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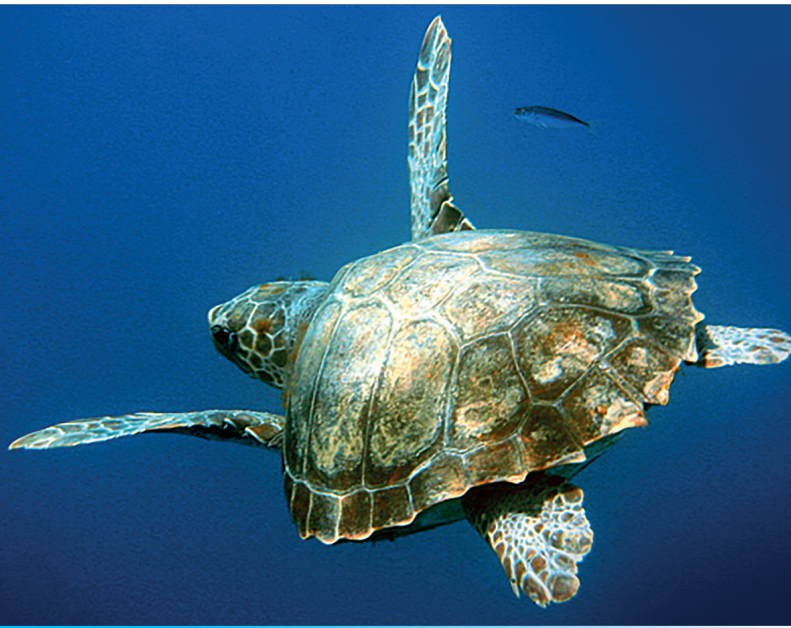

BOOK OF ABSTRACTS

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A 10 YEARS EVALUATION OF SEA TURTLE RESCUE AND REHABILITATION ACTIVITIES IN SEA TURTLE RESEARCH, RESCUE AND REHABILITATION CENTER (DEKAMER), DALYAN-TURKEY

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Sea Turtle Research, Rescue and Rehabilitation Center (DEKAMER) established in 2008 in Dalyan-Muğla-Turkey and continues rescue and rehabilitation activities. Stranded turtles were admitted from all along the Turkish coastline since it's establishment. In this study, The recovery process and success rate of the stranded sea turtles which admitted to DEKAMER, the primary cause of injuries were presented. A total of 266 turtles admitted to DEKAMER. Of these, 207 turtles were *Caretta caretta* (78%), 50 turtles were *Chelonia mydas* (19%) and 9 turtles were *Trionyx triungus* (3%). Of these turtles, 146 (54.8%) were released to the sea after rehabilitation process, 115 (43,2%) died during the rehabilitation, and 5 (2%) turtles are still in rehabilitation process. The number of stranded turtles admitted to DEKAMER increased in the 10 years period (r^2 = 0.94). The majority of the stranded turtles (69%) found in Muğla. The rest of the turtles were found in Antalya (17%), Aydın (9%), and the remaining stranded turtles found in Balıkesir, Çanakkale, İzmir and Mersin. A total of 39.47% of the turtles were female, 18.42% were male, and 42.10% were juvenile. Anthropogenic activities were the main cause of injuries (72.27%). Of these, 107 turtles (40%) were injured from fisheries related activities; 72 turtles (27%) were stranded due to natural causes such as parasite infestation, clod-stunning, diving problems; 52 (20%) turtles were injured from marine vehicle collusion, and 35 turtles (13%) were injured from intentional attack by human. We also observed secondary injuries in 56 (22%) turtles. Stranded turtles were found throughout the year, but the peak season is summer, which coincidence with high tourism season. Most injured turtles were admitted from Muğla and Antalya, which are the biggest mass tourism regions. In addition, DEKAMER has strong stranding network in these regions. Strengthening the stranding network in all regions will increase rescuing injured or sick turtles. In addition, fisheries related studies should be started and regulations on marine vehicle use in the shores of nesting beaches should be implemented immediately in Turkey.

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BACTERIOLOGICAL SURVEY OF *Caretta caretta* FROM THE SOUTHWEST ITALIAN COAST: PREVALENCE, ANTIMICROBIAL RESISTANCE AND INFLUENCE OF ENVIRONMENT

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The monitoring of sentinel species is strongly needed to assess the health of marine ecosystems, which is rapidly deteriorating. Sea turtles served as bio-indicators in different contexts. Nevertheless, sea turtle infectious diseases have not been fully investigated, especially in the wild, making the health assessment of populations still difficult. This study was aimed at performing a bacteriological survey on wild, live *Caretta caretta* from the Tyrrhenian Sea, to address their role as sentinels for their ecosystem and as carriers of potential zoonotic agents. Thirty-five *C. caretta* were classified considering estimated life stage; area, season and cause of recovery; plastic ingestion. Oral and cloacal swabs were collected and processed by culture methods. Isolates were identified and submitted to antimicrobial susceptibility test. Statistical analyses were performed to explore the possible associations between bacterial families and classification factors. Bacterial isolates included: Enterobacteriaceae, *Pseudomonas* spp., *Aeromonas* spp., *Vibrio* spp., *Shewanella* spp. and *Staphylococcus* spp. Different rates of antimicrobial resistance were detected. *Morganella morganii*, *Citrobacter* spp., *Staphylococcus aureus* and *Pseudomonas aeruginosa* were the most resistant strains. Significant associations were detected between bacterial families and classification factors (i.e. life stage; area; season; plastic ingestion). The majority of bacterial isolates regarded opportunistic pathogens in sea turtles, yet some of them might pose a risk to other marine animals and humans, pointing out sea turtles as carriers of potential zoonotic agents. This survey provides a hint of the bacterial communities found in wild populations, and how the environment could influence them. Moreover, it raises concerns regarding the dissemination of antimicrobial resistance in marine wildlife and it strengthens the link between turtle health and ecosystem health, within the wider concept of One Health.

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