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KYPARISSIA BAY VS ZAKYNTHOS: RECENT DATA ELEVATE KYPARISSIA BAY TO HOST THE LARGEST NESTING AGGREGATION OF LOGGERHEADS IN THE MEDITERRANEAN

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As shown from the 31-year monitoring work of ARCHELON the largest nesting aggregations of loggerhead turtles in the Mediterranean are found in Greece and specifically in Laganas Bay, at the southern coast of Zakynthos Island, and in Kyparissia Bay located in western Peloponnese, about 90km south east of Zakynthos. From 1984 until 2007 Laganas Bay hosted on average 1,244 nests per year which accounts for about 36% of all nests in Greece and 17% of all loggerhead nests in the Mediterranean, while in the same period Kyparissia Bay hosted on average 621 nests per year. The nesting habitat in Zakynthos has a total length of 5.5km, spread over 6 discreet beaches, while the nesting habitat of Kyparissia Bay comprises a 44km continuous beach. Despite their proximity the two areas have important differences. Laganas Bay faces southwards so it is not much affected by inundation while the western oriented Kyparissia Bay is impacted by the predominant in summer north westerly winds; nests in Kyparissia Bay are affected by severe canid predation while on Zakynthos such a threat is negligible. Further, Laganas Bay is characterized by intense tourist pressures whereas Kyparissia Bay still enjoys at its greater part relatively low tourism and coastal development. The ARCHELON long-term project, consisting primarily of locating and monitoring nests, covered all Laganas Bay beaches while in Kyparissia Bay the whole area was monitored only in the period 1984-1989 and then turtle work was restricted to the southernmost 9.5km where about 84% of all nesting concentrates and thus this part of beach has been characterized as the core area. The differences between the two areas have shaped differently the field methodology at each area. In Kyparissia Bay the high levels of nest predation and inundation resulted in a great amount of nests being protected by fencing or relocation. Examination of population trends over the last 21 years (1994-2014) shows a significant decline in Zakynthos and a significant increase in Kyparissia Bay, to the effect that in 2013 and 2014 the number of nests at the core area of Kyparissia Bay surpassed those at Zakynthos by about 21%. In order to assess how this increase relates to nesting distribution along the whole Kyparissia Bay, since 2012 ARCHELON has surveyed parts of the northern section. These surveys indicated that the proportion of nests in the northern section is larger than previously assessed. Current data clearly indicate that Kyparissia Bay hosts the largest nesting aggregation of loggerheads in the Mediterranean making it imperative that a proper protection scheme, similar to the National Marine Park of Zakynthos, is instigated. Nevertheless, recent developments in Kyparissia Bay have shown that a gradual degradation of the coastal ecosystem is taking place through destruction of dunes, deforestation, beach front building, and unregulated beach use. A grand conservation scheme would be to combine these two major nesting areas into one vast marine park, incorporating the adjoining marine area. We thank all field assistants and the many hundred volunteers without whom the above long-term work would not happen. AFR acknowledges travel support from Symposium sponsors and the International Sea Turtle Society.