protective bases (Fig.24, 35a). No cages were seen along the North Beach this year.

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;

Even though the team monitoring Patara SPA has been led by the same person for many years, issues raised and emphasised in Article 3 suggests lack of manpower or finances to monitor the entire SPA equally and efficiently. The North Beach entirely lacked any sign of monitoring (marked tracks, sticks, cages, etc.).

³³ Vids/PataraMain_CayagziEnd.mp4

³⁴ Vids/PataraMain_Cage_Crab.mp4

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;

Wooden posts installed on the entire South Beach still do not reflect the actual nesting zone as sea turtles are able to crawl for over 65 metres and even well into the vegetation, as clearly proven by the presence of nests behind these posts³⁵ (Fig.30d, 32c-d, 44a, Fig.46). There are still no wooden posts and a serious lack of information signs along the North Beach, with the only signage present at the vehicle entrance point at Özden Beach (Fig.33a).

Even though several new signs were erected in the region (Fig.32c-d, 38, 44a, 45b), beach users do not comply with the rules and regulations. Umbrellas rented by the facility at Patara Main Beach (Fig.15a-b) must have fixed bases, and beach visit should strictly be prohibited from inserting umbrellas into the sand.

Old information signs at the SPA still remain (Fig.17, 28a, 28d, 33a, Fig.47a-d), and many of the newly installed ones have fallen on the beach³⁶ (Fig.30d, Fig.48a-b).

The information kiosk near the facility at Patara Main Beach seems to be only used as a storage area for cages and some other stuff, instead of serving as an actual information providing spot (Fig.49a-b).

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;

Although the local community and visitors have at least basic knowledge about the sea turtles, they do not seem to be involved in the conservation and management studies.

Other observations:

• Eşen River seemed murky and polluted (Fig.50a-d).

³⁵ Vids/MainBeach_HatchlingsZoning.mp4

³⁶ Vids/PataraMain_Cage_Crab.mp4

TABLES

Table-1. GPS data of important locations in Patara SPA. Records were taken by GPS Coordinates, developed by Fundroid 3000, with an accuracy of 8-14 m. (* = added or updated in 2023)

	COORDINATES	DEFINITION
PATARA	36°14'55"N – 29°18'56"E	Southern end of the SPA
	36°15'17.42"N - 29°18'49.89"E	Concealed signs at the parking area on Patara Main Beach
	36°15'12.51"N - 29°18'44.58"E	Signs at the entrance of Patara Main Beach
	36°15'55.41"N - 29°17'48.93"E	Approximate entrance point at the top of the dunes
	36°16'13.4"N - 29°18'11.1"E *	
	36°16'21.7"N - 29°18'53.7"E	Entrance point for the "secret" passageway to the beach
ÇAYAĞZI	36°17'35.62"N - 29°15'45.50"E	The 3 signs at Çayağzı entrance & wooden posts
	36°17'37.04"N - 29°15'48.88"E	Entrance point at Çayağzı and the information sign
LETOON	36°18'00.98" N - 29°15'51.79"E	Beginning of section (Eşen River mouth)
	36°17'45.29"N - 29°15'35.69"E	Abandoned wooden structures on Letoon Beach (former SPA kiosk)
ÖZDEN	36°19'43.97"N - 29°13'34.58"E	Permanent barrier near Green Park, preventing vehicle entrance to the beach
	36°19'43"N - 29°13'31"E	Northern end of the SPA

MAPS & PHOTOS

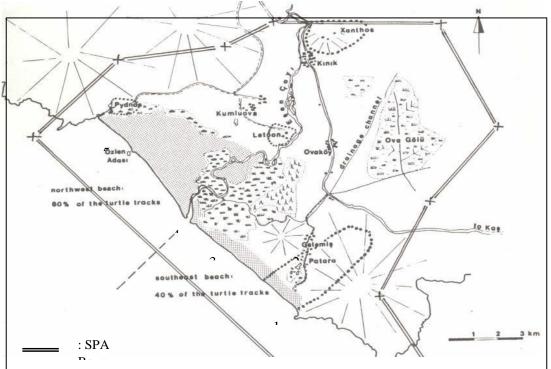


Fig.1. Patara SPA: 1) Patara main beach, 2) Entry point via sand dunes, 3) Çayağzı Beach (Eşen River outlet at the north edge of the south beach), 4) Letoon Beach (Eşen River outlet at the south end of the north beach), and 5) Özden Beach (next to Özden River outlet). *Map Source: Baran I., and M. Kasparek. 1989. Marine Turtles Turkey: Status Survey 1988 and Recommendations for Conservation and Management. WWF, Heidelberg, 123 + iv pp*



Fig.2. Patara SPA Satellite Map. White arrow: construction site of summer house village. "a": new second road connecting villas and Gelemiş village. "b:" is archaeological site fee collection point with daytime vehicle barrier. No. 1-5 are entry points: 1) Patara main beach entry point, snack bar & beach furniture; 2) Entry point via sand dunes, connecting the beach with summer houses; 3) Çayağzı Beach entry point; 4) Letoon Beach entry point & abandoned SPA information kiosk; 5) Özden Beach entry point, Patara Green Park (bar, camping site – closed since 2021) (Özden River outlet). Eşen River outlet lies between No.3&4.



Fig.3. Patara SPA, South Beach. Solar-powered camera towers erected at two entry points, providing live-feed 24/7 at full 360 degrees: a) Patara Main Beach (note the horses and the bin); b) Çayağzı Beach (note the new shacks, the newly installed showers, and the bin).



Fig.4. Patara SPA, South Beach. A large crowd of visitors at the dunes around sunset.



Fig.5. Patara SPA, Patara Main Beach. Gendarmerie lights warding people off the dunes at 20:30.



Fig.6. Patara SPA, Patara Main Beach. The crane at the restoration area behind the beach, not operational at night.



Fig.7. Patara SPA, Çayağzı Beach. Makeshift structures used by the locals, more in number this year.



Fig.8. Patara SPA, Letoon Beach. Camping place at Eşen River mouth. Note the uncontrolled vehicle entry (a, b), people sitting at tables on the beach (b, d), net fishing (c), and bright lights at night (d).



Fig.9. Patara SPA, Letoon Beach. Abandoned wooden structures of the former SPA facility, now partly covered with sand, and one seemingly used as a shelter.

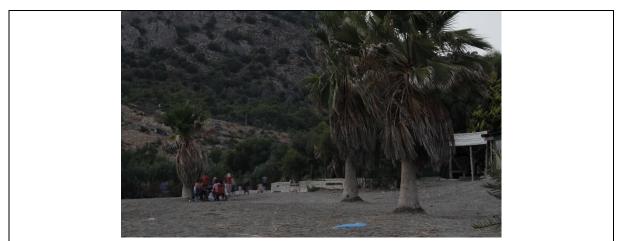


Fig.10. Patara SPA, Özden Beach. Deserted structures of Green Park.



Fig.11. Patara SPA, Özden Beach. Shacks erected at the northern side of the river. Note the horses (a).





Fig.12. Patara SPA, South Beach. Wave erosion along the northern part. Note the driftwood and litter carried ashore by tidal waves, umbrellas inserted into the sand, a sea turtle that managed to climb up the eroded beach (c), a motorcycle and a stray dog by the wooden post marking nesting zone (d).



Fig.13. Patara SPA, Patara Main Beach. Sunbeds in the nesting zone, somewhat stacked (at 05:45 am).



Fig.14. Patara SPA, Patara Main Beach. Visitors with their personal umbrellas inserted into the sand.



Fig.15. Patara SPA, Patara Main Beach. Umbrellas folded and stacked on a table. Note the smoking area to the rear of umbrella renting spot (a).



Fig.16. Patara SPA, Patara Main Beach. The lifeguard tower and bins.



Fig.17. Patara SPA, Patara Main Beach. A booth for smokers.



Fig.18. Patara SPA. Usage of personal umbrellas at Letoon Beach (a, b) and Çayağzı Beach (c). Note the uncontrolled vehicle entrance (a, c) and the fishing rods (c).



Fig.19. Patara SPA, Özden Beach. Beach visitors without umbrellas.



Fig.20. Patara SPA, Çayağzı Beach. Light usage at Eşen River mouth at night.



Fig.21. Patara SPA, Letoon Beach. Light usage on the nesting beach. Note the fishing rods and the lights coming from some structures at the hill overseeing Özden Beach (b).



Fig.22. Patara SPA, Özden Beach. Rod fishing in the evening.



Fig.23. Patara SPA, Özden Beach. Fishing boats near Özden River.



Fig.24. Patara SPA, Letoon Beach. Fishing nets found near a nest on the beach.



Fig.25. Patara SPA, Patara Main Beach. Horses being rented at the top of the dunes and taking people down to the beach.



Fig.26. Patara SPA, South Beach. Horse tracks at a limited location in front of the dunes.



Fig.27. Patara SPA, Özden Beach. Horses galloping along the beach and crossing Özden River.



Fig.28. Patara SPA. Motorised vehicles and their tracks at Çayağzı Beach (a, b, d), Letoon Beach (c).



Fig.28 (continued). Patara SPA. Motorised vehicles and their tracks at several locations. Çayağzı Beach (e,f,g,i,j)l, Letoon Beach (h,k).



Fig.29. Patara SPA, Patara Main Beach. A nesting beach free of vehicle tracks and/or horse riding.



Fig.30. Patara SPA, South Beach. Unattended sea turtle tracks to the north of main dune area.



Fig.31. Patara SPA, Patara Main Beach. Attended sea turtle tracks to the south of main dune area. Note the crossing mark on the track, indicating it has been seen and recorded.



Fig.32. Patara SPA, South Beach. Unattended hatchling tracks to the north of main dune area.



Fig.33. Patara SPA, Özden Beach. Chained and locked barrier at the beach entrance point. Note the old Ministry warning sign (a).



Fig.34. Patara SPA. Satellite imagery revealing the development of constructions in Gelemiş village from 2003 (a) to 2024 (b).



Fig.35. Patara SPA. Litter possibly washed ashore by the high tide.

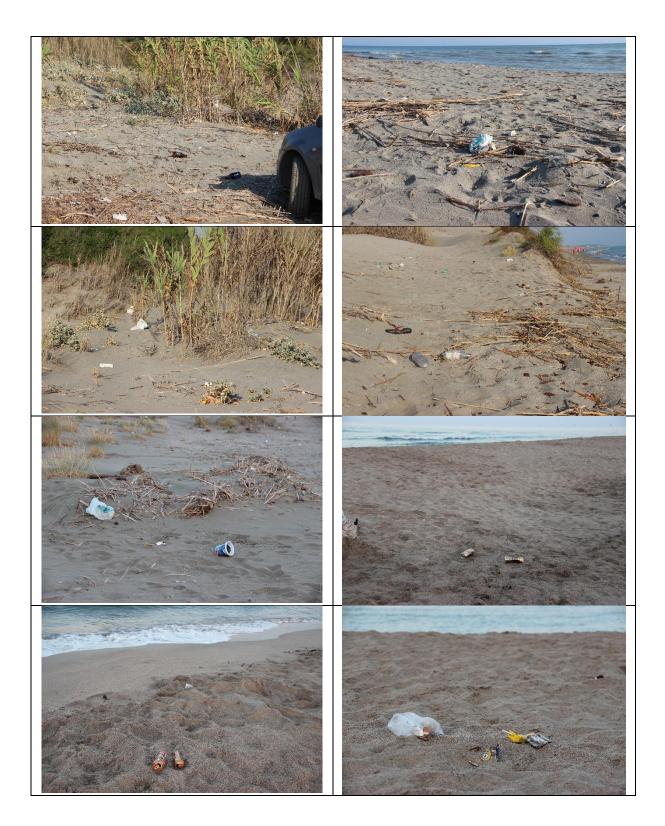




Fig.36. Patara SPA. Litter apparently left by daily visitors: food and beverage containers, diaper, plastic bags, a broken umbrella, and a pallet.



Fig.37. Patara SPA, Patara Main Beach. Thick ropes on the beach, purpose unknown.



Fig.38. Patara SPA, Patara Main Beach. Bins next to the sea turtle beach signage.



Fig.39. Patara SPA, Özden Beach. Bins brought by Kaş Municipality.

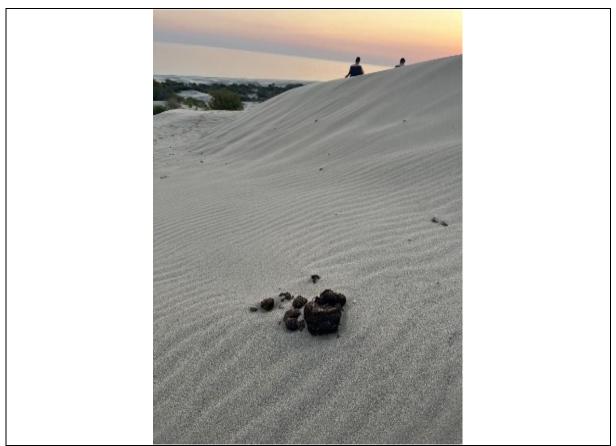


Fig.40. Patara SPA. Horse droppings at the top of the dunes.





Fig.41. Patara SPA. Crab predation, even when caged with protective grills at the base.



Fig.42. Patara SPA. Predated egg shells at Letoon (a), Çayağzı (b), and Özden (c, d) beaches.



Fig.42 (Continued). Patara SPA. Predated egg shells at Patara Main Beach.



Fig.43. Patara SPA, Patara Main Beach. Dog tracks along the beach, unrelated to predation.

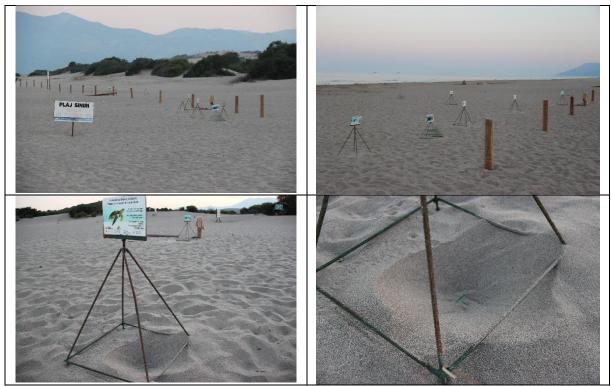


Fig.44. Patara SPA, Patara Main Beach. Prism cages with signs and protective surface grills.



Fig.45. Patara SPA, Patara Main Beach. Sticks marking the nests instead of prism cages.



Fig.46. Patara SPA, Patara Main Beach. A nest behind wooden posts supposedly marking the nesting zone.



Fig.47. Patara SPA, South Beach. Old signage still in place at the top of the dunes (a) and Patara Main Beach (b-d).



Fig.48. Patara SPA, Patara Main Beach. Newly installed signs fallen on the beach.



Fig.49. Patara SPA, Patara Main Beach. Information kiosk used as merely as a storage area.



Fig.50. Patara SPA. Eşen River, murky and polluted.

ANNEX 3: REFERENCES

- Canbolat, A.F. 2004. A review of sea turtle nesting activity along the Mediterranean coast of Turkey. Biol. Conserv. 116: 81-91
- Bann C. & E. Başak. 2013. Economic Analysis of Fethiye-Göcek Special Environmental Protection Area. GEF-funded 2009-13 Project PIMS 3697: Strengthening the System of Marine & Coastal Protected Areas of Turkey. Technical Report Series 11.
- Başkale E., Y. Katılmış, M. Azmaz, D. Sözbilen, F. Polat, M. Lambropoulos, C. Fellhofer-Mihcioğlu, M. Stachowitsch, Kaska, Y. 2016. Monitoring and Conservation of Loggerhead Turtle's nests on Fethiye Beaches, Turkey. Biharean Biologist 10(1):20-23
- Fellhofer-Mihcioglu C., Rameder E., Lambropoulos M., Stachowitsch M., Atatunc K., Canbolat A.F. 2015. The westernmost Mediterranean record of a nesting green turtle, Chelonia mydas: Fethiye beach, Turkey, Aegean sea. In: Kaska, Y., Sonmez, B., Turkecan, O., Sezgin, C. (Eds). Book of abstracts of 35th Annual Symposium on Sea Turtle Biology and Conservation. MACARTpress, 250pp. Turkey.
- Ilgaz, C., Türkozan, O., Özdemir, A., Kaska, Y. & M. Stachowitsch. 2007. Population decline of loggerhead turtles: two potential scenarios for Fethiye beach, Turkey. Biodiversity and Conservation 16: 1027 – 1037.
- Kaska, Y., Ilgaz, Ç., Özdemir, A., Baflkale, E., Türkozan, O., Baran, & M. Stachowitsch. 2006. Sex ratio estimations of loggerhead sea turtle hatchlings by histological examination and nest temperatures at Fethiye beach, Turkey. Naturwissenschaften, 93:338-343.
- Katilmis, Y., Baskale, E., Polat, F., Azmaz M., & Y. Kaska. 2013. Decline of loggerhead turtle nests on Fethiye beach, Turkey. In: Tucker, T., Belskis, L., Panagopoulou, A., Rees, A., Frick, M., Williams, K., LeRoux, R., and Stewart, K. compilers. 2013. Proceedings of the Thirty-Third Annual Symposium on Sea Turtle Biology and Conservation. NOAA Technical Memorandum NOAA NMFS-SEFSC-645: 263 p
- Margaritoulis, D., R. Argano, I. Baran, F. Bentivegna, M.N. Bradai, J.A. Camiñas, P. Casale, G. De Metrio, A. Demetropoulos, G. Gerosa, B.J. Godley, D.A. Haddoud, J. Houghton, L. Laurent & B. Lazar. 2003. Loggerhead turtles in the Mediterranean Sea: present knowledge and conservation perspectives. In: A. Bolten & B E. Witherington (Eds.). Loggerhead Sea Turtles. Smithsonian Books, Washington pp. 175-198.
- Oruç, A., Türkozan O. & H. Durmuş. 2003. In the Tracks of Marine Turtles: Assessment of Marine Turtle Nesting Sites 2003. WWF, Istanbul. 96pp.
- Türkozan, O. 2000. Reproductive ecology of the loggerhead turtle, *Caretta caretta*, on Fethiye and Kızılot beaches, Turkey. Chelonian Conservation and Biology 3:686-692.
- Yılmaz, C. ,Türkozan, O., F. Bardakçı. 2008. Population genetic structure of loggerhead turtles, *Caretta caretta*, in Turkey based on mtDNA sequences, 3rd Mediterranean Conference on Marine Turtles.

Patara: REPORTS & COMPLAINT SUBMITTED TO THE BERN CONVENTION

Available online at www.medasset.org or www.coe.int

- T-PVS (96) 53. A.MEDASSET: Conservation of loggerhead turtles, *Caretta caretta*, and construction projects on the beach of Patara, Turkey.
- T-PVS (96) 53. MEDASSET: Conservation of loggerhead turtles, *Caretta caretta*, and construction projects on the beach of Patara, Turkey. (Brief Update on action to "Save Patara" 1989-1996).
- T-PVS (97) 45. MEDASSET: Marine turtle conservation in Patara, Turkey.
- T-PVS (98) 49. MEDASSET: Marine turtle conservation in Patara, Turkey.
- T-PVS (99) 69. MEDASSET: Caretta caretta in Patara, Turkey.
- T-PVS (2000) 57. MEDASSET: Conservation of the marine turtle, Caretta caretta, in Patara Turkey.
- T-PVS (2001) 72. MEDASSET Review of nature conservation situation in Patara SPA, Turkey.
- T-PVS/Files (2002) 14 MEDASSET. Update report and review of nature conservation measures in Patara SPA, Turkey.
- T-PVS/Files (2003) 12 MEDASSET. Update report and review of nature conservation measures in Patara SPA, Turkey.
- T-PVS/Files (2004) 13 MEDASSET. Update report and review of nature conservation measures in Patara SPA, Turkey.

(No T-PVS reference) (2007) MEDASSET. Update report and review of nature conservation measures in Patara SPA, Turkey.

- (No T-PVS reference). (2009)MEDASSET. Update Report and review of nature conservation measures in Patara SPA, Turkey.
- (No T-PVS reference) Complaint (2012/9) MEDASSET. Complaint to the Bern Convention: construction of summer houses within Patara SPA, Turkey.
- T-PVS/Files (2013) 09 MEDASSET. Update on loggerhead sea turtle (*Caretta caretta*) conservation monitoring in Patara SPA, Turkey.
- T-PVS/Files (2014)16 MEDASSET. Update on loggerhead sea turtle (*Caretta caretta*) conservation monitoring in Patara SPA, Turkey.
- T-PVS/Files (2015) 34 MEDASSET. Update on loggerhead sea turtle (*Caretta caretta*) conservation monitoring in Patara SPA, Turkey.

T-PVS/Files (2016) 35. MEDASSET Update on loggerhead sea turtle (*Caretta caretta*) conservation monitoring in Patara SPA, Turkey.

T-PVS/Files (2017) 29 . MEDASSET Update on loggerhead sea turtle (*Caretta caretta*) conservation monitoring in Patara SPA, Turkey.

T-PVS/Files (2018) 33. MEDASSET Update on loggerhead sea turtle (*Caretta caretta*) conservation monitoring in Patara SPA, Turkey.

T-PVS/Files (2019). MEDASSET Update on loggerhead sea turtle (*Caretta caretta*) conservation monitoring in Patara SPA, Turkey.

2020 – 2023 Patara related reports submitted in combination with Fethiye, please see Fethiye list.

Fethiye: REPORTS & COMPLAINT SUBMITTED TO THE BERN CONVENTION

Available online at www.medasset.org or www.coe.int

- T-PVS/Files (2023) 39. Update Report. Loggerhead Sea Turtle (Caretta caretta) Conservation Monitoring in Fethiye and Patara SPAs, Turkey.
- T-PVS/Files (2022) 34. Update Report. Loggerhead Sea Turtle (Caretta caretta) Conservation Monitoring in Fethiye and Patara SPAs, Turkey.
- T-PVS/Files (2021) 62. Update Report. Loggerhead Sea Turtle (*Caretta caretta*) Conservation Monitoring in Fethiye and Patara SPAs, Turkey.
- T-PVS/Files (2020) 55. Update Report. Loggerhead Sea Turtle (*Caretta caretta*) Conservation Monitoring in Fethiye and Patara SPAs, Turkey.
- T-PVS/Files (2019) 28. Update Report. Loggerhead Sea Turtle (*Caretta caretta*) Conservation Monitoring in Fethiye and Patara SPAs, Turkey
- T-PVS/ Files (2018) 33 MEDASSET. August 2018. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye SPA, Turkey.
- T-PVS/Files (2017) 29 MEDASSET. August 2017. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye SPA, Turkey.
- T-PVS/Files (2016) 35 MEDASSET. October 2016. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye SPA, Turkey.
- T-PVS/Files (2015) 34 MEDASSET. September 2015. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye SPA, Turkey.
- T-PVS/Files (2014) 16. MEDASSET. March & August 2014. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye SPA, Turkey.
- T-PVS/Files (2014) 16. MEDASSET. March & August 2014. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye SPA, Turkey.
- T-PVS/Files (2013) 9. MEDASSET. March & September 2013. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye, Turkey.
- T-PVS/Files (2012) 42. MEDASSET. September 2012. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye, Turkey.
- (No T-PVS reference). MEDASSET. December 2011. Update on Loggerhead sea turtle (Caretta

caretta) Conservation Monitoring in Fethiye, Turkey.

- (No T-PVS reference). MEDASSET. April 2011. Destruction of Sea Turtle Nesting Beaches in Fethiye SPA, Turkey.
- (No T-PVS reference). MEDASSET. March 2011. Update on Loggerhead sea turtle (*Caretta caretta*) Conservation Monitoring in Fethiye, Turkey.
- T-PVS (2010) 08 E. MEDASSET. March & September 2010. Implementation of Recommendation No. 66 (1998) on the conservation status of some nesting beaches for marine turtles in Turkey.
- (No T-PVS reference). MEDASSET. Sept 2009. Complaint to Bern Convention addressing the threats facing the loggerhead sea turtle (*Caretta caretta*) nesting beaches in Fethiye, Muğla province, Turkey.
- (No T-PVS reference). MEDASSET. September 2008. Sea turtle nesting beach degradation in Çirali and Fethiye, Turkey.

RELEVANT RECOMMENDATIONS OF THE STANDING COMMITTEE:

Recommendation No 8 (1987) on the protection of marine turtles and their habitat

- Recommendation No. 12 (1988)) concerning the protection of important turtle nesting beaches in Turkey
- Recommendation No. 24 (1991) on the protection of some beaches in Turkey of particular importance to marine turtles
- Recommendation No. 54 (1996) on the conservation of Caretta caretta at Patara
- Recommendation No. 66 (1998) on the conservation status of some nesting beaches for marine turtles in Turkey
- Recommendation No. 182 (2015) on the conservation of *Caretta caretta* and its habitat at Patara (Turkey)
- Recommendation No. 183 (2015) on the conservation, management, and restoration of Fethiye nesting beaches (Turkey)