

**Conference Title:**

Hungry? Look for a frontal system, if you can.

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**Abstract:**

Food in the open ocean is scarce, yet some of the largest vertebrates on Earth live there. Increased productivity at frontal systems and other oceanic features has often been invoked as the best explanation to this paradox and the distribution of albatrosses, bluefin tuna, blue sharks and basking shark is certainly associated with that of frontal features. Nevertheless, this is not always true for the oceanic stages of leatherback, olive ridley and loggerhead turtles, partially because of their search modes and certain characteristics of their life history. Young marine turtles are positively buoyant and drift with prevailing currents. As they grow, their swimming skills improve and movement becomes independent of currents. Usually, larger juvenile turtles do not take advantage of their improved swimming skills, remain within the areas they drifted to as early juveniles and eventually settle there. Only if they drifted to areas more than 3000 km away from their natal beaches, they become involved into a return migration and settle into areas closer to their natal beaches. In any case, the drifting behaviour of young turtles during the exploratory phase of their early life results into a limited knowledge of the horizontal heterogeneity of the ocean. Accordingly, oceanic stage turtles do not aggregate into the most productive habitat patches, even when competent swimmers, but into the most productive of the areas they visited as early juveniles.

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