Pawikan on FB: Facebook as a Source of Information on the Current State of Sea Turtles in the Philippines with an Emphasis on Mortality

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Extended Abstract

Five of the seven species of pawikan (sea turtles) are found in the Philippine seas. These are Olive ridley turtle (Lepidochelys olivacea), Hawksbill turtle (Eretmochelys imbricata), Green sea (Chelonia mydas), Loggerhead turtle (Caretta caretta), and Leatherback turtle (Dermochelys coriacea). All of these are threatened species due to predation (animals and humans), climate change, harvesting of eggs, juveniles and adults, bycatch, and habitat degradation. Thus, to protect the species, several laws, policies, and programs have been passed and implemented by the Philippines government since 1979 (Marine Wild Fauna Watch of the Philippines (MWFWP), 2014). However, despite the efforts to protect the pawikan, reports about dead sea turtles due to various causes are becoming frequent than ever. Furthermore, public posts on Facebook about dead pawikan by private individuals are increasing. On the other hand, data on the mortality causes of sea turtles remain scarce as of the moment. Hence, to provide additional data, this study was conducted. The data were gathered through Facebook Search function by searching the following search strings: (pawikan AND dead) + year; (pawikan AND patay) + year;

(turtle AND dead) + year; and (turtle AND patay) from 2011 to October 2019. Only posts with photos and/or videos were included in the analyses. The species were identified using the manuals by Wyneken (2001) and by the MWFWP (2014).

A total of 162 public posts were included in the study, composing all of the five species of *pawikan* that could be found in the country, of which the majority (64%) were green sea turtles. On the other hand, 71% of the posts were posted by private individuals, and the remaining percentage was posted by news organizations, community pages, local government units, environmental organizations, and bloggers. The mortality causes of the *pawikan* in the majority (64.8%) of the posts were unknown because the majority of the dead *pawikan*, when found, were decomposing, hence were buried upon retrieval. Thus, necropsy and tissue sampling to determine the causes of death were not done. Moreover, most of the account owners were unresponsive to inquiries. On the other hand, for the posts that have information about the mortality causes, the most common causes of death among the *pawikan* in the Philippines, were boat strike, spear wound, entanglement to fishing gears, predation by humans (butchered or cooked), poaching, fish hook ingestion, ingestion of plastic wastes and predation by animals.

The findings of the study suggest that humans continue to be the biggest threat to *pawikan* not just because their actions are bringing negative impacts to the animals but also because, for some, *pawikan* "is food." Thus, people must be educated regarding the importance of *pawikan* and the measures that must be taken to protect them. However, when educating the people, the government should ensure that proper media are used when communicating with them the laws, policies, and guidelines. Moreover, the study suggests that Facebook is an effective and cost-effective way of data gathering, as it allowed the researchers to verify species identification. Since most Filipinos have a Facebook account(s), it could be an effective medium to educate the people regarding the laws, policies, and guidelines in management and conservation measures, and to engage them in data gathering.

Keywords: Citizen science; Philippines; sea turtles; social media; wildlife conservation.

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