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ARE SCAVENGING BEHAVIOR AND MARINE PLASTIC DEBRIS INGESTION RELATED?

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Scavenging on nature is related to the possibility to gain additional energy from an unexpected resource (opportunistic feeding strategy) or to the main feeding strategy of a species (obligate scavengers). In this study, we explored a robust data set of a marine large consumer (green turtle *Chelonia mydas*) over 500 records of stranded events along Brazilian coast to assess a possible relationship between scavenging behavior in cephalopod carcasses and plastic debris ingestion by species. Data from sea turtle diet and debris ingestion were extracted from a long-term sea turtles stranding program. Analysis concerning sea turtle feeding habits and debris ingestion were performed examining entire gastrointestinal systems to retrieve debris and cephalopods beaks. We used measures of upper rostral length and lower rostral length of beaks to estimate mantle lengths and body mass of cephalopods. A total of 21 sea turtles have ingested cephalopods. All sea turtles individuals that have ingested cephalopod also ingested plastic debris. Nine cephalopod *taxa* were identified from seventeen pairs and three single beaks found in diet analysis. The most common *taxa* were *Chroteuthis* sp. (9 individuals), following by *Histioteuthis* (6 individuals). Necropsies revealed 66.7% of *C. mydas* individuals died by debris ingestion, which is remarkable higher than the mean debris ingestion death rates reported in Brazil (10.7%), even in the most affected areas (29%). Also, individuals that have ingested cephalopods presented higher debris amounts in their gastrointestinal tract than individuals of the same site and size classes that did not ingest cephalopods. We concluded from our evidences that the sea turtle opportunistic scavenging behavior may be enhancing their odds to ingest plastic debris. In this perspective, the high presence of plastic debris floating in the oceans may function as evolutionary trap for marine opportunistic scavenger animals.