
Residence times and vertical behaviour of tunas around drifting fish aggregating devices (DFADs) in the Indian Ocean

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Abstract

Most of studies on the associative behaviour of tunas were conducted around anchored FADs. We investigated the behaviour of yellowfin (*Thunnus albacores*), skipjack (*Katsuwonus pelamis*) and bigeye tuna (*Thunnus obesus*) around drifting fish aggregating devices (DFADs) in the Indian Ocean between March 2010 and May 2012 using pressure sensitive acoustic transmitters and satellite-linked acoustic receivers. We examined the day/night vertical behaviour of each species. Using two different temporal scales to estimate the residency time, we document temporal patterns in residency times of the three species of tunas associated with DFADs. Estimating how much time tunas stay around DFADs is necessary to understand the role of floating objects on the ecology of these species, moreover, it helps us to assess the impacts of the deployment of FADs on these species.

Keywords: Behaviour, drifting fish aggregating device, skipjack tuna, yellowfin tuna, bigeye tuna, Indian Ocean

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