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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

40th meeting
Strasbourg, 30 November - 4 December 2020

Specific Sites - Files open

**Threats to marine turtles in Thines Kiparissias
(Greece)**

- REPORT BY THE COMPLAINANT -

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

**DEVELOPMENT PLANS IN KYPARISSIA BAY, SOUTHERN KYPARISSIA
(WESTERN PELOPONNESE, GREECE)**

11 August 2020

**UPDATE REPORT BY
*MEDASSET - the Mediterranean Association to Save the Sea Turtles***

***for the 40th Standing Committee Meeting of the
Contracting Parties to the Convention on the Conservation of European Wildlife and Natural
Habitats (Bern Convention)***

Following the complaint submitted on 22 August 2010 for the 30th Standing Committee Meeting [T-PVS (2010) 16] regarding developments threatening Kyparissia Bay, and the following:

- 1 The response of the Greek authorities to the European Commission (22 December 2010) forwarded to the Bureau Meeting on 8 March 2011 (T-PVS/Files (2011) 5E)
- 2 The European Commission's letter of formal notice to the Greek Authorities in October 2011
- 3 MEDASSET's update reports sent to the Bureau on 2 September 2011 and on 29 March 2012
- 4 ARCHELON's short Report sent to the European Commission and the Bern Convention (October 2012)
- 5 The European Commission Reasoned Opinion (EL2011/2156 ENVI) sent to the Greek Authorities in October 2012
- 6 The Greek Authorities response to the EU Commission's Reasoned Opinion on 22 November 2012
- 7 MEDASSET's update reports sent to the Bureau on 11 March 2013 and 1 August 2013 [TPVS/Files (2013) 15]
- 8 ARCHELON's short Report sent to the European Commission and the Bern Convention (October 2013)
- 9 The response of the Greek Authorities to the letter of the Bern Convention (11 October 2013) on 17 October 2013
- 10 The decision of the 2nd Bureau meeting on 17 September 2013 [T-PVS (2013) 10] to finally discuss the complaint as a File open at the 33rd Standing Committee meeting (December 2013), inviting the Greek authorities to attend
- 11 The European Commission's decision on 28 March 2014 to take Greece to Court for failure to provide adequate protection for the endangered sea turtles
- 12 The Bern Convention on-the-spot appraisal in South Kyparissia Bay, 14-15 July 2014
- 13 MEDASSET'S update report sent to the Bureau on 30 August 2014 [T-PVS/Files (2014)48]
- 14 the on-the-spot appraisal Report to the Standing Committee, dated 1 September 2014 by Dr. Paolo Casale, University of Rome "La Sapienza", coordinator of the Sea Turtle Project of WWF Italy and member of the IUCN SSC Marine Turtle Specialist Group [T-PVS/Files (2014)49]
- 15 ARCHELON's short report sent to the European Commission and the Bern Convention (October2014)
- 16 Recommendation No.174 (2014) of the Standing Committee, adopted on 5 December 2014, on the conservation of the loggerhead sea turtle (*Caretta caretta*) and of sand dunes and other coastal habitats in Southern Kyparissia bay (NATURA 2000-GR2550005) "Thines Kyparissias", Peloponnese, Greece)
- 17 MEDASSET's update report sent to the Bureau on 14 August 2015 [T-PVS/Files (2015) 29]
- 18 ARCHELON's short report sent to the European Commission and the Bern Convention (October 2016)
- 19 The judgement of the Court of Justice of the European Union, in Case C-504/14 Commission Greece issued on 10 November 2016

- 20 The three decisions of the Council of State about the Presidential Decree of Kyparissia Bay: 32/2015 issued in April 2015, 175/2017 issued in July 2017 and 80/2018 issued in June 2018.
- 21 MEDASSET update report in 2017 [T-PVS/Files (2017) 30] and 2018 [T-PVS/Files (2018) 48].
- 22 ARCHELON update reports 2017 [T-PVS/Files (2017) 37] and 2018 [T-PVS/Files(2018)44]
- 23 The issuance of the Presidential Decree (Government Gazette D 391/03-10-2018 and D 414/12-10-2018) in October 2018
- 24 Court case on 3 June 2020 regarding 7 writs on annulment of the Presidential Decree
- 25 Awaiting for the court case decision where MEDASSET, ARCHELON and WWF Greece have intervened in the trial in defense of the Presidential Decree

MEDASSET hereby presents a summary of the current situation in Kyparissia Bay, a NATURA 2000 site, (THINES KYPARISSIAS – GR2550005):

Location and core nesting area

Kyparissia Bay, which is located on the Western Peloponnese coastline, has an increased ecological value due to the presence of an extensive dune ecosystem and the fact that it constitutes one of the most significant nesting sites of the *Caretta caretta* turtle in the Mediterranean Sea, an endangered species according to the 92/43/EOK Directive, in need of strict protection (annexes II and IV of the same directive). Approx. 82% of nesting activity occurs in the 10km beach between the estuaries of the rivers Neda and Arkadikos (approximately 1.452 nests in 2013, 1.286 in 2014, 1.472 in 2015, 2.702 in 2016, 2.650 in 2017 and 2.550 in 2018 and 2,850 in 2019 as recorded by ARCHELON). It is important to note that in all the aforementioned years the number of nests exceed those recorded on Zakynthos, officially the most important nesting site for *Caretta caretta* in the Mediterranean.

Overview of the case file at the Bern Convention

The ecological value of the area and the necessity for protection measures has been repeatedly reiterated to Greek authorities by MEDASSET and ARCHELON in cooperation with other Environmental NGOs. The Standing Committee of the Bern Convention, being aware of the severe pressures on the habitat due to construction interests since 2010, unanimously adopted Recommendation No. 174 at its annual meeting on December 5, 2014, urging Greece to prevent habitat deterioration and ensure improved protection of Southern Kyparissia Bay. The 2014 Recommendation was issued pursuant to a report and appraisal by an international expert¹ and concerns raised by NGOs (ARCHELON and MEDASSET) relating to the construction of roads, houses and marine structures near the nesting sites, as well as the risks posed by fishing practices, light pollution and human disturbance to the beach during the nesting and hatching season. In total, the Recommendation includes 12 measures for the protection and restoration of the site.

Since the adoption of Recommendation No. 174, MEDASSET in collaboration with ARCHELON, have presented the continued degradation of the site and its inadequate management to the Bern Convention each year. While positive steps have been made with the adoption of the Presidential Decree (PD), its enforcement is not only non-existent but also in danger of being annulled, as the court's decision after the 7 writs of annulment by real estate firms, 3 municipalities and some owners of coastal properties, is still pending. Should the writs of annulment be accepted, the area will be exposed again, totally unprotected by the law, to severe threats. Threats include illegal building constructions, further planting on the nesting beach and dunes, nearshore fishing, vehicle access on the nesting beach, lack of beach furniture management and severe light pollution. We strongly express our concerns and reiterate the urgent need for the adoption and enforcement of a Management Plan that will enforce the adequate management of the protected area.

¹ Report to the Standing Committee dated 1 September 2014 by Paolo Casale, University of Rome "La Sapienza", coordinator of the Sea Turtles Project of WWF Italy and member of the IUCN SSC Marine Turtle Specialist Group.

Adoption of the Presidential Decree

The Presidential Decree (PD) on the characterization of the sea and land area in the “Kyparissia Gulf Regional Park”, which was drafted in 2014 and submitted to the Council of State for constitutional lawfulness review, fell far short of EU and conservationists’ demands. It designated the sand dunes of Kyparissia Bay as a “regional” rather than “national” park, allowing much looser restrictions. The country’s highest administrative court in April 2015 returned the document to the Environment Ministry with numerous observations and objections that still need to be addressed (Decision 32/2015). The Court emphasized that the issuance of an improved new draft Decree was urgent in light of the European Commission's complaint and the 2014 Recommendation. Environmental groups have also vehemently criticized the Decree, arguing that it does not adopt a strong enough stance against activity that is detrimental to the natural habitat.

On 18th February 2016, the general prosecutor of the ECJ suggested that Greece should be convicted for failure to introduce measures to protect the Gulf of Kyparissia. Specifically, the prosecutor, whose proposals are not binding for the European Court, stated that despite the positive overall picture and the efforts made by the Greek government and non-governmental organizations to protect sea turtles for the last twenty years, Greece has allowed a series of activities that negatively affect both the reproduction of the turtle and the protected dune habitat in the region.

In order to avoid this, the Greek Ministry of Environment and Energy finally put the 2nd draft PD out for public consultation on 26th February 2016. The public consultation lasted two weeks, MEDASSET reviewed the draft PD, and together with all the other Greek Environmental NGOs, including ARCHELON, submitted comments and proposed amendments to the Ministry of Environment with the hope that the content of the PD will not remain unchanged. In a meeting in Athens in May 2016, the National Nature Committee 2000 (known in Greek as Epitropi ‘Fusi 2000’) gave its endorsement to the draft PD which remained unchanged and urged the Ministry to incorporate the Commission's comments to the PD and send it for review to the State Council before the expiration of the Ministerial Decision which was suspending new building permits and any type of construction activity behind the core nesting area.

On 24th May 2016, (when the suspension of building permits expired) the Ministry of Environment issued a new Ministerial Decision² that halted any type of construction activity throughout Kyparissia bay for the next two years. This was a positive development but due to its temporary nature (valid only for two years) the need for a new PD remained high.

On 10th November 2016, the Court of Justice of the European Union (CJEU), in its judgement concerning Case C-504/14 declared that a comprehensive and coherent preventive legislative and regulatory framework for the protection of the *Caretta caretta* sea turtle was lacking in the Kyparissia area.

Specifically the CJEU declared that the Hellenic Republic,

- by failing to adopt a comprehensive, coherent and strict legislative and regulatory framework for the protection of the *Caretta caretta* sea turtle in the Kyparissia area;
- by failing to take, within the prescribed period, all the specific measures necessary to prevent the deliberate disturbance of the *Caretta caretta* sea turtle during its breeding period; and
- by failing to take the measures necessary to enforce the prohibition on deterioration or destruction of the breeding sites of that species, has failed to fulfil its obligations under Article 12(1)(b) and (d) of Directive 92/43;

In April 2017 (i.e. two years after the Decision 32/2015 of the Council of State), the Greek Ministry of Environment (MoE) submitted a revised draft PD for Kyparissia Bay to the Council of State. In July 2017 the Council of State issued the new decision (175/2017), with which it postponed the elaboration of the PD (i.e. the issue of final approval or rejection of the new draft PD), until the MoE justified that an appropriate environmental study and assessment of Kyparissia Bay and the surrounding areas was conducted, in order for the effective protection of the area to be ensured. The Council of State requested the administration (MoE) to re-examine the issue more strategically and from the point of view of environmental protection, as the area was included in the Natura 2000 network.

² The ministerial Decision (FEK D 141/ 24-5-16) was issued according to the article 6, paragraph 9 of the law 3937/11.

In June 2018, the PD draft was approved by the Council of state (Decision 80/2018) and finally adopted and published in the Government Gazette (D 391/03-10-2018 and D 414/12-10-2018) in October 2018, which means that for the first time, Kyparissia Bay is officially and permanently protected. Specifically, a positive step of the PD is that it protects the nesting beach from permanent constructions.

According to the PD and the law 4519/2018, the management of Kyparissia Bay is under the responsibility of the Management Agency of Kotychi, Strofilia Lagoon & Kyparissia Bay, based close to Patras.

Many illegal activities though continue to degrade the habitat and they will only be addressed through the enforcement of the Presidential Decree and the preparation and implementation of a Management Plan while considering local's community needs and assistance. We would highly recommend that in order to implicate the local community properly into a proper co-management of the protected area, awareness raising activities and implication of the authorities are implemented. The preparation and implementation of the Management Plan must address several crucial issues: a complete identification of the legal road system in the protected area; beach use rules (duration of stay at the beach, beach zoning, code of conduct etc.) that will prevent harassment of sea turtles during their highly sensitive reproduction cycle; rules for beach bars operating in the core habitat; fishing regulations; and hunting regulations to protect the area's bird fauna. To date, not only has no Management Plan been implemented, but also, the existing PD is extremely poorly enforced. Furthermore, the Management Plan is not expected to be ready before end of 2021, if the planning of Greek authorities for the elaboration of Management Plans for all Natura 2000 areas goes as scheduled. At the same time, NGOs express intense concern about the agreement for the exploration and exploitation of hydrocarbons in the marine area adjacent to the protected area, which was signed simultaneously with the issuance of the PD for the protection of Kyparissia Bay.

2020 UPDATE

The first week of July 2020, MEDASSET's experts in collaboration with ARCHELON's expert, carried out an assessment of the conservation status of the core nesting area of Kyparissia Bay (All photos are taken by MEDASSET unless stated otherwise). Despite the visit of the environmental inspectors from the Ministry of Environment and Energy in April 2020 and the recommendations that they made to restore the long-term illegal activities mainly focused on the restoration of the illegal permanent constructions and roads, no actions had been taken till our visit to the Kyparissia Bay two months later. In addition, there is a pending decision from the Court with regards to the seven writs of annulment of the Presidential Decree. These actions deriving from real estate firms, 3 municipalities and some owners of coastal properties of the protected area, show the lack of real progress made by the government, including the local community and correspondent authorities, to implement the 12 measures under Recommendation No 174 to protect the area.

It must be noted that indicative of the refusal of some local authorities to accept the PD, is the fact that during 2020 nesting season the Municipality of Trifylia refused to allow ARCHELON to operate the seasonal information station in Kalo Nero. This refusal results in a severe draw back to the public awareness program. The visitors and the locals cannot be systematically informed about the need to protect a threatened species and its habitat.

We herewith provide an outline of the observed conservation problems at Kyparissia Bay, noting that they are not totally representative of the real situation due to the specific circumstances under which we implemented the assessment this year. The outbreak of COVID-19 and the crisis provoked, combined with the visit at an early summer season due to the earlier deadline to submit the report to the Secretariat of the Bern Convention, makes it impossible to reflect the regular touristic pressure. For this reason we will submit updates at a later stage, after the nesting period and having a clearer picture of the situation at the end of October. The aspects that are affected due to COVID-19 and early summer season will be specified in the text as '**Not representative**'.

1. Consider giving the key nesting areas for sea turtle an appropriate protection status that may ensure the long-time conservation of their high natural values, including sea turtle nesting beaches, dunes systems, coastal forests, marine habitats and others;

The PD, designates the nesting beach as a Nature Protected Area and not as a National Park. All areas that are not designated as Nature Protected Areas are designated as Agricultural Landscape Zones where building is permitted. Part of the coastal area, specifically at Kalo Nero area behind the core nesting beaches, is designated

as Agricultural Landscape Zones, putting in extreme danger the reproduction of sea turtles and the adequate protection of the habitat.

2. Permanently restrict or prohibit as appropriate based on an appropriate assessment the construction of any villas or other buildings, new roads or other infrastructure, in the key areas where construction licenses have been suspended by decree thus preserving the present natural state of those areas;

The failure to enforce the PD, has not led to a suspension or demolishing of the existent constructions just behind the core nesting area. Hence, the PD fails to adequately protect and preserve the habitat. No buffer zone has been implemented between the two areas despite requests by ARCHELON, MEDASSET and the 'Nature 2000' National Committee. Furthermore, the PD addresses the existing illegal road network, but it is yet to take any action in its demolishment and the lack of its enforcement and the roads continual use leads to the continuous degradation of the site (*see third recommendation*).

3. Restore the original sand dune and forest habitat in the above mentioned area by demolishing any illegal road built perpendicularly to the shoreline, as well as other existing illegal artificial infrastructure; put immediately effective measures in place to prevent cars and caravans from reaching the proximity of the nesting beaches and produce nuisance to sea turtle nesting and hatching;

As mentioned, despite what is stated in the PD, no action has been taken for the demolition of the illegal road system perpendicular to the shoreline, or the restoration of the area (Fig.1 (a) and (b)). No measures have been implemented with regards to the prevention of access of cars in close proximity to the nesting beaches and furthermore no blockades were placed at the legal roads leading to the beach, allowing easy access of vehicles onto the beach in high density sensitive nesting areas. (Fig. 2 (a), (b), (c) and (d)). In addition, not effective measures have been taken to prevent cars and caravans from reaching the proximity of the nesting beaches, producing nuisance to sea turtle nesting and hatching (Fig 3). Lastly, camping occurs extensively throughout the protected forest habitat that borders the dunes and nesting beach (Fig. 4).

4. Ensure that owners of the houses that have already been built in sensitive areas in the vicinity of the core nesting area, avoid changing the profile of the dune, and control that the communities and geomorphological dynamics; ensure that existing houses change or shade the lights illuminating the beach causing photo-pollution affecting negatively sea turtle nesting and hatching; remove invasive alien plants already planted in some of those areas (for instance *Carpobrotus*) as they may spread into dune and beach nesting areas making them inappropriate for sea turtle nesting;

As stated in the PD, the existing houses need to make vital changes to reduce light pollution and restore the degraded sand dune eco-system. Due to the lack of enforcement, only some modifications have been implemented by the Municipality of Trifylia resulting in a small decrease of the light pollution in Kalo Nero, but not anywhere else.

Introduced alien plants have not been removed and there has been no effort to reinstate the previous dune ecosystem where houses have been built within the vicinity of nesting areas (Fig.5 (a), (b), (c) and (d)). In addition, new alien species are planted to set the border for their garden in line with the other house. Cultivation of the flora continues to maintain these alien species and prevent restoration of the sand dune ecosystem. The invasive species *Carpobrotus* can be found at various locations along the shore, spreading onto the beach spreading from Kalo Nero till Vounaki area (Fig. 6 (a) and (b)). In addition, invasive species and newly planted young trees have been introduced by the new businesses of 'beach bars' to operate during the summer. (Fig. 7).

5. Avoid any agriculture in the public domain and restore dunes to their original natural state;

No action has been taken to enforce the specifications of the PD and thus the cultivation of watermelons still continues extensively across the sand dune area.(Fig. 8 (a) and (b) .

6. Address in the whole Nature 2000 site the problem of photo-pollution, particularly in Kalo nero; all lights should be shaded in a way to avoid illuminating the beach and dune areas

Issues relating to light pollution are addressed in the PD, but due to lack of enforcement, there are still extremely high levels of light pollution at the beach at Kalo Nero by the taverns operating along the beachfront, as well as by hotels and streetlights (Fig. 9 (a), (b) and (c)). It was noted in 2017, that Trifylia Municipality implemented some mitigation measures for reducing light pollution, by directing artificial lighting downward at a lower height; however, this approach is not extensively implemented, even though the adjustment is not highly complicated. (Fig. 10 (a) and (b))

7. Ensures that the beach's equipment used now in the Natura 2000 site is removed at night or stored in a way that reduces the area occupied on the beach; prohibits does not give any licenses to any new beach equipment so that core nesting area remain free of obstacles for nesting turtles; 'Not representative'.

The beach furniture used on Kalo Nero beach cover a zone of approximately 1.2 km and tourism business enterprises owners remove them only occasionally during night, despite the relevant provisions of the PD. The illegal wooden platforms on the beach of Kalo Nero remain despite the demolition protocols that have been issued from the Public Land Authority of Kalamata and despite the provisions of the PD for urgent demolition of all illegal constructions. Fixed structures (boardwalk, volleyball net) are also present on the beach at Elea near an illegally operating beach bar. (Fig. 11 (a)-(f))

8. Prohibit any sand and gravel extraction or any new structures in the sea (breakwaters, etc.);

During this year's assessment, sand and gravel extraction was observed, whereas this issue was not recorded for the last three years. (Fig. 12 (a) and (b))

9. If new housing is to be built to accommodate growing tourism, favor building in areas already urbanized (such as Kyparissias town) avoiding delivering building licenses in pristine natural areas within the Natural 2000 site, independently from the ecologically friendly characteristics of the new buildings;

The Measure is only partially addressed. The PD fails to adequately protect the nesting habitat, especially at Kalo Nero area, directly behind the core nesting beaches, where building is permitted. Ongoing constructions were observed at Vounaki and Agiannakis Beach (Fig. 13 (a) and (b)) although questions were raised since 2019 whether the construction is in accordance with legal building permits.

10. Consider regulating the navigation of vessels in the marine part of the Natura 2000 site GR 2550005 during the nesting and hatching season (April to October) so as to avoid the killing of turtles by boats; assess existing fishing practices and prohibit those that may negatively affect nesting and mating turtles, as some are likely to be drowned in fishing nets;

Fishing activities are largely regarded as the highest threat to sea turtles today and the only maritime restrictions stated in the PD relate to vessel speed limit (maximum six knots) within one mile of the shoreline and recreational fishing, which is permitted only during the day. Fishers are still permitted to set their nets in the nearshore waters in close proximity to the nesting beach, which presents an extremely high risk of incidental capture of breeding adult turtles and hatchlings. NGOs and experts called on the authorities to include protective measures to address fishing threats in the PD, but as stated by the Ministry of Environment these issues should be addressed within the Management Plan, which is yet to be developed.

Furthermore, there is no enforcement of the PD six- knot speed limit and prohibited nighttime recreational fishing activities. Recreational fishing is occurring widely across the shoreline, which also poses a significant threat to sea turtles, with risks of hook ingestion and entanglement with abandoned fishing line (Fig. 14).

11. Enforce measures aimed at avoiding people and cars visiting the sea turtle nesting beaches at night, particularly from the camping sites; control feral dogs as they have proved to attack and hurt many nesting sea turtles; 'Not representative'.

No restrictions were included in the PD to prohibit or reduce human presence on the beach at night, but as stated by the Ministry of Environment, these issues should be addressed within the Management Plan, which is still yet to be developed. Currently there is a complete absence of measures preventing people and cars from accessing the beach at night. There are no notices or signs informing visitors that this is a sea turtle nesting beach and that visitors should not access the beach at night to prevent disturbances. The lack of blockades to the access points allows easy beach access by vehicles at night (Fig. 15 (a)-(d)). As a result to all the above, the nesting areas are subjected to high levels of disturbance.

No attacks by feral dogs have been recorded this year.

12. Keep the Standing Committee regularly informed about the progress in the implementation of this Recommendation.

MEDASSET is in frequent contact with the Secretariat, updates the Secretariat in due time for any developments in the area before every Bureau Meeting and every Standing Committee Meeting with detailed reports and letters, prepares responding letters to Greek and EU authorities correspondingly.

General remarks & Recommendations

For Kyparissia Bay to be sufficiently protected there must be (1) immediate and effective enforcement of the PD and (2) urgent preparation, issuance and implementation of a Management Plan for the area, which will also cover the unresolved issues not addressed in the PD (e.g. fishing activities and nighttime beach use) and (3) impose fines and penalties in order to restore the illegal activities. The Management Plan must be prepared in cooperation with the Kotychi – Strofylia – Kyparissia Bay Wetlands Management Body and it is essential that its development includes the active participation of local stakeholders and community. The implementation of a Management Plan will strengthen the protection of the site and will clarify the PD provisions, which have not been described in detail. The preparation and implementation of the Management Plan must address several crucial issues: a complete identification of the legal road system in the protected area; beach use rules (duration of stay at the beach, beach zoning, code of conduct, etc.) that will prevent disturbance of sea turtles during their highly sensitive reproduction cycle; rules for beach bars operating in the core habitat; fishing regulations; and hunting regulations to protect the area's bird fauna, which the PD fails to address. With a Management Plan in place, regulating and controlling authorities will have clear provisions so that the area will be better patrolled and the law enforced. Concrete actions should be taken by the correspondent authorities for the eradication of the illegal activities by the local community. This should work as an exemplar for all the community and will eliminate the further deterioration. These three critical issues need to be immediately addressed.

Hence, MEDASSET calls upon the Bern Convention Standing Committee to:

- Follow-up, discuss and keep the case file open at the 40th Meeting of the Standing Committee.
- Urge Greek authorities to fully implement Recommendation No. 174 with no further delay.

Figures 1- 15



Fig 1 | Recommendation #3: Illegal road system with no signs of any demolition works to restore protected site between Elaia and Agiannakis (a) one of the 5 illegal roads constructed by real estate firm taken by drone (b)





Fig 2 | Recommendation #3: Lack of restoration to the roads in the sand dunes and blockades to access points; Tractor parked on sand dunes at Elaia beach (a), truck on the beach to be working as a 'beach bar' (b), traces of cars and vehicles on the nesting beach following to the beachfront, the perpendicular to the sea tracks of the turtle "meet" the parallel to the beach vehicle tracks. (c) a sea turtle track and a nesting attempt (d)



Fig 3 | Recommendation #3: Not effective measures in place to prevent cars and caravans from reaching the proximity of the nesting beaches, producing nuisance to sea turtle nesting and hatching;



Fig 4 | Recommendation #3: Illegal camping in coastal forest directly behind the sand dunes of the nesting area

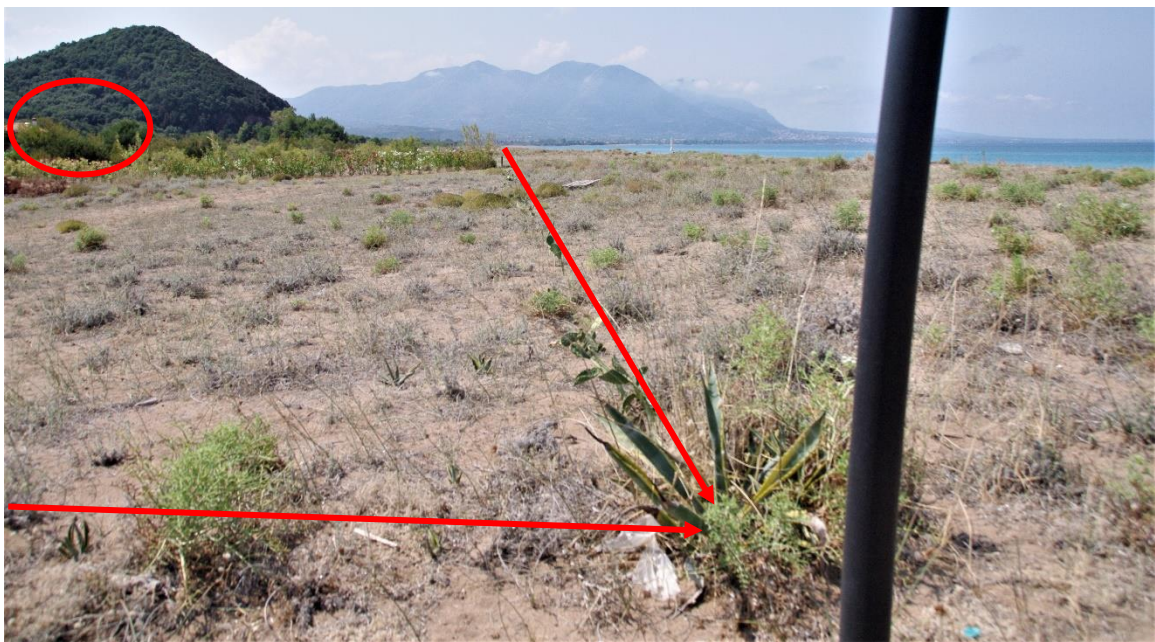




Fig 5 | Recommendation #4: Existing houses at Vounaki with arrows showing the new alien species introduced as a boundary for the house, new alien species introduced to set the border for their garden in line with the other house (a-b) the adjacent house in circle and the boundary of new alien species introduced as follows from the photo (c) and Agiannakis with maintained introduced alien plant species. No steps have been taken for their removal to reinstate the natural dune system. (d)





Fig 6 | Recommendation #4: Planted young trees and cultivation of invasive species *Carpobrotus* spreading on the back a high density nesting area at Kalo Nero (a) and (b)



Fig 7 | Recommendation #4: New plants introduced by the new businesses of ‘beach bars’ to operate during the summer.



Fig 8 l Recommendation #5: Alteration of sand dune system with continued watermelon cultivation (a) and (b)



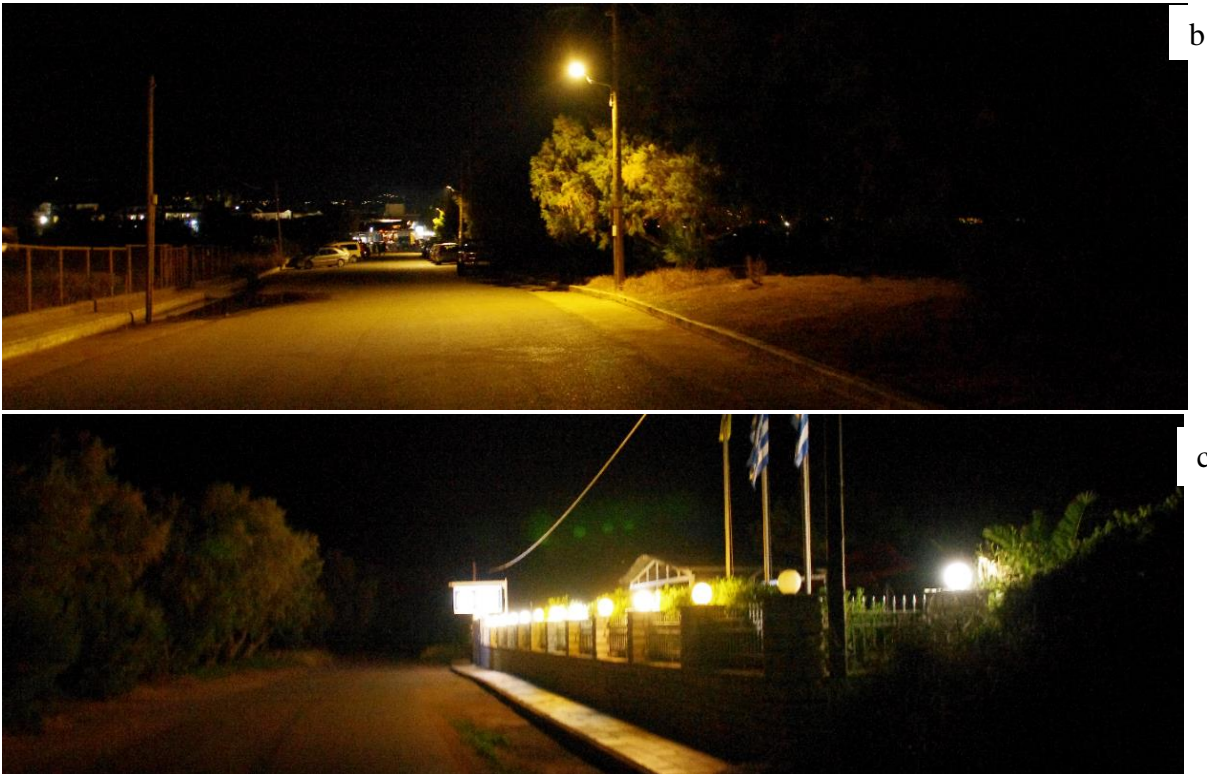


Fig 9 | Recommendation #6: Photo pollution of the Tavernas along the beachfront at Kalo Nero (a), Streetlights (b) and Local hotel. (c)



Fig 10 | Recommendation #6: Extensive presence of caravans at Kalo Nero nesting beach not removed during the night (a) and overnight camping along the beachfront and on the beach in temporarily structures. (b)





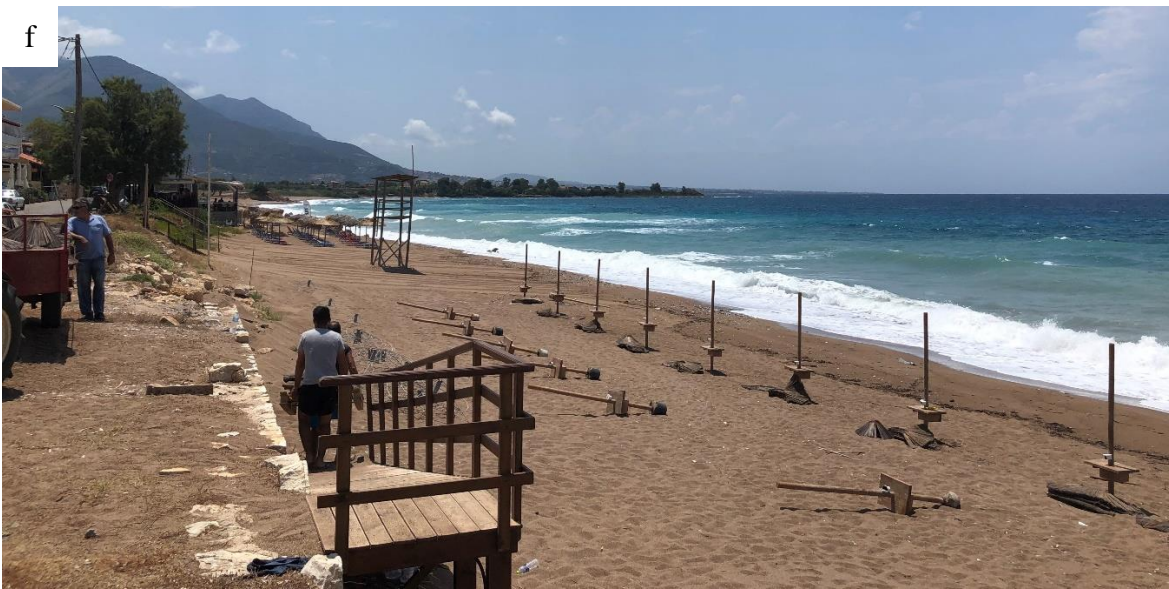


Fig 11| Recommendation #7: Heavy beach equipment used, rubbish bin and shower with an actual runoff showing the proximity to the nesting right in front of it (a), not removed during the night resulting in not only disturbance but also trapping of the nesting animals (b), (c) and introduction of new beach equipment in core nesting areas (d), (e) and (f)



Fig 12 | Recommendation #8: Sand extraction at Kalo Nero in preparations of a new 'beach bar', 'flattened' the sand, heavy machinery on the nesting beach identified by the traces. (a) and (b)



Fig 13 | Recommendation #9: Further building on-going at (a) Vounaki (illegal road, building concrete and remains of cultivation) (b) Agiannakis Beach (shower construction on the beach, maintained introduced alien plant species)

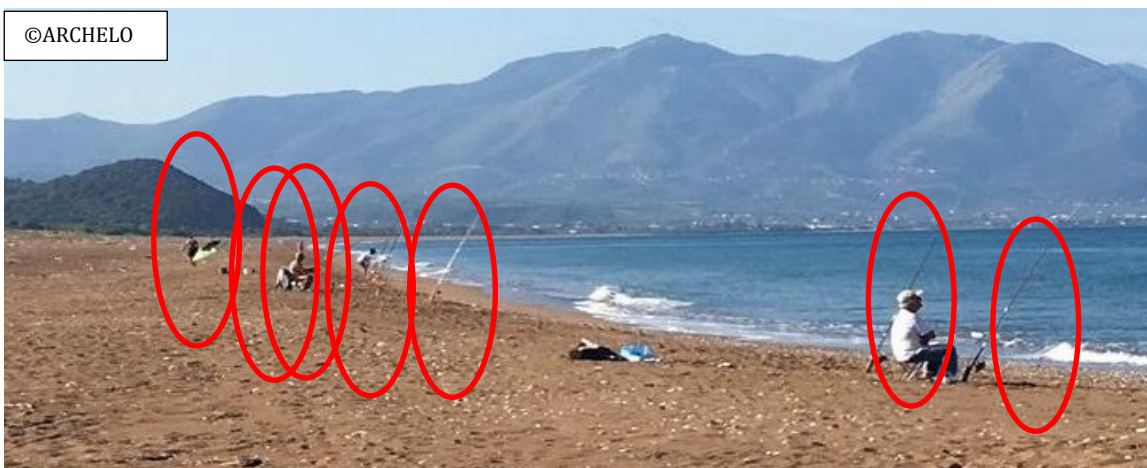


Fig 14 | Recommendation #10: Recreational fishing from the shore occurring across the core nesting area at Agiannakis.





Fig 15 | Recommendation #11: Human presence on the nesting beach at Apollo camping village (a); Tracks of vehicle overlaid by emerging females tracks (b); Lack of blockades of roads onto beaches allows vehicles to enter beaches at night (c) and (d)