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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

39th meeting
Strasbourg, 3-6 December 2019

Specific Sites - Files open

**Follow-up of Recommendations Nos. 182 and 183
(2015) on Presumed degradation of nesting beaches
in Fethiye and Patara SPAs
(Turkey)**

- REPORT BY THE COMPLAINANT -

*Document prepared by
MEDASSET - Mediterranean Association to Save the Sea Turtles, Greece*

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- August 2019 –

UPDATE REPORT BY THE NGO

Marine Turtle Conservation in the Mediterranean

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

30 August 2019

Document presented by

MEDASSET - the Mediterranean Association to Save the Sea Turtles

*for the 39th Standing Committee Meeting of the Contracting Parties to the Convention on
the Conservation of European Wildlife and Natural Habitats (Bern Convention)*

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LOGGERHEAD SEA TURTLE (*CARETTA CARETTA*) CONSERVATION MONITORING IN PATARA SPA, TURKEY

MEDASSET hereby submits an update report to the second Bureau Meeting of the Bern Convention (September 2019) on the conservation status of sea turtle nesting beaches in Patara Specially Protected Area (SPA) in Turkey.

Contents:

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SUMMARY & RECOMMENDATIONS

In 2019, there was no considerable improvement in the conservation status of the nesting beaches and conservation problems remain: lack of management staff and insufficient nest monitoring, lack of zoning and information signs, vehicle access, horse-riding, camping, litter, derelict facilities on beaches, etc. There were no signs of new efforts or conservation activities, with the exception of sunbed stacking at night and installation of a new sign. **The SPA remains unmanaged and inadequately protected. To date, Recommendation No. 182 (2015) has not been implemented.**

At the same time, construction of the 300-312 summer house development in the 3rd Degree Archaeological site of the SPA continues, and another 20 buildings seem to have been built without permission in the SPA, benefiting from a recent construction law. Once completed the summer population will increase by at least 120% (current population during the summer being ca. 1000). It is evident that the pressures and disturbances presently occurring will increase likewise.

MEDASSET calls upon the Turkish authorities to:

- Urgently implement Recommendation No. 182 (2015). Revise the SPA management plan and implement a comprehensive and updated action plan before May 2020 that will allocate necessary financial and human resources for sea turtle monitoring of the entire beach and for the SPA management and rules enforcement, and include measures aiming to solve the documented conservation problems on the nesting beaches and sand dunes, strengthen management and rules enforcement, and ensure adequate protection of the natural and archaeological site.
- Address the concerns raised in MEDASSET's complaint regarding the 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.
- Provide an update on the ongoing redetermination of the SPA's zoning and ensure that the entire nesting beach (north and south sections), the nearshore areas and the entire sand dune areas are appropriately zoned and protected.

MEDASSET calls upon the Bern Convention Standing Committee to:

- Discuss the case file at the 39th Meeting of the Standing Committee.
- Encourage Turkish authorities to provide further information on the case as requested above
- Urge Turkish authorities to implement Recommendation No. 182 (2015) before May 2020.

BACKGROUND

For a full description of the site and of the case background see MEDASSET 2012 Complaint.

Patara Specially Protected Area (SPA) is a unique archaeological site of global importance and a protected nature site that includes coastal forest, wetlands, shifting sand dunes and a loggerhead sea turtle (*Caretta caretta*) nesting beach that is among the most important rookeries for the species in Turkey. Patara's river and wetland systems created the most important and largest dune ecosystem on the Turkish Mediterranean coast.

Threats to Patara were first raised by MEDASSET in 1988 and the case has since been supported by others at the Standing Committee Meetings of the Bern Convention. In 1996 a Case File was opened and the 9-measure Recommendation No. 54 was adopted. MEDASSET submitted further detailed and specific recommendations in 1998 (T-PVS (98) 49). The File was closed in 2001 despite some remaining problems and Turkey was asked to continue reporting progress. MEDASSET continued to monitor the conservation status of Patara and submit reports to the Standing Committee.

In September 2012 MEDASSET submitted a complaint (2012/9) on a large scale summer house construction project by 3 housing cooperatives within Patara SPA's 3rd Degree Archaeological protected area (Fig. 2-3) and on the failure of the current land use and management plan to secure adequate protection for both the natural and archaeological site. As described in the complaint, the project (450-700 villas for a population of around 3000 people, according to 2011 press articles) will impact the loggerhead nesting population, by increasing disturbances and habitat damage. The complaint also presents an interpretation of the multiple changes to the zoning and the Patara SPA management plan, which made construction within the the 3rd Degree Archaeological area possible, and shows a clear bias towards construction interests and disregard of expert opinion provided by archaeologists and planners since 1978. The original plan did not allow new permanent constructions in the 3rd Degree Archaeological protected area, apart from those necessary to cater to the needs of the small village, and envisaged the development of low-impact, small-scale tourism facilities, with the aim to maintain cultural, historical, archaeological and natural components of the site. The large scale summer house construction project within Patara SPA is incompatible with the Bern Convention Recommendations No. 12 (1988), No. 24 (1991), No. 54 (1996) and No. 66 (1998). No information on an environmental impact assessment (EIA) or carrying capacity study prior to the approval of the project is available. To our knowledge the approval of the construction project has not been matched with an updated plan to ensure increased resources to manage and mitigate impacts of the much higher number of users of the protected area.

In 2013, 27 villas and swimming pools were completed (by Ozlenen Deniz Housing Cooperative) and inadequate management of the nesting beach was documented (T-PVS/Files 2013 9). In December 2013, a case file was opened to address the complaint (together with the complaint regarding Fethiye SPA) and to encourage Turkish authorities "to work towards greater accountability, cooperation and responsibility". No information, response or update was provided by Turkish authorities before or during the Standing Committee Meeting.

In 2014, constructions continued and inadequate management of the nesting beach and new beach development was documented (T-PVS/Files 2014 16). Articles in the Turkish press (Annex 1 of T-PVS/Files 2014 16) reported that in total 300 villas will be built inside the protected area by the 3 Cooperatives and that the request of one of the cooperatives to exchange their land for lands outside the protected area was not accepted by authorities. The government stated that the summer house development is "2 km away from the beach" and at the "opposite direction" of the 1st Degree archaeological site (T-PVS/Files 2014 25). In MEDASSET's view the development site is linked to both the nesting beach and the archaeological site and cannot be viewed as a separate or isolated section of the SPA. To the best of our knowledge, the development is 1 km from the beginning of the sand dunes and 1.5 km from the nesting site. In addition, the government report did not address the concerns raised in the complaint regarding an EIA, carrying capacity study and management of the associated impacts related to the increased users and businesses that will result from this development. In December 2014, the Standing Committee decided to conduct an on-the-spot appraisal in view of identifying a set of recommended actions for consideration of the Committee at its 2015 meeting.

In 2015, the 27 new summer houses were inhabited and new foundations were laid in the cooperatives' land inside the 3rd Degree Archaeological area. A second road connecting the

development to Gelemis/Patara village was asphalted. Official information was not available about the final number of summer houses to be constructed, however, during the Bern Convention's on-the-spot appraisal on 28 July 2015 an official stated that in total 312 summer houses will be constructed. As regards the status of the nesting beaches, management and conservation problems remained unsolved in 2015, such as lack of guarding and access control, poor beach furniture management at night, littering, lack of information signs, etc. In December 2015, the Standing Committee, alarmed by the findings of the on-the-spot assessment in July 2015 which confirmed MEDASSET's reports, adopted Recommendation No. 182 (2015), asking Turkey to take urgent action to improve management and conservation of Patara.

In 2016, 2017 and 2018, Rec. No. 182 (2015) was not implemented and there was no significant improvement in the conservation status of the nesting beaches and management problems remained, such as lack of local management staff and insufficient nest monitoring personnel, lack of zoning and information, severe vehicle access problems, camping, litter, etc. At the same time, construction of the summer house development in the 3rd Degree Archaeological site of the SPA continued.

2019 UPDATE

Patara nesting beach description (Fig. 1-2): the 12 km beach is split in a north and south beach by the Esen river that meets the sea in the middle of the SPA. At its northern end the beach is bordered by the Özden river. There are 5 access points. At the North beach there is an entry point at the Özden river outlet (Özden beach) and another entry point at the Esen river (Letoon beach). At the South beach there are three entry points: at the mouth of the Esen river (Çayağzı beach), at the middle of the beach on the top of the dune, and at the south end of the beach (Patara main beach)

MEDASSET visited Patara SPA in August 2019 to assess and document the conservation situation on 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;

No local management unit, such as guards or rangers, were present to enforce regulations and fines in the protected area. "Zabita"¹ officers were seen in the early morning and late afternoon (Fig. 4). However, there is seemingly little to no enforcement – officers observed camping at the dunes, and vehicles at the Esen river mouth setting up for barbecues in late afternoon/evening, but there was no apparent action taken.

To our knowledge there was no improvement in Patara's legal protection or management. In contrast, in the framework of an ongoing process to re-determine the SPA's zoning launched in 2017, a very small part of Patara's sand dunes was included in a new "Strictly Protected Zone", according to the maps available for the SPA section belonging to the Antalya region (section south of Esen river). Maps of the new zoning of the SPA section under Mugla region's jurisdiction were not available. The status of the re-zoning process is unknown and a full update by authorities is required.

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;

At Letoon Beach, unused and derelict SPA facilities are still present (Fig. 5). A small fishing community is set up with caravans, tents and other vehicles at the river mouth. An old fence line is still visible, with posts and old wire still marking a clear limit between beach and dune (Fig. 6).

¹ "Zabita" is a type of police force that is not permitted to carry a gun, affiliated to the Ministry of Internal Affairs, working under the local municipality, and usually in charge of public order & safety. Their enforcement authority is limited, but they can implement fines, check permits & licenses, and play a part in law enforcement.

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

Visitors who bring their own beach umbrellas can insert them in the nesting area, as zoning or delimitation of the nesting zone does not exist along the 12 km beach, with the exception of the area surrounding the beach bar at Patara main beach area.

At Patara main beach, it seems visitors who bring their own sunbeds and parasols can place them in any area they wish (Fig. 7). There are still only three old wooden posts marking the nesting zone and two new signs were placed within the sunbed zone, though their purpose is unclear. The wooden posts are approximately 40-50 m from the high water line and nests were seen on both sides of the markers, hence it seems zoning remains inaccurate (nesting in Patara occurs 10-80 m from the waterline²) (Fig.8-9). There are approximately 450 sunbeds split into 4 rows and 150 parasols are available to rent that are either already installed or can be inserted in the sand by visitors. These cover a stretch approximately 100 m long and 25 m wide (Fig. 10). Lifeguards stack the sunbeds in the evening (18:30), but these remain close to the water line (Fig. 11-12). Furthermore, access is not controlled and people move and use the sunbeds after the permitted time which is 8pm (Fig. 13). Forming additional barriers for nesting turtles trying to reach the nesting zone, a lifeguard tower, and boardwalks are permanently placed on the nesting beach, a boat and kayaks were left on the beach through the night (Fig. 11-16). A volleyball pitch is also used on the nesting beach, posing a further threat to nests (Fig. 14). At the back of the restaurant, there is a shower block and toilets. Water from the shower drains onto the nesting beach at the base of oleander plants (Fig. 17).

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

Vehicle access has not been restricted and vehicles or tracks were observed along most beach sections (Fig. 18-23).

Access is possible via the 2 entry points at the Esen river, and via the entry point at the top of dunes (by quads and motorcycles, not standard cars). At Çayağzı and Letoon, there are no obstructions to beach access, with vehicles and tracks seen (tractors, motorbikes, scooters) on the river mouth and on the nesting beach during the day and late afternoon. At Özden, a chain blocks access to the beach and a car park is situated behind the camp site. However, the section in front of the camp is managed and cleaned with a tractor type vehicle; motorbikes and scooters can access the beach. During the day, the main road to Patara beach (and the archaeological site) is controlled for fee collection but the barrier is open between 19:00 and 8:00 and access is unrestricted at night.

(iv) prohibit illumination of the beach;

At Patara main beach, one street lamp in the parking area was visible from top of the nesting beach though no evidence of hatchling disorientation was witnessed. Between Patara main beach and the dunes entry point, it is likely that once the summer house village is completed, light pollution may increase. At Çayağzı and Letoon, small fishing camps had limited lighting at the river mouth. At Özden, lights from the camp site are visible from the beach; whilst these have limited impact, more shading would make this have a lesser impact.

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

At Çayağzı and Letoon, seine fishing from the beach was observed.

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

² Yerli, S. & F. Demirayak. 1996. Marine Turtles in Turkey, A survey on nesting site status. WWF & DHKD. 129pp.
T.C. Çevre Ve Şehircilik Bakanlığı Tabiat Varlıklarını Koruma Genel Müdürlüğü. 2012. Patara Özel Çevre Koruma Bölgesi Tür ve Habitat İzleme Projesi Kapsamında Patara Kumsal Alanında Deniz Kaplumbağaları (*Caretta caretta*, *Chelonia mydas*) ve Nil Kaplumbağası (*Trionyx triunguis*) Popülasyonlarının Araştırılması İzlenmesi ve Korunması Projesi Final Rapor Kasım 2012. Türkiye Tabiatını Koruma Derneği.
25.80m average reported in: Olgun, K., Bozkurt, E., Ceylan, S., Tural, M., Özcan, S., Karasüleymanoğlu, K. Ş., & Geroğlu, Y. 2016. Nesting activity of sea turtles, *Caretta caretta* (Linnaeus, 1758) and *Chelonia mydas* (Linnaeus, 1758) (Reptilia, Cheloniidae), at Patara Beach (Antalya, Turkey) over four nesting seasons. Turkish Journal of Zoology, 40(2), 215-222. doi:10.3906/zoo-1505-8

At Özden, though the campsite is contained, 3 campervans were seen on the other side of the river, set up with a volley ball court (Fig. 23). At Patara main beach, visitors with camping gear were seen going into the dunes in the late evening and coming out in the early morning, and visitors remain on the beach after permitted hours (Fig. 24-26). At the dunes access point near the summerhouse village, one tent was recorded and evidence of numerous fires (Fig. 27). The area around Esen river continues to be used as a picnic and a camping area in view of the beach (Fig. 28-29).

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

Horse-riding was observed on the dunes and on Patara main beach (Fig. 30-31). Vehicle tracks (cars, motorbikes, scooter, tractor) were recorded along the beaches (see (iii)),

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

No information about fines for non-compliance.

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

No local management unit or guards were present to enforce regulations and fines in the protected area. The nest monitoring team does not have the responsibility or authority to charge fines or enforce measures. The day-time guard controlling the road barrier and entry fee for the Patara archaeological site does not seem to have any responsibility for the nesting beach.

“Zabita”³ officers were seen on the early morning visit at the dune access point (one vehicle), and late afternoon at Çayağzı by the river mouth (2 vehicles) (Fig. 4). However, their authority was unknown; there is seemingly little to no enforcement – officers saw people camping at the dunes, and vehicles at the Esen river mouth setting up for barbecues in late afternoon/evening, but there was no apparent action taken.

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

No new constructions behind the beach were observed. In the cooperatives’ land inside the 3rd Degree Archaeological area, construction work for the summer house village continues (see next section).

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

At Patara main beach, there are large bins in the car park, bins are also spread out throughout the sunbed area and small pots are available next to the sunbeds. At the dunes access point, two large bins are present. At Çayağzı and Letoon, no bin facilities are provided, and litter was observed around the river mouth. It is not possible to determine the origin (washed down the river, washed onshore). Piles of litter were also seen under the trees in Letoon (Fig. 32-33). At Özden beach, large bins are available on both the beach side and car park side of the campsite.

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

At Patara main beach, some predation was recorded at the south end of the beach. Six nests were caged within the main tourist area. Nests outside the area also had protective grills. Towards the Çayağzı end of the beach, 3 nests were protected with grills and 15 were dug; it’s not clear if they were all dug up pre or post emergence (Fig. 34). Between Letoon and Özden, most nests were predated. Approximately 23 nests showed evidence of digging and broken egg shells; it’s not clear if they were all dug up pre or post emergence but at least 8 nests still had clearly visible tracks indicating recent nesting events.

³ The “Zabita” is a type of police force, which is not permitted to carry a gun, directly affiliated with the Ministry of Internal Affairs, working under the local municipality, and is usually in charge of public order, health and safety. Their enforcement authority is limited, but they can implement fines, ask to see permits and licenses, and play a part in enforcing the law.

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;

Nests in Patara main beach around the sunbeds were caged, whereas nests in other areas were mainly marked with sticks or simple nest markers (Fig. 35-37). Some nests were protected from predation but it was not systematic.

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;

Only the south beach (Patara main beach till Esen river) seems to be monitored with the one of the morning patrol members having finished their section by ~7am. The North beach (Letoon and Özden section) does not seem to be monitored. This and the fact that not all nests are protected seem to indicate insufficient personnel to effectively monitor the 12 km beach. Furthermore, the kiosk at Patara main beach seems to be used to store equipment, with no information for tourists.

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 signs to indicate the nesting zone;

As an improvement compared to previous years, a sign indicating restrictions that apply on the nesting beach has been placed at Çayağzı beach entrance (Fig. 4). No information is provided at the Letoon beach entrance and at the Patara dunes access point. At Patara main beach, the signs by the car park are obstructed by vegetation. Once at the beach, further information signs are available, about littering, sunbathing and access times. The old information kiosk is not in use. Caged nests have signs on them explaining what they are. Five different markers delimit the nesting zone around the beach restaurant: 3 old yellow wooden posts (2 on one side and one on the other side of the beach restaurant) and 2 new “Responsibility Area” signs were placed on either side of the beach restaurant, within the sunbed zone, between the restaurant and the water line; but the zoning is not clear, not enforced, and is likely inaccurate (see point 2.ii). There is no zoning in the rest of the 12 km nesting beach.

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;

No information available.

Observations on other human activities and impacts:

- Summer house village in the 3rd Degree Archaeological area (Fig 3, Fig. 38-41): Since 2016, construction work continues. In addition to the 27 houses inhabited in 2015, and the 28 pre-existing houses (prior to the complaint and since at least 2003), a total of 310 buildings are in different stages of construction by building cooperatives. It seems that 20 additional houses have been built - that are not related to the cooperatives land - some of which are in the 1st and 3rd Degree Archaeological area, and there are local reports that the new houses were not granted permission but seem to be benefiting from law No. 1787 dated 06/07/2018 on construction “amnesty” (Fig. 42-43).⁴ There are two asphalted roads leading to Gelemis village so far. The road leading to the beach entry point via dunes is used frequently by cars.
- Night access to the beach, is possible via all five entry points as there are no guards or barriers at night. Bonfires were observed on Çayağzı beach at night.
- Wastewater pollution: Esen river water remains murky and with a strong odour; chemical pollution by the surrounding farmland should be investigated.
- Dune conservation: No new plantations were observed but no dune conservation/restoration efforts were visible. Some dune areas are ecologically degraded (stabilized) by plantations.

⁴ https://webdosya.csb.gov.tr/db/imarbarisi/menu/3194-sayili-imar-kanununun-gecici-16_20181019044142.pdf
<http://www.resmigazete.gov.tr/eskiler/2018/06/20180606-8.htm>
www.artigercek.com/haberler/kacak-yapilasma-antik-kentin-sinirlarina-dayandi
<https://ilerihaber.org/icerik/kas-kiyilarinda-yagma-dogal-sit-alaninda-kacak-villalar-insa-ediliyor-70103.html>

DOCUMENTS SUBMITTED TO THE BERN CONVENTION

Available online at www.medasset.org or www.coe.int/t/dg4/cultureheritage/nature/Bern/default_en.asp

CoE Reference	
T-PVS (96) 53 A	MEDASSET: Conservation of loggerhead turtles, <i>Caretta caretta</i> , and construction projects on the beach of Patara, Turkey.
T-PVS (96) 53	MEDASSET: Conservation of loggerhead turtles, <i>Caretta caretta</i> , 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: <i>Caretta caretta</i> in Patara, Turkey.
T-PVS (2000) 57	MEDASSET: Conservation of the marine turtle, <i>Caretta caretta</i> , 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.
T-PVS/Files (2005) 09	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 (<i>Caretta caretta</i>) conservation monitoring in Patara SPA, Turkey.
T-PVS/Files (2014)16	MEDASSET. Update on loggerhead sea turtle (<i>Caretta caretta</i>) conservation monitoring in Patara SPA, Turkey.
T-PVS/Files (2015) 34	MEDASSET. Update on loggerhead sea turtle (<i>Caretta caretta</i>) conservation monitoring in Patara SPA, Turkey.
T-PVS/Files (2016) 35	Update on loggerhead sea turtle (<i>Caretta caretta</i>) conservation monitoring in Patara SPA, Turkey.
T-PVS/Files (2017) 29	Update on loggerhead sea turtle (<i>Caretta caretta</i>) conservation monitoring in Patara SPA, Turkey.
T-PVS/Files (2018) 33	Update on loggerhead sea turtle (<i>Caretta caretta</i>) conservation monitoring in Patara SPA, Turkey.

MAPS & PHOTOS

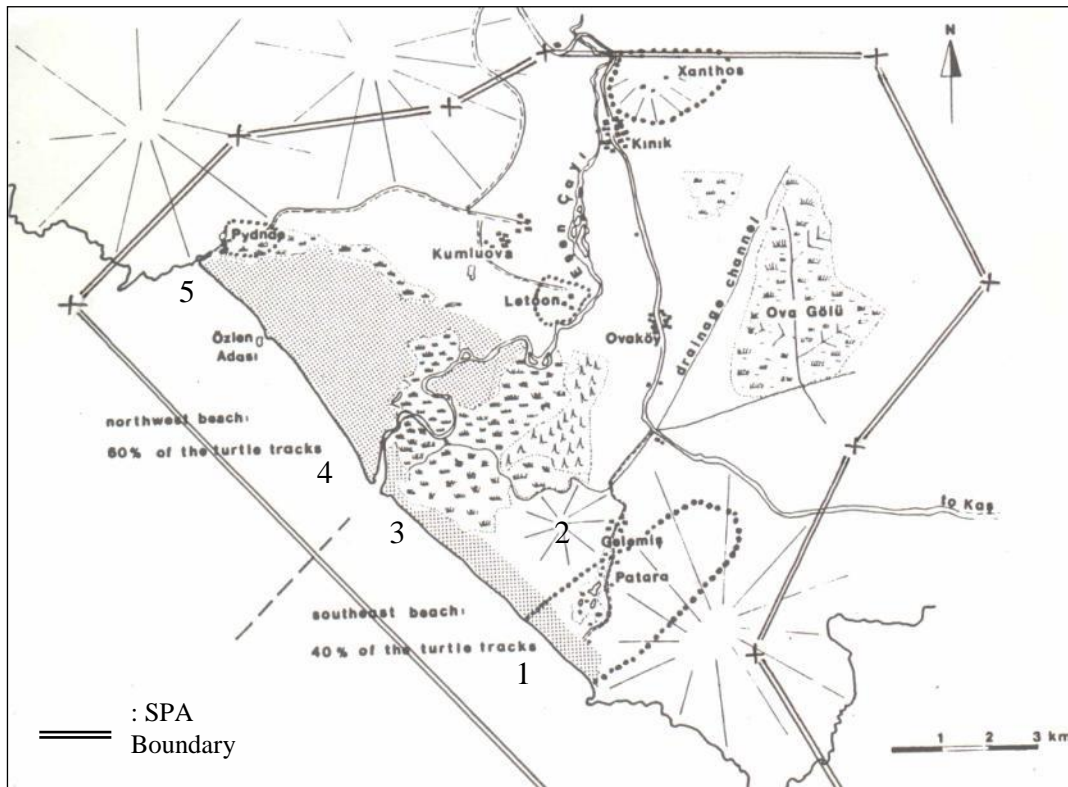


Fig. 1. Patara SPA. Patara main beach is No.1, entry point via sand dunes is No.2. Çayağzı beach is No.3 (Esen River outlet at the north edge of the south beach), Letoon beach is No.4 (Esen River outlet at the south end of the north beach) and Özden beach is No.5 (next to Özden river outlet). Map Source: 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 Gelemis village. “b.” is archeological site fee collection point with daytime vehicle barrier. No. 1-5 are entry points: 1 is Patara main beach entry point, snack bar & beach furniture; 2 is entry point via sand dunes, connecting beach with summer house village; 3 is Çayağzı beach entry point & illegal beach bar (est. 2014, closed in 2015); 4 is Letoon beach entry point & abandoned SPA information kiosk; 5 is Özden beach entry point, bar, camping site, 4x4 rentals (Özden river outlet). Esen river outlet lies between No.3&4.

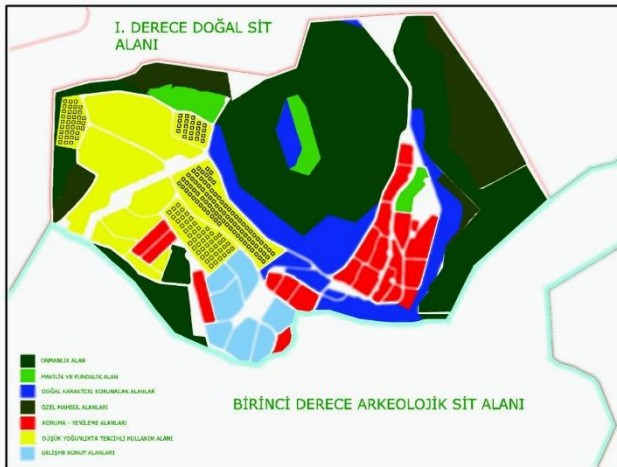


Fig.3. EPASA Management Plan Map of Patara SPA “3rd Degree Archaeological Site” (see blue area in Fig. 2). Construction is allowed in the red and blue areas, which include Gelemis village, and in the yellow area which includes the summer housing cooperative lands.



Fig.4. Patara SPA. “Zabita” patrol at Cayagzi beach entrance. New sign in the foreground.



Fig.5-6. Patara SPA. Letoon beach. Left: SPA facilities have been abandoned and have not been removed from the dunes. Right: An old fence line with posts and old wire between dunes and beach.



Fig. 7-9. Patara SPA. Patara main beach. Top: Private umbrella in so-called “Responsibility Area”. Bottom: Two yellow wooden posts mark the nesting zone and the sunbed/visitor zone, on the north side of the beach restaurant; note nests (red circle) in the sunbed use zone (so-called “Responsibility Area”).



Fig. 10-12. Patara SPA. Patara main beach. Top: View of beach furniture area. Bottom: Stacked sunbeds in the evening (left) and morning (right), though these are too close to the waterline. Note kayaks (left) that remain on the beach at night.



Fig. 13-14: Patara SPA. Patara main beach. Left: Visitors on the beach after permitted time (8pm). Right: Volleyball court on nesting beach.



Fig. 15-17. Patara SPA. Patara main beach. Boardwalks from the beach bar to waterline (top, late pm) and behind bar (bottom left). Right: Water from the shower drains onto nesting beach.

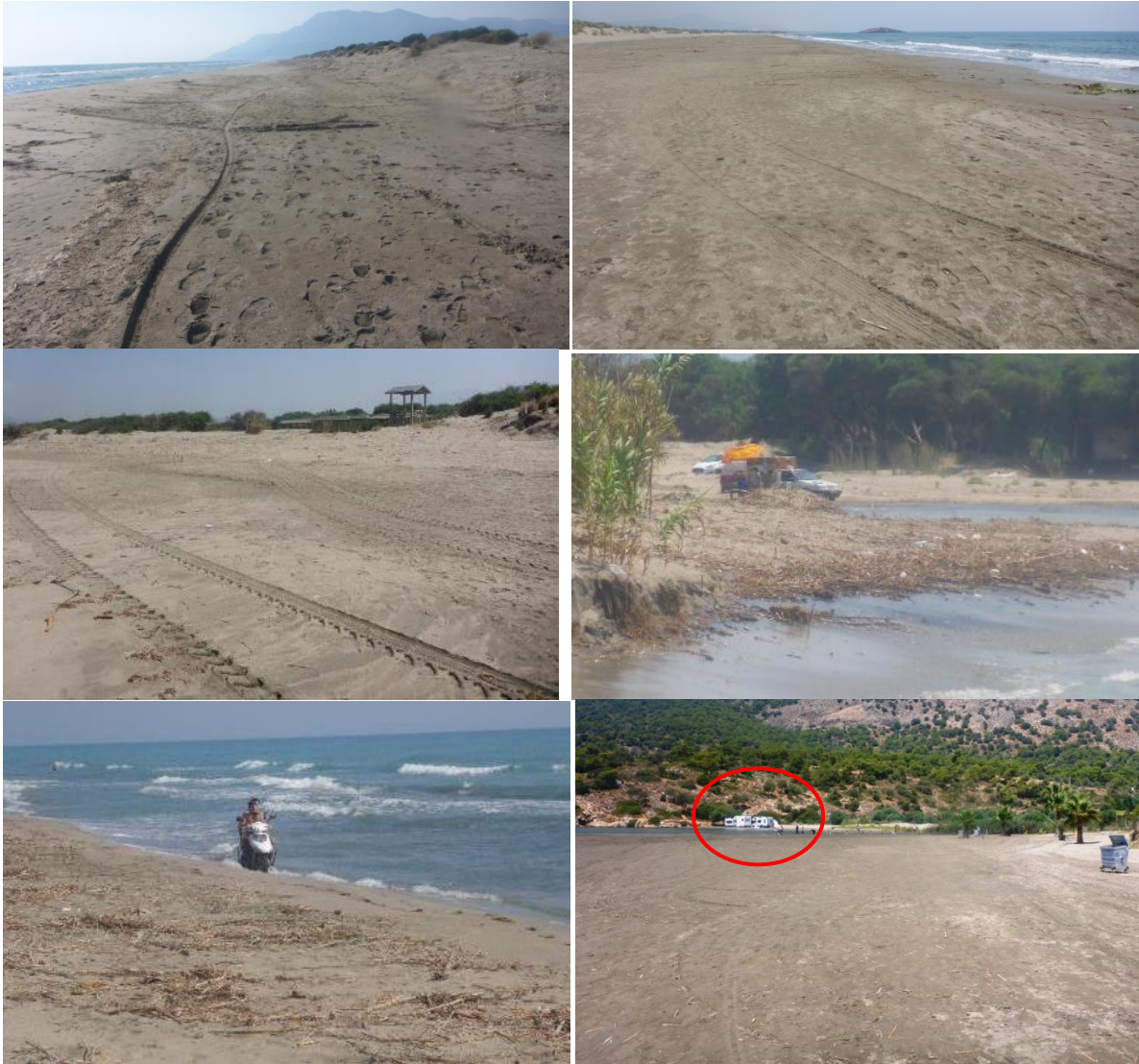


Fig. 18-23. Patara SPA. Top: Vehicle track on Patara (left) and Letoon beach (right). Middle: Vehicle track on Letoon beach and vehicles around Esen river mouth. Bottom left: Scooters on Çayağzı beach near Esen river. Bottom right: Vehicle tracks and beach flattening on Ozden beach - note caravans at the end of the beach.

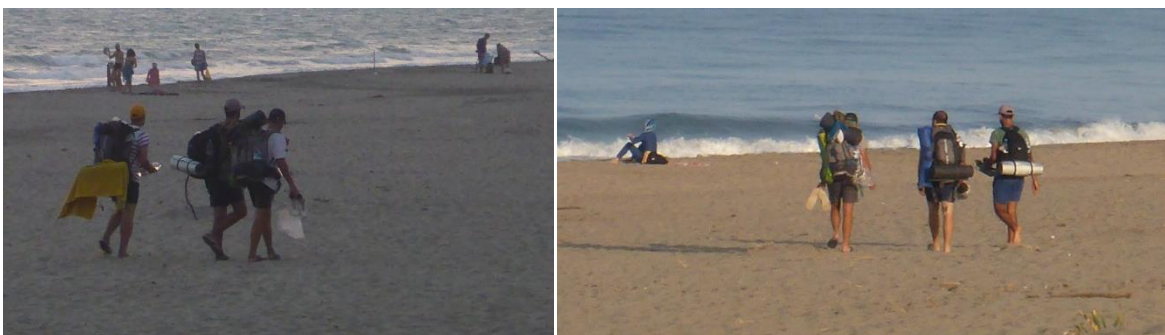


Fig. 24-25. Patara SPA. Patara main beach. People with camping gear heading into the dune and out of the dunes after spending the night camping

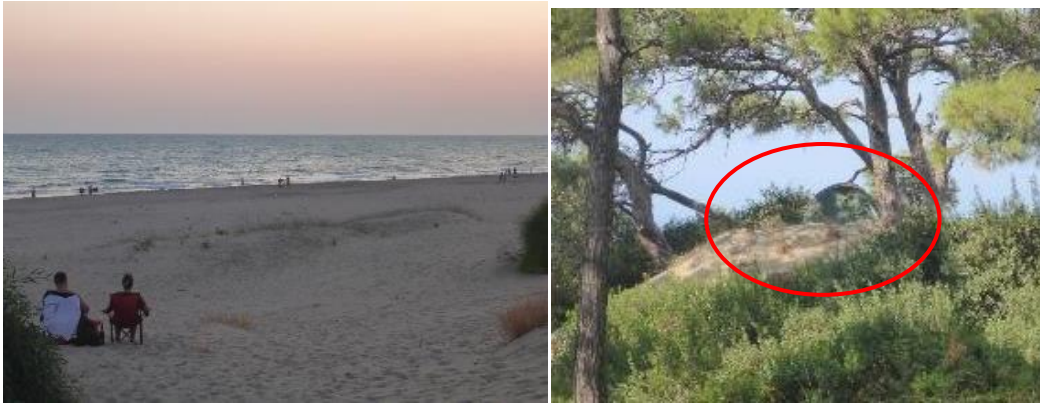


Fig. 26-27. Patara SPA. Patara main beach. Left: sunset picnics and human presence on the beach after permitted hours. Right: camping at the top of the dunes.



Fig. 28-29. Patara SPA. Esen river mouth. Vehicle access and preparation for evening barbecue and camping.



Fig. 30-31. Patara SPA. Patara main beach. Horse riding on the dunes, beach and into the sea.



Fig. 32-33. Patara SPA. Letoon beach. Waste in the dune and undergrowth due to lack of waste disposal bins and collection.



Fig. 34-37. Patara SPA. South beach (Patara beach and Çayağzı beach). Top right: Nest predated, unknown if pre or post emergence. Top left: Typical nest marking and use of metal grid inside sunbed area. Bottom: Typical nest marking (left) and use of metal grid for predation control (right) outside main tourist area (sunbed area).



Fig. 38-39. Patara SPA. 3rd Degree Archaeological Site. Top: June 2016. Bottom: April 2018. Construction work continues for approx. 310 buildings in different stages of construction.



Fig. 40-41. Patara SPA. 3rd Degree Archaeological Site. Construction work continues for approx. 310 buildings.



Fig. 42-43. Patara SPA. Construction of 20 additional summer houses that do not seem to have permission.

LOGGERHEAD SEA TURTLE (*CARETTA CARETTA*) CONSERVATION MONITORING IN FETHIYE SPA, TURKEY

MEDASSET hereby submits an update report to the second Bureau Meeting of the Bern Convention (September 2019) on the conservation status of sea turtle nesting beaches in Fethiye Specially Protected Area (SPA) in Turkey.

Contents:

- *SUMMARY & RECOMMENDATIONS*
- *BACKGROUND*
- *2019 UPDATE*
- *REFERENCES*
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SUMMARY & RECOMMENDATIONS

In 2019, there was no improvement and the conservation status of the nesting beaches has deteriorated: lack of beach furniture management, no zoning and lack of information, no vehicle access control, more fixed structures, severe light pollution, camping and human presence at night, etc. Habitat destruction continues as businesses expand on the sandy sections of the nesting beaches, further reducing available habitat and increasing disturbances. New hotels are to be constructed behind one of the last remaining pristine nesting areas, in complete disregard of the Bern Convention's Recommendations. There were no signs of new conservation or management activities. The only exception was litter collection and irregular beach furniture management in 1.5 of 8 km of the nesting beaches. The SPA remains unmanaged and inadequately protected. To date the majority of measures under Recommendation No. 183 (2015) have not been implemented.

Without urgent conservation action and effective management, the recorded negative nesting trend will not be reversed and the few remaining areas in Fethiye SPA that have not been damaged will continue to be encroached upon by unplanned and unsustainable development.

MEDASSET calls upon the Bern Convention Standing Committee to:

- Follow-up and keep the case file open at the 39th Meeting of the Standing Committee.
- Encourage Turkish authorities to provide further information on the case. Request an official update on the new hotel development and the status of the shipyard construction project.
- Urge Turkish authorities to implement Recommendation No. 183 (2015) before May 2020. Encourage and assist Turkish authorities to implement management and conservation measures.

MEDASSET calls upon the Turkish authorities to:

- Urgently implement Recommendation No. 183 (2015) and implement a comprehensive and updated action plan before May 2020
- Revise/produce a SPA management plan that will cover both the land and marine areas, and will include a clear description of permitted land uses and activities. Allocate the necessary financial and human resources that will ensure enforcement of regulations and measures by authorities.
- Cancel plans for new hotel development and cancel the construction of a shipyard, drydock or marina, near or on Fethiye nesting beaches.

BACKGROUND

The loggerhead sea turtle (*Caretta caretta*) nesting beaches in Fethiye (Mugla Province, Turkey) are among the 12 most important nesting beaches in Turkey.⁵ Recently, the northernmost green turtle nest was also recorded here (Patara previously held this record).⁶ Protection is not only significant in terms of nesting numbers but also to ensure the genetic diversity of the loggerhead population in the Mediterranean.⁷ Fethiye's importance increases because of the relatively higher proportion of male-producing nests.⁸ 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 severely declining.⁹ Threats to the nesting population have constantly been increasing since 1993-4.¹⁰ Real estate and tourism development is progressing with no regard for the sea turtle nesting population and the protected coastal ecosystems. Scientists have suggested conservation measures but these have not been applied.¹¹ A recent economic analysis of the SPA identified intensive use of beaches, excessive and uncontrolled housing and tourism developments among the many threats to the SPA and recommends enforcement of use and conservation principles, improved management and sustainable tourism development.¹²

There are at least four Bern Convention Recommendations that apply to Fethiye: Recommendation No 8 (1987), No 12 (1988), No 24 (1991) and No 66 (1998), the latter requesting that Turkish authorities “*secure the remaining unbuilt beach plots against development*”, “*improve control of the effects on the beaches of local tourism, secondary summer homes, caravans, camping and other activities [...]; remove present adverse effects of these activities on nesting beaches; take urgent necessary measures to fully implement the protection status of SPAs; to enforce legislation against illegal sand extraction and assure that penalties are dissuasive; regulate and, where necessary, prohibit speed boats, jet skis and paragliding during the nesting season; ensure respect of low speed limits set and reinforce controls*”.

Since 2008, MEDASSET has been monitoring and reporting on the lack of management, poor spatial planning and build-up in Fethiye's coastal zone. In August 2009 MEDASSET submitted a complaint to the Bern Convention about the severe degradation of the protected sea turtle nesting beaches in Fethiye due to poor management, lack of spatial planning and uncontrolled build-up of the coastal zone due to tourism development. The complaint was discussed at the 30th Standing Committee Meeting in 2010, in relation to Recommendation No. 66/1998. Commitments for improved protection were made by the Turkish authorities,¹³ and in 2011 some steps were taken to mitigate some of the tourism-related impacts during the nesting season. In 2012, these management measures were not sustained and further coastal build-up was recorded. At the 32nd Standing Committee Meeting in 2012, Recommendation No. 66/1998 was discussed and the Delegate of Turkey stated that authorities would monitor the situation more closely in 2013 and that matters were expected to improve. In 2013, there was no improvement of the protection and management of the nesting beaches, with the exception of beach furniture management in approx. 1.5 of 8 km of the nesting beaches and some new signage which, however, remained insufficient. Habitat destruction and coastal build-up continued. At the 33rd Standing Committee Meeting in 2013, the delegate of Turkey accepted that “the images [presented] are disturbing”, regretted that due to Ministry restructuring a response was not available. MEDASSET's call for a Case File to be opened was supported by the delegate of Norway who also proposed that the Committee commissions an on-the-spot assessment. A Case File was opened to address the issue

⁵ Türkozan 2000; Margaritoulis *et al.* 2003; Canbolat 2004

⁶ Fellhofer-Mihcioglu *et al.* 2015

⁷ Yilmaz *et al.* 2008

⁸ Kaska *et al.* 2006

⁹ Ilgaz *et al.* 2007; Katilmis *et al.* 2013

¹⁰ Oruc *et al.* 2003

¹¹ See references.

¹² Bann C. & E. Başak. 2013. Note: although the project dealt with anthropogenic impacts in some of Fethiye SPA's marine areas, it did not include implementation of conservation measures or the creation of a business plan or management plan for the land area of the SPA.

¹³ T-PVS/Files 2010 23 (Government report); Authority's letter in Annex 1 of MEDASSET, December 2011

together with the complaint regarding Patara SPA (2012/9), to encourage Turkish authorities “to work towards greater accountability, cooperation and responsibility”.

In 2014, yet another sea turtle nesting season passed with no improvement in the protection and management of the sea turtle nesting beaches in Fethiye SPA, and habitat destruction and coastal build-up continued. The 34th Standing Committee Meeting decided to conduct an on-the-spot appraisal in view of identifying a set of recommended actions.

In 2015, there was no progress in the protection and management of the site. The few measures, taken a few days before the Bern Convention’s on-the-spot appraisal in July 2015, were reversed shortly after. Once again, there were unregulated beach furniture and fixed structures inside the nesting zone, littering, light pollution, uncontrolled visitor and vehicle access, and several other threats to sea turtles, hatchlings and nests. Businesses expanded on the sandy sections of the nesting beaches, further reducing the available habitat and increasing disturbances. A huge new resort opened on one of the last remaining pristine beach sections. The threats identified led to the destruction of nests, unsuccessful nesting attempts, mortality of hatchlings and adult turtles. In December 2015, the Standing Committee, alarmed by the findings of the on-the-spot assessment which confirmed MEDASSET’s reports, adopted Recommendation No. 183 (2015), asking Turkey to take urgent actions to improve management and conservation of Fethiye.

In 2016, 2017 and 2018, there was no significant improvement of the conservation status of the nesting beaches: lack of effective management, no beach furniture management on 6.5 of 8 km of the nesting beaches, lack of zoning and information, nearshore fishing, no vehicle access control, more fixed structures and development on sandy sections of nesting beaches, two new jetties, severe light pollution, camping and human presence on the nesting beaches at night, sand extraction, planting of trees and bushes on the sand.

2019 UPDATE

Nesting beach description (Fig. 1): the 8 km beach is split in three main sections: Çalıř, Yanıklar and Akgöl. Çalıř is 2.5km long, separated from the other two beaches by a small rocky peninsula. A river (Kargı) marks the border between Yanıklar (4.5km, including Karatas beach) and Akgöl (1km). For a detailed description of the Fethiye SPA nesting beaches see MEDASSET, September 2009.

MEDASSET visited Fethiye SPA in August 2019 to assess and document the conservation situation on the nesting beaches. The following presents the survey findings in relation to each of the measures under 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 Çalıř section in Fethiye SPA is highly developed with dense distribution of businesses along the beach, with mobile and fixed structures along the beach (Fig. 2). The 7 jetties/docks and concrete platforms (many of which were installed after Rec. No. 183 was issued) have not been removed (Fig. 3-5).

At Karatas, a recently pristine nesting beach, Barut TUI Sensatori Resort (est. 2015), increased its capacity by building and operating an additional building on the western side of the 2015 hotel (Fig. 6). The remaining coastal wetland that was burnt and flattened in 2017, has been drained, levelled, and is ready for development (Fig. 7). According to local civil society groups “Karaot Solidarity, FETDER (Fethiye Association of Ecological Life) and Muğla Çevre Platformu (MUÇEP), 4 more hotels are in planning on the eastern side (Fig. 8).¹⁴ An Environmental Impact Assessment has been obtained for one of these hotels.¹⁵ Assessment plans for two hotels are in the last stage of approval. The other hotel project owners (plots 421/3 & 421/4) decreased the capacity below the 400 beds threshold for one of the hotels

¹⁴ <http://eced.csb.gov.tr/ced/jsp./ek1/24655>

¹⁵ www.fethiye.gov.tr/three-sister-2-resort-otel-isimli-turizm-konaklama-tesisi-projesi-ced-karari

to avoid an Environmental Impact Assessment and are exempt from the procedure and are now required to get an approval for the second hotel only. The 5 hotels, with an expected capacity of over 2.600 rooms, will cover the whole shoreline and their cumulative impact will lead to irrevocable destruction of the nesting beach.

No new information or official news has been received on the final decision regarding the government plan to construct a shipyard on the nesting beaches.

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;

There is no evidence of any form of restoration, nor of any form of mitigation of the impacts of the development in the area. Permanently fixed structures are found on all of the nesting beaches with some areas nearly completely covered in mobile beach furniture. No effort is made to clear the beach at night.

The Çalış section is highly developed with dense distribution of businesses behind and on the beach. In Section A, showers remain at the back of the beach with water seeping into the sand (Fig. 9-10). In Section B, the whole extent of the beach continues to be occupied by businesses with dense distribution of sunbeds, parasols, cushions, astroturf carpets, walkway, playgrounds, volleyball courts and showers, leaving virtually no unoccupied sandy area (Fig. 11-15).

At Karatas, the “Deniz Incisi Buffet” playground and walkway remain on the upper part of the nesting beach. Barut TUI Sensatori Resort has installed water sports activity tents and boats, an extensive sunbed section including 22 pavilions (2018: 21), with walkways throughout (Fig. 16-19). Several pavilions and a walkway are inside the nesting zone. An approximately 15-25m wide section between the water line and the boardwalk is left clear and smoothed, which is a 50% reduction to the nesting zone.

At Yanıklar, from Hotel Club Tuana to Katrancı Hotel the nesting zone is heavily impacted and is covered with boardwalks, pavilions, water sport activity huts, volleyball court, two jetties and furniture (sunbeds and parasols) (Fig. 21-24). Doga Camping maintains a volleyball court, Onur camping placed a wooden pavilion and Yonca Lodge placed tables on wooden bases on the nesting beach.

In Akgöl, sandy nesting areas are occupied by business structures and furniture (see No.6).

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

There was no evidence of sand mining; however, there was evidence of digging and sand/gravel moving around the river mouth between Yanıklar and Akgöl. Furthermore, between Barut and the cleared wetland, there was evidence of sand being moved / piled.

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

Bushes, trees and grass planted on the nesting beaches in previous years have not been removed and continue to expand onto the nesting beach and transform the natural profile of the beach (Fig. 19-20). The lawn around Barut TUI Sensatori Barut pavilions, the palms around “Deniz Incisi Buffet” in Karatas beach, and numerous plantations along Çalış B are all still present. In Akgöl, a new business planted new trees and bushes on the beach (see point 6).

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;

There was no evidence of any zoning. Beach furniture is not moved or stacked at night along 6.5 km of the 8 km of the nesting beaches. Çalış A and “Deniz Incisi Buffet” on Karatas are the only locations where furniture is stacked at night.

In Çalış A, there was an increase in beach furniture and there were approximately 600 sunbeds and 300 fixed parasols in 2 rows, with no evidence of zoning. Sunbeds are piled by two and dragged to the back wall in the evening; however, the beach is freely accessible at night and people move and use sunbeds (Fig. 25). In Section B, over 500 sunbeds with fixed parasols in 2-5 rows, large shaded areas, astroturf covering the ground, fixed boardwalks inhibit access to nesting areas (Fig. 26-29). The area is nearly completely covered in tourism infrastructure leaving very little available nesting zone and there is no effort remove any of the furniture at night.

At Karatas, Barut TUI Sensatori Resort has occupied vast amounts of the nesting beach with over 200 sunbeds and associated parasols in 4-5 rows, pavilions, boardwalks (Fig. 16-17, 19). Extra sunbeds have been added to the left (west) side of the pavilions. Several pavilions, the first row of sunbeds, the first horizontal walkway behind them, and the second row of sunbeds, are inside the nesting zone. Sunbeds are not collected or stacked at night. The walkways and sunbeds seem to be washed and the sand is flattened and smoothed on a daily basis, leading to regular sand compression and water runoff that can have an adverse effect on nesting and hatching output. Only a single nest was seen in this area during the present survey, which may be a result of the hotel’s impact on the nesting beach. The “Deniz Incisi Buffet” placed 2 rows of 20 sunbeds and 15 umbrellas close to the sea, which were stacked in the evening but were left close to the sea. In the adjoining sandy nesting beach (the so called “small beach”) though the beach is very busy, there is no zoning and beach users can place their equipment as they please; 6 wooden pavilions were observed behind the beach but were not in use (Fig. 30).

At Yanıklar, the northern section is densely covered by sunbeds, as well as other equipment (see No. 2) and the beach is not cleared at night (Fig. 21-24) (Lykia Botanika placed 210 sunbeds in 3 rows; Katrancı 30 sunbeds in 1-2 rows; and Club Tuana 240 sunbeds in 4 rows). Doga Camping, Onur Camping and Yonca Lodge also offer sunbeds and shades that are not removed at sunset.

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;

Akgöl beach has the largest sandy zone suitable for nesting in the area. The sandy area has been severely damaged due to touristic development (Fig. 31). The north end of the beach is still occupied by 9 pavilions (Fig. 32). At the rear of the beach, the area next to river bed is flattened due to its usage as parking area. At the south side of the beach, Karaot Buffet maintains a permanent shaded structure with bathroom facilities and camping, sunbeds and parasols, picnic tables and a boat on the beach (Fig. 33-34). Between Karaot Buffet and the southern end of the beach a new business (Gunbatimi Camping) was established, placing two tables with shades, three fire pits, a volleyball court and a boardwalk on the beach (Fig. 35).

The important nesting hotspot in Akgöl is under severe pressure by these three businesses. There are beach sections which consist of cobbles and stones, not suitable for nesting that could instead be used by beach businesses following SPA guidelines.

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;

Light pollution is severe on all beaches and there were no apparent new efforts to mitigate the problem (Fig. 36-40). Beach businesses operate at night, many of them till midnight, with lights and loud music, and have made no adjustments to reduce light pollution.

In Çalış A and B, extensive street and business lights, including vendors tables, illuminate the beach. At Karatas, lights on the beach are switched off, though some lighting remains on the pier; though there is no direct lighting on the beach, hotel lights in the background are likely to cause some disturbance. At Yanıklar, lights from the hotels provide a luminous backdrop and some limited lighting is left on the pier. At Akgöl, limited lighting from Karaot was visible.

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;

Vehicles tracks were seen on all beaches except Çalış A due to unrestricted vehicle access: in Çalış B, access is possible via the northern end; at Karatas access is now available through the cleared wetland; at Yanıklar, access points are available in various points areas; at Akgöl, access is available onto all sections of the beach (Fig. 41-43).

The small beach next to Karatas, the southern end of Yanıklar, and the northern end of Çalış B seemed to be the most popular picnic areas, with fires made directly onto the beach. Akgöl and Çalış A had fewer people having picnics, but some fires still present.

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;

There are multiple outlets for motorized water sport activities though little activity was recorded nearshore, however this was a limited in time survey. All available evidence suggests nothing is in place to regulate boat traffic. Floating ropes are in place to delimit swimming areas.

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);

Monitoring and conservation of the sea turtle nests were carried out by Pamukkale University (as since 2016) though the contract was short-term, for one season only. A team of three members was seen, the information desk was not staffed and the project seemed understaffed, with inadequate manpower.

No information about recommended assessments (i)-(iii).

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

There is uncontrolled visitor access to all beaches at night. Fires and barbecues were observed on all beaches. Camping was recorded on Karatas, Akgöl and Çalış B (Fig. 44-45). There is no night time restriction for the operation of the beach businesses hence lights, music and people disturb nesting and hatching.

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;

In Çalış A, bins are available along the promenade and emptied daily. In Çalış B, some bins are available at the back of the beach and along the road. At Karatas, no bins seemed to be available though hotel staff were seen litter picking. At Yanıklar, rubbish seems to be piled up in specific areas but not in closed bins (Fig. 46). At Akgöl, large bins are available in the parking area though some litter was observed at the back of the beach (Fig. 47).

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;

See next section.

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

There was no local management unit, guards or similar personnel present in the SPA and no apparent increase of management & control resources. In Çalış Section A, Çalış Tourism and Promotion Association personnel are present to manage beach furniture and collect litter, but they do not have the capacity or competence to raise awareness and/or control beach access. The nest monitoring team does not have the capacity or the authority to enforce regulations.

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;

Signage remains mainly unchanged compared to 2015 (Fig. 48-53), and is insufficient, unclear and poorly displayed, hence the public is largely unaware of regulations and the protected status of the beaches. More signs are required at each entry point and more information needs to be presented to visitors.

In Çalış A, two signs remain explaining regulations is available at two access points, the signs at the other access points seem to be missing in 2019. The information booth was not manned (there were some leaflets) during the present survey, likely due to lack of manpower (see section 10). In Çalış B there are two signs and at Yanıklar, there is only one sign, presenting the turtle life cycle, with limited information on permissible activities. At Karatas, there are no information signs. At Akgöl, there is a sign on the northern end of the beach and a sign in the middle of the beach; a sign is also needed at the southern entrance.

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;

Nests are caged in areas with dense touristic activities, and have predation cages (protective grills) in more remote places. Screening against light pollution is ineffective, but more light management is required as the extent and intensity is considerable.

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- 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.
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- (No T-PVS reference). MEDASSET. September 2008. Sea turtle nesting beach degradation in Çıralı and Fethiye, Turkey.

MAPS & PHOTOGRAPHS

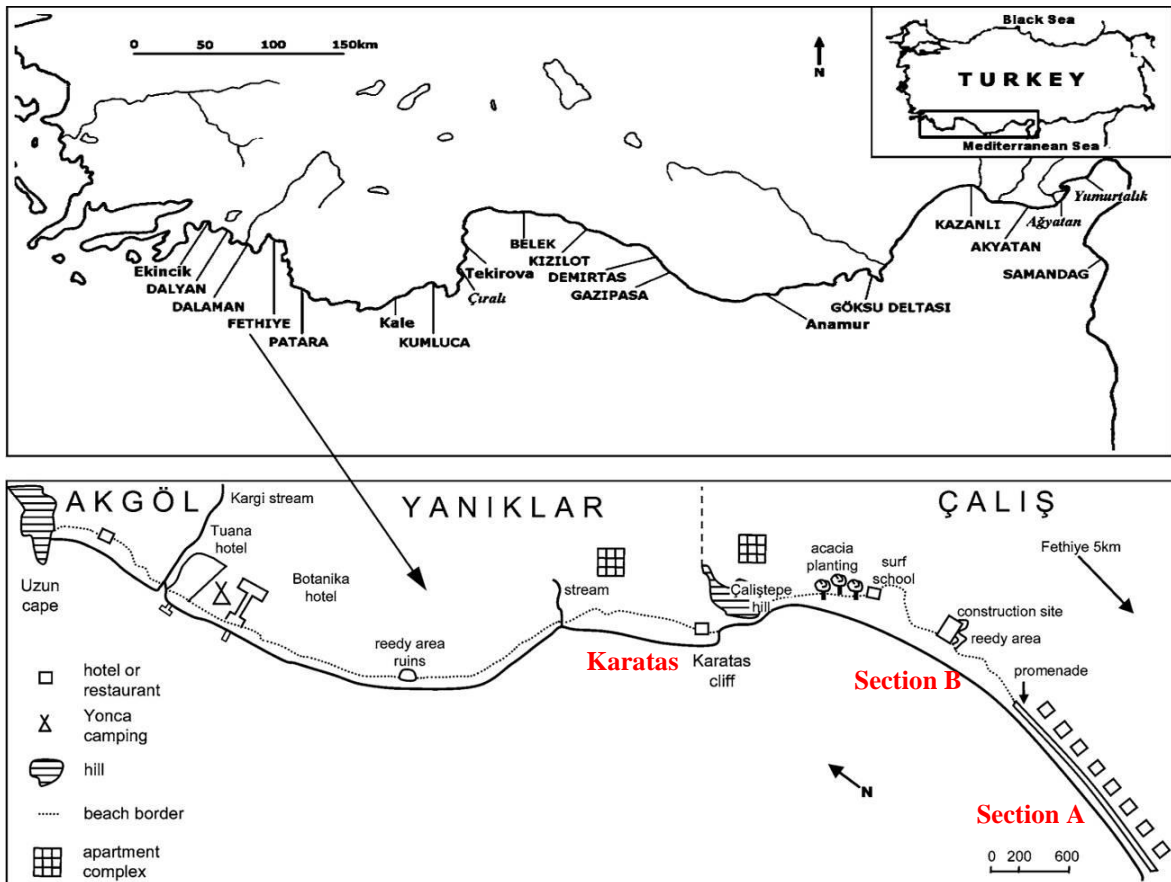


Fig. 1. TOP: Fethiye among important nesting beaches. BOTTOM: Fethiye nesting beach subsections; developments since 2006-7 are not shown here. Source: Ilgaz et al., 2007.



Fig. 2. Fethiye SPA. Çalış Section B. Google Earth 2003 – 2019 satellite imagery comparison shows the continual coastal build-up, planting of sandy area and occupation of nesting beach, in conflict with Recommendations. Note that the sandy area (nesting zone) has been occupied and, in most parts, only the pebbly zone near the waterline is development-free.



Fig. 3. Fethiye SPA. Çalış Section B. Abandoned Concrete platform on nesting beach



Fig. 4-5. Fethiye SPA. Çalış Section. Examples of jetties and cordoned water sport areas.



Fig. 6. Fethiye SPA. Karatas. Google Earth imagery, top: 2003, bottom: 2019. Barut TUI Sensatori Resort installed permanent structures on the previously pristine nesting beach. Several pavilions and extra sunbeds (left circle), the first two sunbeds rows, a walkway and water sport tent are inside the nesting zone. In 2019 the Resort expanded westwards (red rectangle) further increasing capacity.



Fig. 7. Fethiye SPA. Karatas. Flattened wetland, to be developed. Hotel established in 2015 and expanded in 2019, in background.



Fig. 8. Fethiye SPA. Karatas. Building plans for four new hotels: Blue: Fabay Koymat Hotel (Ayfaba Tourism Investments, Inc.) 650 rooms (1495 people) plus housing facility for 120 personnel; Pink: Melis Resort Hotel (Gülmete Tourism Investments, Inc.) 650 rooms (1495 people) plus facility for 120 personnel; Orange: Three Sisters-1 Resort Hotel (Lylyana Resort Hotel, B9 Energy Production Inc.); Red: Three Sisters-2 Resort Hjotel (Aronis Resot Hotel, Varli Renewable Energy Inc.)

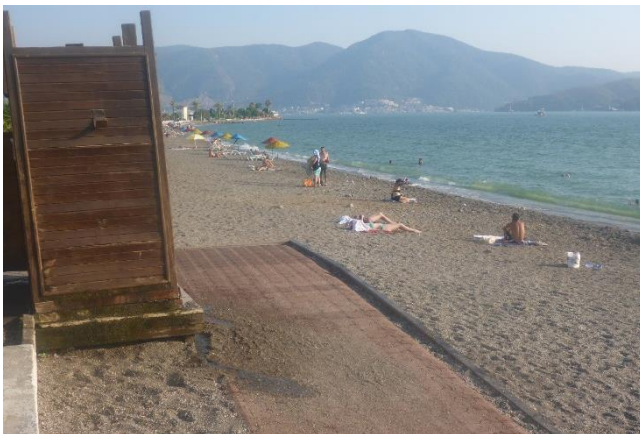


Fig. 9-10. Fethiye SPA. Çalış. Section A. Showers cabins remain on the beach and water leaks directly onto the nesting zone (note caged nest in right image).



Fig. 11-14. Fethiye SPA. Çalış Section B. Sunbeds, Cushions, astroturf carpets occupy the nesting beach and are not removed at night.



Fig. 15. Fethiye SPA. Çalış Section B. Playground, volleyballs court, permanent shades have occupied nesting beach. Note camping with tent in foreground.



Fig. 16-17. Fethiye SPA. Karatas beach. Sunbeds and walkways occupy the nesting beach and are not removed at night.



Fig. 18. Fethiye SPA. Karatas beach. Barut TUI Sensatori Hotel boats and watersport equipment on the nesting beach that are not removed at night.



Fig. 19-20. Fethiye SPA. Left: Karatas. Barut hotel pavilions, boardwalks, sunbeds and lawn planted on sand inside nesting zone. Right: Çalış Section B. Palm tree on nesting beach continues to be irrigated.



Fig. 21. Fethiye SPA. Yaniklar beach. Sunbeds, walkways, permanent shades, marine vessels, occupy the nesting beach and are not removed at night.





Fig. 22-24. Fethiye SPA. Yanıklar beach. Sunbeds, walkways, permanent shades, marine vessels, occupy the nesting beach and are not removed at night.

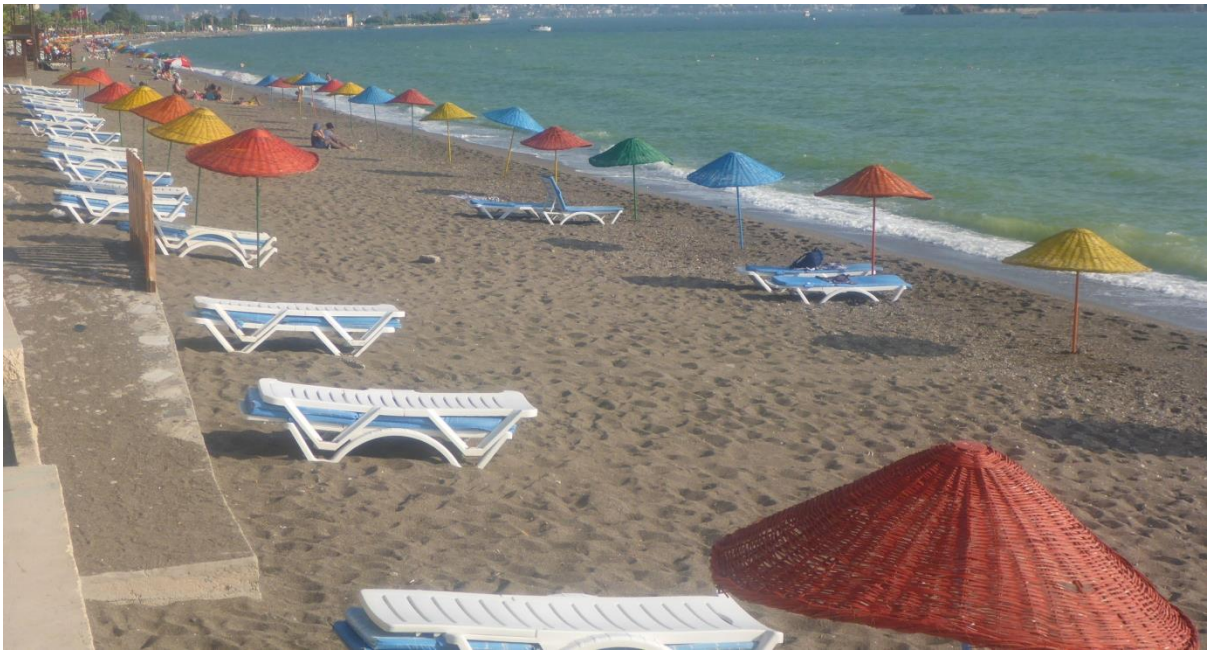


Fig. 25. Fethiye SPA. Çalış Section A. Example of stacked sunbeds. Umbrellas that do not close (in the event of a nest within its shade) are not appropriate for nesting beaches.



Fig. 26-27. Fethiye SPA. Çalış Section B. Sunbeds occupy the nesting beach and are not removed at night (Left: Wonder Cafe; Right: Jiva Resort)



Fig. 28-29. Fethiye SPA. Çalış Section B. Sunbeds occupy the nesting beach and are not removed at night. Note nest with cage among sunbeds.



Fig. 30. Fethiye SPA. Karatas (small beach). No zoning means visitors and place their equipment as they wish. Nests were observed on the beach.



Fig. 31. Fethiye SPA. Akgöl. Google Earth imagery. Box 1 & 2: Location of businesses in core nesting zones. A new business was established in zone 2 in 2019.



Fig. 32. Fethiye SPA. Akgöl (early a.m. before beach users arrive). Nesting hotspot occupied by a row of wooden pavilions. Note the numerous marked nests and the research team on beach.



Fig. 33-34. Fethiye SPA. Akgöl. Bathroom facilities, tents, sunbeds and parasols, picnic tables and a boat on the nesting beach.



Fig. 35. Fethiye SPA. Akgöl. Volleyball court, boardwalks, permanent shades, tables, and plantations on nesting beach by new business.



Fig. 36-37. Fethiye SPA. Yaniklar. Jetty (left) and hotel (right) lights.



Fig. 38. Fethiye SPA. Çalış. Section B. Beach bar lights on the nesting beach.



Fig. 39. Fethiye SPA. Karatas. Barut TUI Sensatori resort jetty lights in the evening.



Fig. 40. Fethiye SPA. Çalış. Section A. Light pollution on the nesting beach. Note nest sign on cage (red circle).



Fig. 41. Fethiye SPA. Çalış Section B. Vehicle access point.



Fig. 42-43. Fethiye SPA. Vehicle tracks on Akgöl (left) and Karatas (right) nesting beach.



Fig. 44-45. Fethiye SPA. Camping on the nesting beach in Agkol (left) and Calis B (right).



Fig. 46-47. Fethiye SPA. Left: Waste piled up at the back of Yanıklar nesting beach. Right: Litter on Akgöl nesting beach.



Fig. 48-49. Fethiye SPA. Information board in Çalış Section A (left) and Çalış Section b (right).

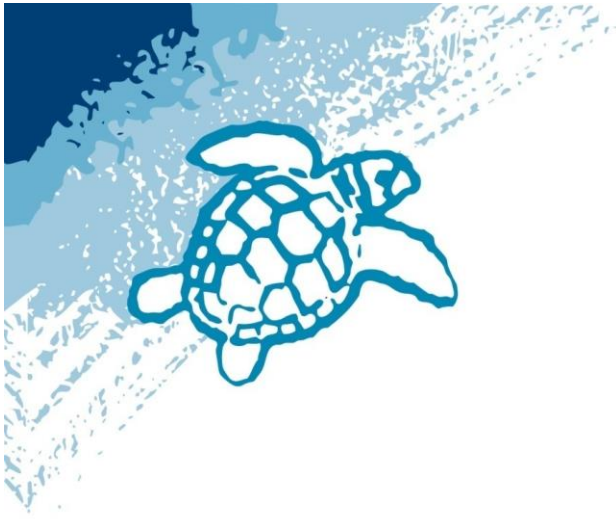


Fig. 50-51. Fethiye SPA. Left: Çalış Section A. An information board with insufficient information (seemingly one of the boards that used to be standing next to the beach entry steps). Right: Yanıklar. Turtle ecology information board.



Fig. 52-53. Fethiye SPA. Akgöl. Information board (north end of beach and middle of beach).

- March 2019 -



MEDASSET

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Ms Jana Durkošová
Chair
Standing Committee of the Bern Convention

Athens, 14 March 2019

Our Ref. 24679

Re: Open Case-File No. 2012/9

Dear Mrs. Durkošová,

We hereby submit our comments on the Government report that was submitted on 8 March 2019 (T-PVS/Files(2019)26) on the planned activities for the upcoming nesting season in Fethiye and Patara SPA (Turkey), aimed at ensuring a thorough and timely implementation of all operational parts of the Recommendations No. 182 & 183 (2015), as requested by the 2018 Standing Committee Meeting.

As shown in the summary table attached to this letter, the actions reported by the Government do not address the majority of measures listed under Rec. No. 182 & 183. We wish to reiterate that the largest part of the Government report provides information on the research team's plans to monitor the sea turtle nests. There is regrettably an immense gap of action as regards management measures necessary to ensure the adequate protection of the nesting beach against human pressures.

As the sea turtle nesting season, as well as the tourist season, will start in a couple of months, we kindly request that the Bureau considers urging the Turkish Government to revise and improve its Action Plan in order to fully address the Convention's Recommendations so as to prevent further degradation of the protected nesting beaches in Fethiye and Patara.

We are at your disposal for any further information.

Yours sincerely,

Lily Venizelos
MEDASSET President
Member of IUCN-Species Survival Commission: Marine Turtle Specialist Group

Enclosed: Table: Review of Government Report in comparison to Rec. No. 182 & 183 (2015)

CC: Mrs Iva Obretenova, Secretary of the Bern Convention, Council of Europe

Table: Review of Government Report (March 2019) (T-PVS/Files 2019 26) in comparison to Rec. No. 182 & 183 (2015)

Recommendation No. 182 (2015) to the Bern convention on the conservation of <i>Caretta caretta</i> and its habitat at Patara (Turkey)	
<i>1. Urgently ensure that Patara nesting beach receives appropriate legal protection and management, in line with its exceptional, natural and ecological value;</i>	No information (e.g. on plans for presence of management team such as rangers, etc, on the beach to enforce regulations)
<i>2. Urgently set up, enforce and monitor the implementation of strict regulations which:</i>	No information
<i>(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;</i>	No information
<i>(ii) regulate the extent and use of furniture on the beach and ensure furniture is removed from the nesting zone at night;</i>	No information
<i>(iii) prohibit access of vehicles by placing barriers at the beach entrances;</i>	No information
<i>(iv) prohibit illumination of the beach;</i>	No information
<i>(v) prohibit fishing with nets in front of the beach;</i>	No information
<i>(vi) prohibit camping on the beach and on riversides in view of the beach;</i>	No information
<i>(vii) prohibit horse riding and 4x4 or quad safaris on the nesting beach;</i>	No information
<i>(viii) define fines for non-compliance with above regulations</i>	No information
<i>3. Ensure that adequate financial and human resources are allocated for the control, management and enforcement of regulations;</i>	No information (e.g. on plans for presence of management team such as rangers, etc, on the beach to enforce regulations)
<i>4. Continue to prevent uncontrolled human settlement behind the beach, particularly where these may result in making the beaches unsuitable for turtle nesting;</i>	No information
<i>5. Ensure that litter is periodically removed from the beach and dunes;</i>	No information
<i>6. Address the problem of predation, including through population control's programmes;</i>	Yes
<i>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;</i>	Yes
<i>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;</i>	Programme set-up. No information if it is long-term or one-year.

<p><i>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;</i></p>	<p>No information on clearer signage.</p>
<p><i>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;</i></p>	<p>No information on direct engagement with local community (meetings etc). Actions targeting tourists, hotels. Information office for general public/local community (if they choose to engage with the information office).</p>
<p>Recommendation No. 183 (2015) on the conservation, management, and restoration of Fethiye nesting beaches (Turkey)</p>	
<p><i>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;</i></p>	<p>No information</p>
<p><i>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;</i></p>	<p>No information</p>
<p><i>3. Stop sand extraction and ensure the application of deterrent penalties for these illegal activities;</i></p>	<p>No information</p>
<p><i>4. Remove planted vegetation, acacia in particular, with a view to restore the remaining sandy beach;</i></p>	<p>No information</p>
<p><i>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;</i></p>	<p>No information</p>
<p><i>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;</i></p>	<p>No information</p>
<p><i>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,</i></p>	<p>No information</p>

<i>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;</i>	
<i>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;</i>	No information
<i>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;</i>	No information
<i>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);</i>	Programme set-up. No information if it is long-term or one-year.
<i>11. Prohibit camping and bonfires and set appropriate time limits for the operation of beach bars at night during the nesting and hatching season;</i>	No information
<i>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;</i>	No information
<i>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;</i>	No information
<i>14. Ensure that adequate financial and human resources are allocated to the control and management of the beaches;</i>	No information
<i>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;</i>	No information on placing signs (signs are derelict or inexistent in 6.5 km of nesting beaches, ie.e Karatas, Agkol, Yaniklar, Calis Section B). No information on local community involvement in protection & management of the protected area.
<i>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;</i>	Yes