

Two decades of bottlenose dolphin research on Little Bahama Bank

Changes in the marine environment are integrated up through trophic levels and exhibited in the status of marine top predators. As such, bottlenose dolphins are an iconic symbol of the health of the Bahamian marine environment, representing a visible “indicator” species that can be studied to monitor the effect of environmental change and coastal development. Since 1992, the Bahamas Marine Mammal Research Organisation (BMMRO) has been monitoring the dolphin population that inhabits the shallow waters of Little Bahama Bank. This “island” population is isolated by the deep oceanic waters that surround the bank system, and photographic identification studies have been used to monitor this resident population for 16 years. Here I will draw from 1300 encounters, with more than 350 individual dolphins, to report on distribution, abundance and survival trends, particularly in our long-term study site in the Sea of Abaco. Specifically, I will compare data from two decades, contrasting patterns from the 1990s with recent data collected as part of a new monitoring effort in collaboration with Friends of the Environment. These results demonstrate how long-term studies can help us track individual dolphins to make inference about both population and ecosystem health.