Foraging ecology of Common dolphins (*Delphinus delphis*) in the Northwest Atlantic Alex Reulbach Frederick Wenzel

Despite the protected status and importance of the Common dolphin (Delphinus delphis) as a marine predator within the Northwest Atlantic, its foraging ecology is still poorly understood. Common dolphins in this region have historically been located in offshore waters, but warmer water temperatures have allowed an expansion of their range into inshore waters within the past 15 years. The present study utilized hard part analysis from the contents of 36 bycaught Common dolphin stomach samples, collected over 28 years (1993-2021), to obtain a greater understanding of their foraging ecology in the region. Depending on where the stomach samples were obtained, they were categorized as either inshore (n = 20) or offshore (n = 16). This division was essential in understanding how differences in habitat drives differences in foraging ecology. Stomach content analysis indicates that cephalopods and small fish species, including Silver hake and Atlantic butterfish, dominate the inshore diet, while myctophids, including Madeira's lanternfish and Bermuda lanternfish, dominate the offshore diet. A wide range of prey species was found within the stomach samples at both the inshore (n = 17) and offshore (n = 15) locations. The significant difference in foraging ecology between locations and the large variety of prey species consumed at both locations suggests that Common dolphins are opportunistic predators. Common dolphin foraging ecology is dictated by variation in the regional composition of abundant prey species. These results allow for targeted management of important prey species to ensure better protection of the Common dolphin within the Northwest Atlantic.