{rokbox title=|Sampling strategy of both surveys and species composition of the hauls :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-dinamica-espacial-anchoa-golfo-vizcaya-boyra-et-al-2016-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-dinamica-espacial-anchoa-golfo-vizcaya-boyra-et-al-2016.jpg{/rokbox}

Guillermo Boyra, **Marian Peña**, Unai Cotano, Xabier Irigoien, Anna Rubio, Enrique Nogueira, 2016. **Spatial dynamics of juvenile anchovy in the Bay of Biscay** . Fisheries Oceanography. 25:5, 529–543, 2016

Abstract: In autumn 2009, the implementation of two successive acoustic surveys targeting juvenile anchovy (*Engraulis encrasicolus*) in the Bay of Biscay allowed us to monitor the changes in the spatial distribution and aggregation patterns of juveniles of this species during 45 days under fairly stable meteorological conditions. Juvenile anchovy changed its biological condition and behavior in a different manner in two distinct areas. In the Spanish sector, the juveniles migrated 20 nautical miles (n.mi.) towards the coast, but they remained on the shelf and near the surface during the whole surveyed period. As the advance towards the shelf break progressed, their area of distribution decreased, their density increased and the juveniles spread in fewer but heavier shoals. In the French sector, the juveniles also migrated from slope waters towards the coast at a similar velocity, but they crossed the shelf break into the continental shelf, where they increased their mean depth significantly until gradually adopting the typical nyctemeral migrations of adult anchovy. The mean length of the juveniles that adopted the nyctemeral migrations was significantly higher than that of the juveniles remaining at the surface, suggesting that body size is relevant to accomplish this change. Besides, the stronger temperature gradients between the shelf and oceanic waters in the Spanish sector, favored by a narrow shelf, may have acted as a barrier influencing the distinct observed spatial patterns in the two areas.

Keywords: anchovy, fish behavior, fish ecology, fishmigration, juvenile, life cycle