

## **Anthropic Waste on Deep Fishing Grounds in Strait of Sicily**

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### **Abstract**

Each year, millions of anthropic items are wasted on the sea bottoms. The Strait of Sicily (Central Mediterranean Sea, FAO fishing zone 37.4) is affected by this phenomenon mainly as a consequence of the dumping of rubbish by the many fishing boats and merchant ships frequenting the area. The amount and composition of the solid waste collected during two experimental trawl surveys carried out on red shrimp (*Aristaeomorpha foliacea* and *Aristeus antennatus*) grounds are illustrated. Data were collected during spring and summer 1993. The 130 valid hauls were 3-hour long, and were carried out on various fishing sectors in the 500-700 m depth range; the swept area was around 0.3 km<sup>2</sup>/haul. Only 14 hauls resulted completely clean; the percentage was 25% when considering “almost clean” hauls. The average count was of 9.9 objects/haul, for a volume of 20.1 dm<sup>3</sup>. A maximum of 80 items and 400 dm<sup>3</sup> of waste volume were recorded in individual hauls. There are some differences among fishing areas; considering the season, summer hauls are cleaner, probably because fishermen had removed (and dumped somewhere else) some litter and the largest fishing impediments. Cans, shoppers and bottles results the most frequent items of anthropic origin. Iron drums and tanks are the most dangerous litter, because their content may cause tinting and soiling of the catch; the stones (“mazzare”) used by fishermen to anchor the “cannizzati” (a fishing aggregating devices), besides representing a hazard for the gear integrity, produce mechanical damages to the catch. While the problem of anthropic waste is not new in the area considered, the Strait of Sicily presents a better situation in respect to other zones of the Mediterranean, and litter does not seem to have a negative impact on red shrimp yields yet. Nevertheless, since the design connotation of the study does underestimate the actual amount of waste on the deep-water grounds, it is evident that the phenomenon can be relevant, representing an environmental treat and an economic damage for the fishermen.