



ANNUAL ACTIVITY REPORT KYPARISSIA BAY PROJECT

———— 2024 ————

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**ARCHELON, The Sea Turtle
Protection Society of Greece**



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1 INTRODUCTION

The nesting beach of the Loggerhead sea turtle (*Caretta caretta*) in Kyparissia Bay is part of the European Natura 2000 sites GR2550005 "THINES KYPARISSIAS: NEOCHORI – KYPARISSIA" and GR2330005 "THINES KAI PARALIAKO DASOS ZACHAROS, LIMNI KAIAFA, STROFYLIA, KAKOVATOS". The part of the beach defined by the rivers Arkadikos to the south and Neda to the north constitutes the nesting core, has a length of 9.5 kilometers and is entirely included in GR2550005.

The entire Kyparissia Bay was designated a Nature Protection Area by Presidential Decree issued in October 2018 (Government Gazette D 391/03-10-2018, D 414/12-10-2018) and includes the above Natura 2000 sites (GR2550005, GR2330005) and the GR2330008 "THALASSIA PERIOCHI KOLPOU KYPARISSIAS: AKR. KATAKOLO – KYPARISSIA". The Management Unit (MU) responsible for the protection and management of the sea turtle habitat is the MU of the National Park of Wetlands of Kotychi, Strofylia and Protected Areas of Western Peloponnese and is part of the Natural Environment & Climate Change Agency (N.E.C.C.A.). The MU has not yet been active in guarding the sea turtle habitat, while its management actions are very limited.



2 RESULTS

Systematic nest recording in Kyparissia Bay began in 1984, and since 1992, the vast majority of nests within the nesting core have been protected by ARCHELON with globally recognized protocols against predation, flooding and hatchling disorientation. As a result of this mass protection of the nests, a gradual increase in the number of nests has been observed since 2006, making Kyparissia Bay the nesting area with the largest breeding population of Loggerhead sea turtles in the Mediterranean.

In 2024, ARCHELON attached satellite transmitters to 5 more turtles (3 females and 2 males). These transmitters complement previous research, during which 29 transmitters were attached to investigate the feeding grounds used by the Kyparissia Bay population. Another important result of the research was the finding that the nesting frequency (nests/turtle/year) is higher than previously thought, which revises previous data on the size of the breeding population.

In 2024, the ARCHELON project for monitoring and conservation of sea turtle reproduction in Kyparissia Bay was carried out by a group of volunteers/researchers between May and September 2024 and was successfully completed. According to preliminary data, in 2024, a record number of approximately 6,700 nests were recorded in the nesting core of the area and about 1,200 nests were recorded north of Neda up to Tholo (approximately 4.5 km in length). Approximately 38.2% of the nests were protected from predation, trampling, and the effects of light pollution. It should be noted that due to the large number of nests, the nest protection protocol was adapted to achieve the greatest possible protection with the available human resources. Specifically, in areas of the beach with intense human presence all nests were protected, while in the rest of the areas protection was applied to one-quarter of the nests.



In the duration of the project, 13 cases of sea turtle strandings were recorded (12 dead and 1 injured). 16 additional cases of strandings (15 dead and 1 injured) were recorded in the entirety of Kyparissia Bay from the competent Port Authorities since the beginning of the year. The two injured turtles were transferred for treatment to the ARCHELON Sea Turtle Rescue Centre in Glyfada, Attica.

Through ARCHELON's information and public awareness program, 6,500 visitors and residents were informed about sea turtles and the threats they face. These activities were carried out on the beach, in various tourist facilities, at the ARCHELON's Environmental Station in Agiannakis, and at the ARCHELON Information Kiosk on the beach of Kalo Nero (operating May 17 - September 23).



3 THREATS

During the summer, in the area that ARCHELON was active, there were numerous violations of the provisions of the Presidential Decree. Specifically, ARCHELON recorded the construction of 2 new houses in the Vounaki area within a Nature Protection Zone (NPZ-2γ) where construction is not permitted. Despite being located in a Nature Protection Zone (NPZ-1β), illegal wooden platforms were once more recorded on the nesting beach of Kalo Nero in 2024. One of the businesses in the same area even constructed a new one.

Constant vehicle movement was also recorded, both on the nesting beach and on the dune zone (degrading the protected vegetation). Regarding the 5 illegal roads constructed by a real estate company in previous years, the concrete barriers installed in 2021 by the Ministry of Environment and Energy (MINENV) proved insufficient for another year, as they did not prevent vehicle access to the beach and the dune zone. Beach cleanings using heavy vehicles were conducted even after the start of the nesting season. At the same time, beach-front businesses did not properly manage their beach furniture during the night, limiting available space for nesting. Extensive light pollution affected a significant percentage of the nests. Also, cases of free camping were recorded, both on the beach and behind it. Additionally, agricultural activity continued in the dune zone within the Nature Protection Areas, resulting in the ongoing degradation of the protected vegetation.

In 2024, annual local music events continued to be held (August 4th in Giannitsochori and August 5th in Kalo Nero), as well as other events (beach parties, July and August in Giannitsochori) right behind the beach. The organization of these events, apart from being prohibited by the Presidential Decree, coincided with the hatching period and caused disorientation in the hatchlings, which are phototactic organisms.



Finally, frequent presence of horses, night fishing, presence of invasive plant species in the dune zone, and in some cases, violations of the maximum allowed speed (6 knots) by speedboats were also recorded on the beach. The competent authorities made limited effort to implement the Presidential Decree and to mitigate the aforementioned threats that impact both the nesting habitat and the sea turtle reproductive activity.

It should be noted that some of the existing threats, which either deter adult sea turtles from nesting or cause disorientation and trampling of the hatchlings, are not regulated by the Presidential Decree. These are expected to be included in the Management Plan (MP), which unfortunately has not yet been issued. These include the operation of beach cafes-bars (cantinas) in the areas of Agiannakis, Elaia, Giannitsochori, and other parts within the Nature Protection Area, which cause light pollution, noise pollution, and the gradual establishment of illegal parking areas on the dune zone. In addition, the human presence on the beach during the night, the use of private beach furniture that is not removed at night, as well as the terms of professional fishing must be regulated.



4 CONSERVATION

Beyond its undeniable ecological value, the coastal zone of Kyparissia Bay also undoubtedly possesses a high aesthetic value due to its natural beauty. Despite this, local authorities, self-government, and coastal businesses have not shown the due respect for the existing environmental legislation, particularly the Presidential Decree and the regulations concerning the nesting beach and coastal habitats. Thus, the inadequate implementation of environmental legislation has been repeated for another year. The ongoing lack of a Management Plan, which should be issued immediately taking into account the threats not regulated by the Presidential Decree, adds to this problematic situation. In order to ensure the proper protection, the creation of visitor reception infrastructure, and the overall effective management of the area, it is necessary for the competent Management Unit of N.E.C.C.A. to be adequately staffed. It is also necessary to closely cooperate with local authorities and businesses, so that the ongoing disturbances and the continuous degradation of the habitat can cease.

The long-term monitoring data collected by ARCHELON in Kyparissia Bay show a significant recovery of the sea turtle population. This recovery was achieved after many years of hard work by thousands of volunteers and is entirely dependent on the previous conservation efforts, which are important to continue. Similarly, it is important to address the threats described in this report. Otherwise, despite the intensive efforts of ARCHELON and other environmental organizations, the viability of the nesting habitat will be jeopardized and the observed recovery of the reproductive population may be reversed.

Kyparissia Bay, along with the neighboring Bay of Laganas (Zakynthos), hosts over 86% of all Loggerhead nests in the European Union. The Greek government's announcement to establish a large National Park in the Southern Ionian Sea, which will include both areas, is a promising development for the long-term survival of the species.

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