An analysis of the fish catches and recruitment of Caspian Sea fish in the fish cages area

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Abstract

This research is part of the results of the projects carried out in the years 2008 to 2010, which focused on the density, mass and distribution of biological groups including zooplankton, *M.leidyi* and kilka fishes in the southern coast of the Caspian Sea. The results showed that during the years 1999-2010, due to the invasive *M.leidyi* and intense feeding of zooplankton species, especially *Eurytemora* sp., Kilka's main food, the catch of Kilka fishes from 95 thousand tons in 1999 was rapidly reduced and in In 2010, it reached 27 thousand tons. Since the Kilka's fish are part of the sea, they are more likely to be affected by environmental stresses caused by human manipulation of the aquatic environment. And the probability of the impact of fish cages on the Kilka fishing communities, due to their small size, availability, ease and especially damage to Immature Common kilka , which lives in coastal areas, is far from expected. Since the Sturgeon catches in coastal areas are more than deep, and now, with the reduction of Anchovy and Big eyes Kilka, the nutritional dependence of sturgeon species on a Common kilka is inevitable. It is recommended that applied the Prohibition or fishing restriction at a depth of less than 40 meters and to be considered for the exploitation of the marine aquaculture enclosed by the sea to be 50 meters.

Keywords: Kilka, Zooplankton, distribution,Cage Culture, Caspian Sea