

{rokbox title=|Brama brama :: Image: ICTIOTERM|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-migracion-palometa-brama-brama-quinzan-et-al-2016-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-migracion-palometa-brama-brama-quinzan-et-al-2016.jpg{/rokbox}

M. Quinzán, J. Castro, M. Marín, G. Costas, S. Monserrat, A. Amores, **E. Massutí**, **M. Hidalgo**, 2016.

[Unveiling the influence of the environment on the migration pattern of the Atlantic pomfret \(*Brama brama*\) in North-eastern Atlantic waters](#)

. Fisheries Oceanography. 25:6, 610–623, 2016

Abstract: Hydroclimatic variability is one of the main factors that drives inter-annual changes in fish migration patterns. This study analyses the relationship between climate-oceanographic factors and migration of the Atlantic pomfret (*Brama brama*) in NE Atlantic waters. Geo-referenced catch data from logbooks of longliners operating in European Atlantic waters from 2002 to 2013 were linked to environmental indices at different temporal and spatial scales. Our results point to a strong influence of temperature at 200 m depth as the key factor along with the upwelling in the Galician (NW Iberian) waters. However, sea surface temperature (SST) indirectly affects the geographical display of Atlantic pomfret migration, and large migrations are observed in scenarios of high SSTs in the migratory area (c. above 14.7°C). Migrations are constrained during years when temperatures are below this threshold. A longer time-series of annual landings (1950–2013) supports this evidence and highlights the significant influence of temperature at 200-m depth along with the landings of the previous year. Length frequency distributions suggest an increase in size between consecutive seasons supporting the hypothesis that migration is a feeding strategy and a return to tropical waters of origin for spawning. Our study shows that the temperature of intermediate waters is a key variable in determining the northward migration of the Atlantic pomfret whereas density-dependence and surface climatic conditions trigger secondary effects on the migration pattern of this species.

Keywords: *Brama brama*, environmental factors, migratory patterns, NE Atlantic, spatio-temporal distribution