

{rokbox title=|The area around the Balearic Islands in the Western Mediterranean where ichthyoplankton surveys were conducted for this study :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-revision-zonas-puesta-atunes-muhling-et-al-2017-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-revision-zonas-puesta-atunes-muhling-et-al-2017.jpg{/rokbox}

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, Raul Laiz Carrion, 2017.

[Reproduction and larval biology in tunas, and the importance of restricted area spawning grounds.](#)

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Abstract: Tunas show a wide variety of life history strategies, spatial distributions and migratory behaviors, yet they share a common trait of spawning only in tropical and sub-tropical regions. The warm-water tuna species generally show significant overlap between spawning and feeding grounds, and longer spawning seasons of several months to near year-round. In contrast, the cool-water bluefin tunas migrate long distances between feeding and spawning grounds, and may spawn over periods as short as 2 months. Here, we examine the spatial distributions of tuna larvae in the world's oceans, and examine interspecific differences in the light of adult behaviors and larval ecology. We discuss the links between larval tuna and their oceanographic environments and relate these to current knowledge of larval growth, feeding and trophodynamics, with a focus on the better-studied bluefin tunas. We show that larval tunas have moderate to fast growth rates and selective feeding habits, and thus appear to be adapted for survival in warm, oligotrophic seas. We also examine the challenges of sustainably managing species which migrate across multiple management boundaries to reach spatio-temporally restricted spawning grounds and discuss the previous and future anthropogenic impacts on tuna spawning areas.

Keywords: Tuna, Fish larvae, Larval ecology, Life history strategy