See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/325545275

# FISHERY CHARACTERISTICS AND LANDINGS OF THE BLUE CRAB CALLINECTES SAPIDUS IN THERMAIKOS GULF, NORTHERN AEGEAN SEA

READS

Conference Paper · June 2018

CITATIONS

0

1 author:



Kosmas Kevrekidis

Decentralised Administration of Macedonia-Thrace, Thessaloniki, Greece 17 PUBLICATIONS 203 CITATIONS

SEE PROFILE

All content following this page was uploaded by Kosmas Kevrekidis on 04 June 2018.

## FISHERY CHARACTERISTICS AND LANDINGS OF THE BLUE CRAB CALLINECTES SAPIDUS IN THERMAIKOS GULF, NORTHERN AEGEAN SEA

#### **Kosmas Kevrekidis**

Decentralized Administration of Macedonia-Thrace, Department of Fisheries & Aquaculture, 551 31 Thessaloniki, Greece <u>kkevre@damt.gov.gr</u>

Key words: Callinectes sapidus, blue crab, fishery, landings, Thermaikos Gulf

**Introduction:** The blue crab *Callinectes sapidus* Rathbun, 1896, (Fig. 1) is among the alien decapods established in the Mediterranean Sea. In the last decade the species has expanded its distribution almost throughout the Mediterranean whereas its abundance has significantly increased mainly in the eastern basin. The species is a valuable resource and, nowdays, Egyptian and southeastern Turkish lagoons along with the northern Aegean Sea (e.g. Thermaikos and Vistonikos gulfs) are the main areas which support commercial local fisheries of blue crab within the Mediterranean (see Kevrekidis & Antoniadou, 2018 and references there in). The abundance and population structure of *C. sapidus* in Thermaikos Gulf (Methoni Bay) has been recently studied (Kevrekidis & Antoniadou, 2018) whereas until now no information existed on fishery characteristics and landings of blue crab in Thermaikos Gulf.



### Fig. 1. A live male specimen of Callinectes sapidus Rathbun, 1896

**Methods**: Landings data of blue crab from Auction Agency of Greece (Auction centre of N. Michaniona-Thessaloniki) were used and analyzed.

**Results**: The main fishing period of blue crab in Thermaikos Gulf expands from May till November with a summer peak (June - September). The annual production ranged from 7 (2007) to 84 t (2010) (mean 37 t) during the 2007-2017 period (Auction Agency of Greece, 2018) (Fig. 2). Data landings for the above period in the gulf show that the month with the highest production is September (mean 8.3 t) followed by June (mean 6.8 t) and August (mean 4.2 t). A steady declining trend on fishery production of the species is recorded after 2011 in the gulf.



Figure 2. Fishery production of blue crab *Callinectes sapidus* in Thermaikos Gulf for the period 2005-2017

**Main Conclusions**: The commercial fishery of blue crab in Thermaikos Gulf is mainly exploited in Methoni Bay and the adjust areas of the deltaic Axios - Loudias - Aliakmonas riverine system, using fyke nets (mesh size 40 mm). Fishery-boats target on blue crab in the gulf are mainly <8 m in length and fyke nets used are deployed mainly in depth <3 m, despite legislative restrictions not allowing the use of fyke nets in July and August and at depths <2 m. In Methoni Bay the number of fishery boats increased from 2-3 in the period 2007-2009 to 20-22 nowadays with the highest mean CPUE recorded in July (36 ind./5 pairs fyke nets) followed by September and November (Kevrekidis & Antoniadou, 2018). Fisheries legislation (mesh size of fyke nets and closed period) in Thermaikos seems to prevent juveniles' mortality and despite fishing pressure applied, the exploitation seems to be maintained in sustainable levels, so far. However, a declining trend in landings recorded after 2011 in the gulf, according to the Auction Agency of Greece (2018), may cause concerns to future sustainability of blue crabs' stock. The limited knowledge on key aspects of blue crab biology, necessitates the recursive monitoring of its population for the implementation of a sustainable management plan in Thermaikos.

#### **References**:

Kevrekidis, K. & C. Antoniadou, 2018. Abundance and population structure of the blue crab *Callinectes sapidus* (Decapoda, Portunidae) in Thermaikos Gulf (Methoni Bay), northern Aegean Sea. Crustaceana, 91(6): 641-657.