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Cover photo: Releasing *Alaniaris* to back to the sea with transmitter in place in 2015. Amvrakikos Gulf, Greece. See p15. ©ARCHELON

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¹ a de facto state that comprises the north-eastern portion of the island of Cyprus. It is only recognised by

Turkey and considered by the international community to be part of the Republic of Cyprus. See <https://en.wikipedia.org/wiki/Cyprus>

Updating the Record for the Earliest Loggerhead Sea Turtle (*Caretta caretta*) Mating in the Mediterranean

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The more recent development of affordable and easy-to-use drones has opened a wide scope of possibilities regarding ecological research (Rees et al. 2018). They have proven to be useful in studying mega-vertebrates that are known to be elusive and monitor their behaviours with minimal disturbance (Chabot & Bird 2015; Schofield et al. 2017). Several sea turtle studies have implemented the use of drones to study operational sex ratios and mating dynamics (Schofield et al. 2017), densities and distributions (Schofield et al. 2019; Comis et al. 2022) and even perform Photographic Identification (Photo ID) studies (Comis et al. 2022).

Loggerhead sea turtle (*Carreta caretta*) mating in the Mediterranean is primarily observed between March and June (Schofield et al. 2013, 2017) and is known

to be temperature dependent (Jourdan & Fuentes 2015). In 2023 loggerhead turtle mating was observed in late February (27 and 28 February) on two separate occasions in Kefalonia, Greece setting the record for the earliest recorded mating event in the Mediterranean (Witzmann et al. 2023).

In 2024 drones were used to detect a mating event on 19 February in Kefalonia, Greece (Fig. 1), surpassing the earliest recorded mating events from 2023 (Witzmann et al. 2023). The drone captured Photo ID shots that were used to identify both mating individuals. Both individuals had previously been measured and tagged by Wildlife Sense (Wildlife Sense, unpub. data) confirming their sex, and hence, a successful mating attempt.

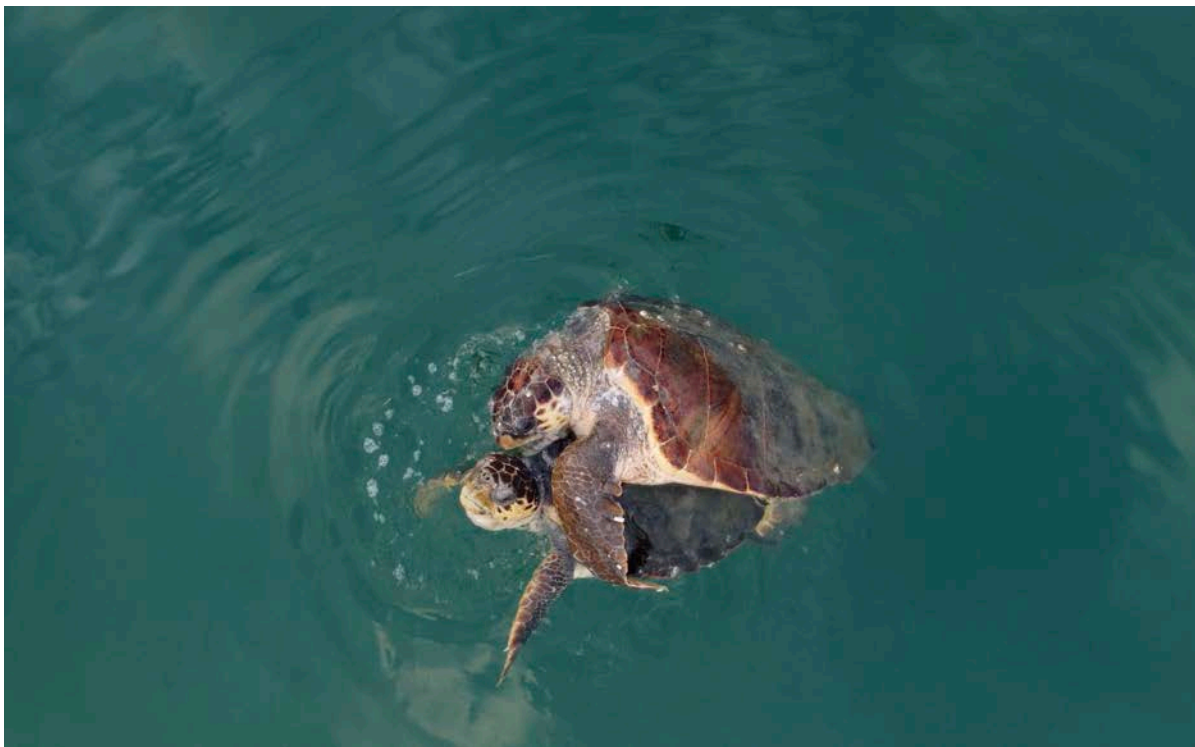


Figure 1. Loggerhead sea turtle mating on 19 February 2024 in Kefalonia, Greece. The image was captured using a DJI Mini 2.



The use of drones has allowed for successful year-long monitoring of the sea turtles in the Argostoli harbour by Wildlife Sense. Through regular drone flights throughout the winter months, it is possible to deduce if these February mating events are highly sporadic or if they are indeed becoming more regular throughout the years.

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