Abstract ID : 785

Title : Tursiops truncatus feeding behaviors associated with Turtle Excluder Device

Category : Behavior

Student : Not Applicable

Preferred Format : Oral Presentation

Abstract : In-trawl underwater video monitoring of behavioral responses of sea turtles, fish and shrimp to experimental Turtle Exclusion Devices (TEDs) also recorded two unique bottlenose dolphin, Tursiops truncatus, feeding behaviors: On-Flap feeding and In-TED feeding. During "On-Flap" feeding, dolphins were observed lying on the flap of a bottom shooting TED. This behavior resulted in an increased space between the TED extension and the flap allowing fish schooling at the TED to drop out of the net through the TED exit hole and dolphin would then feed on exiting fish. Analysis of a 90-minute tow showed a dolphin on the flap for 11 minutes. On-flap feeding bouts averaged 18 seconds (range=1-86 seconds). "In-TED" feeding dolphins entered the TED exit hole and fed on fish schooling in the TED extension. The amount of a dolphin's body that entered the TED ranged from the head just at the eye level to the entire body forward of the dorsal fin. TEDs are located in the throat of the shrimp net, thus dolphins were moving into the net. On occasion two dolphins were observed simultaneously within the TED. Dolphins exited the TED either, after they caught fish, or prior a turtle or shark appearing in the TED. Dolphins reentered a TED within one second of the turtle or shark exiting the TED. Dolphins selectively fed on mackerel even when drum and Atlantic bumpers were present. Preliminary analysis showed an average catch rate of one mackerel per 30 seconds when mackerel were present in the camera's field of view. Dolphins spent more time in the TED when mackerel were not in view. On these occasions, however, they were then seen exiting with a mackerel in their mouth if they had made a catch prior to exiting the TED.