

Food and feeding habits of the Atlantic Horse Mackerel, *Trachurus trachurus*, from the Aegean Sea

(Osteichthyes: Carangidae)

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Abstract. The stomach contents of the Atlantic Horse Mackerel, *Trachurus trachurus* (Linnaeus, 1758), were analysed to investigate the food and feeding habits of this species with respect to fish size and season. A total of 60 different prey species was found belonging to five major systematic groups, i.e. Polychaeta, Crustacea, Mollusca, Chaetognatha and Osteichthyes. Crustaceans (especially Copepoda, Euphausiacea and Mysidacea) were the most important food category by percentage of relative importance index. Teleosts were the second most important food category, while Polychaeta and Chaetognatha were occasionally seen as food. Little seasonal variation in the diet of *T. trachurus* was observed: copepods and mysids were the dominant prey groups in all seasons, and teleosts except in spring were the most frequent prey. However, differences in size were highlighted, with fish larger than 16.9 cm feeding on teleost larvae. At least 45 Copepoda species were identified, with *Acartia clausi* and *Oncea media* being the most significant among them by the percentage of relative importance index groups in all seasons. Copepods, euphausiids and mysids were thus the most important prey to be consumed by *Trachurus trachurus* in all seasons as well as by the small size classes. Moreover, teleosts constituted the main food for larger specimens.

Key words. Atlantic Horse Mackerel, *Trachurus trachurus*, feeding habits, İzmir Bay, Çandarlı Bay, Aegean Sea, Turkey.

Introduction

The Atlantic Horse Mackerel, *Trachurus trachurus* (Linnaeus, 1758), is a common semipelagic carangid fish inhabiting the Mediterranean, northeastern Atlantic and Black Sea (SMITH-VANIZ 1986). The species of the genus *Trachurus* play a major role in the world's fisheries. In the Mediterranean, these species are of major importance in the pelagic and demersal fisheries where annual harvests have fluctuated from 5,155 to 21,998 tons between 1989 and 1998 (FAO 2000). Two species of the genus *Trachurus*, *T. mediterraneus* Steindachner, 1868, and *T. trachurus*, are commercial fishes captured in the Turkish seas, with their total annual catch during 2006 being 25,927 tons which was the third in rank of the Turkish fisheries' performance (ANONYMOUS 2006).

T. trachurus is likely to play an important role in the food chain, given its abundance along the Aegean Sea coast of Turkey. However, despite its abundance and importance, little is known about the trophic ecology of this species in the Aegean Sea. Only a few studies have provided preliminary quantitative descriptions of the diet of the Atlantic Horse Mackerel in the Turkish seas (BAYHAN & MATER 2000, BAYHAN et al. 2005). They noted that zooplankton crustaceans and fish dominated in the stomach contents. However, the literature