



Sketch of a small simple Thynneion at Kandyli, near Tolo in Argolid, Greece. The sketch illustrates the function of the tool as well as its technical features of its positioning. Image copied from Παναγιωτόπουλος Ν., 2014, *Αλιεία και βιομηχανία των Τόννων και Άλλων Συγγενών Ειδών*, Αθήναι.

## A very short bibliography on thynneia, the stationary tuna traps

The bibliography about the capture of tunas (and other migratory fish) is immense! Archaeology, ethnography and biology are disciplines that produce such literature. Additionally, the scientific interest in the mystery and mystique of tunas dates back to Classical Greece and remained alive, producing all kinds of texts, until today.

In this post, we suggest some basic readings and sources. For those wanting to know more, these sources provide an excellent starting point for a more detailed exploration of the topic.

For all aspects of tuna fishing in Mediterranean antiquity the 2018 book *Thynnos. Archaeologia della Tonnara Mediterranea* by Enrico Felici is the best! It contains a detailed presentation of the information provided by ancient Greek and Roman authors, information and thoughts on the archaeological visibility of various aspects of tuna fishing and it also comes with fascinating use of early modern texts on tunas and ethnographic notes on tuna fishing from the 19th and 20th century. The book is in Italian.

Much research on tuna fishing and its archaeological documentation is done by researchers in western and central Mediterranean, especially Spain and Italy. The following paper provides a very interesting example of such research:

Bernal-Casasola, D., Marlasca Martin, R., & Hernandez-Tórtoles, A. (2020). Atunes en las cetariae de Portopalo: primeras pinceladas arqueoictiológicas. Las cetariae helenísticas y romanas de Portopalo (Sicilia). Primeros apuntes interdisciplinares, 367-397.

The best point of reference for information on the biology and ecology of tunas and related species is the web site of the International Commission for the Conservation of Atlantic Tunas (ICCAT) where users can find all sorts of materials, from identification sheets to bibliographies, conference and meeting announcements, researchers in the field, policies etc. <https://www.iccat.int/en/>

For a detailed presentation of the characteristics of Scombridae in the Aegean and a detailed discussion on their relevance to ancient fisheries see this paper:

Mylona, D. (2021). Catching tuna in the Aegean: biological background of tuna fisheries and the archaeological implications. *Anthropozoologica*, 56(2), 23-37.

Teresa Maggio is a journalist who lived on Favigniana island for some time in the 1990's, experienced one of the last successful operations of a tonnara, the stationary tuna trap, and wrote about it in her fascinating 2001 book *Mattanza: the Ancient Sicilian Ritual of Bluefin Tuna Fishing*. The story she tells brings the life of tuna fishers and the sensation of tuna fishing alive.

A simple web search on tuna traps, tuna fishing, tonnara, albadraba, madrague, mattanza and other related terms results in thousands of pages of varied content, most of it partial and often ill informed, but also sensational photographs. We used some of them in this post with reference to their sources.

Some of the images in this post have been copied from scientific articles. These are the following:

Dennis, M. M., Landos, M., & D'Antignana, T. (2011). Case-control study of epidemic mortality and *Cardicola forsteri*-associated disease in farmed Southern Bluefin Tuna (*Thunnus maccoyii*) of South Australia. *Veterinary Pathology*, 48(4), 846-855.

Puncher, G.N., Alemany, F., Arrizabalaga, H. et al. Misidentification of bluefin tuna larvae: a call for caution and taxonomic reform. *Rev Fish Biol Fisheries* 25, 485–502 (2015). <https://doi.org/10.1007/s11160-015-9390-1>

Cermeño, P., Quílez-Badia, G., Ospina-Alvarez, A., Sainz-Trapaga, S., Boustany, A. M., Seitz, A. C., ... & Block, B. A. (2015). Electronic tagging of Atlantic bluefin tuna (*Thunnus thynnus*, L.) reveals habitat use and behaviors in the Mediterranean Sea. *PLoS One*, 10(2), e0116638.

Örenc, A. F., Ünver, M., Düzcü, L., & Di Natale, A. (2014). Tentative GBYP bluefin tuna data recovery from the Ottoman archives, the maritime museum archives and the archives of the Istanbul municipality. *Collect. Vol. Sci. Pap. ICCAT*, 70(2), 447-458.

Mariotti, A. M. L. (2007). Resoconto storico della tonnarella di Camogli dall'antichità ai giorni nostri e l'evolversi della cattura del tonno rosso (*Thunnus thynnus* Linneo, 1758) e di altre specie ittiche nelle sue acque. *Biologia Marina Mediterranea*, 14, 54-68.

Di Natale, A. (2012). An iconography of tuna traps. Essential information for the understanding of the technological evolution of this ancient fishery. *Collect. Vol. Sci. Pap. ICCAT*, 67(1), 33-74.

Cattaneo-Vietti, R., Cappanera, V., Castellano, M., & Povero, P. (2015). Yield and catch changes in a Mediterranean small tuna trap: a warming change effect? *Marine Ecology*, 36(2), 155-166.

García García P., 2012, Las almadrabas de la costa andaluza bajo el dominio de la casa ducal de Medina Sidonia. Su tipología, sus producciones et sus problemáticas. ICCAT-GBYP Symposium on Trap Fishery for Bluefin Tuna, Tangier. *Collect. Vol. Sci. Pap. ICCAT*, 67(1): 75-87.