

Chapter 3

Two Stocks



Abstract The management of bluefin tuna resources within ICCAT is based on the consideration of two distinct stocks. A definition is provided of what a stock is from the point of view of a species subjected to fishing exploitation and the basic criterion by which the separation of bluefin tuna into western and eastern stocks was adopted.

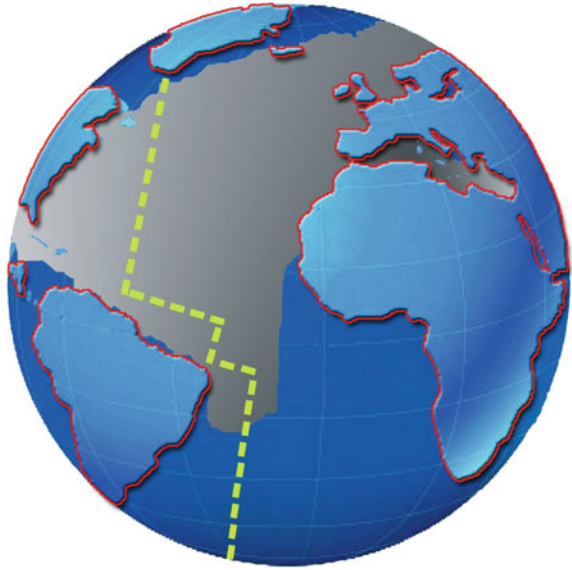
For the purposes of resource management, the International Commission for the Conservation of Atlantic Tunas (ICCAT) considers the population of the North Atlantic as two stocks¹: the eastern, which includes the Mediterranean, and the western (ICCAT 2010). These are managed separately. The line defining the separation of the stocks is the 45° W meridian (Fig. 3.1). The basis on which this separation of eastern and western stocks is made is the fact that there are two main spawning areas, one in the Gulf of Mexico and the other in the Mediterranean.

This dividing line in no way means that ABFT cannot cross it; they do so without any difficulty as demonstrated in several articles: Block et al. (2005), Boustany et al. (2008), Fraile et al. (2014), Rooker et al. (2014), Puncher (2015), Arregui et al. (2018), and Tensek et al. (2018). Mixing of the two stocks of ABFT is variable in quantity and in time (Siskey et al. 2016). In spite of this, ABFT in most cases shows fidelity to one spawning ground by returning to its birthplace (Block et al. 2005).

Five synopses on this species have been published in which other aspects are detailed that have not been considered in the present article: Tiews (1963), Mather et al. (1973, 1995), Fromentin and Powers (2005), Rooker et al. (2007) and ICCAT (2010).

¹Stock: A stock constitutes a biological unit of a species that forms a group with similar ecological characteristics, the unit being what is subject to assessment and management.

Fig. 3.1 Dividing line of the bluefin tuna stocks (45° West). (Taken from Cort et al. 2010)



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