



Analysis of Factors Affecting Life Fate of Groupers After Fishing Operations

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Abstract

This study observed the factors that influence the fate of groupers which release after fishing operations. These factors, which lead to behavioral impairment after fishing, is classified fatigue, temperature shock, barotrauma, exposure to air and a human contact. Evaluation was tried to put forward by examining the levels of cortisol T_3 and T_4 in the blood parameters of groupers. For this study, *Epinephelus marginatus*, *Epinephelus aeneus* and *Epinephelus costae* were used. The study consists of two experiment sets including the marine environment and laboratory conditions. As a result of experiments, it was observed that groupers do not demonstrate swimming behavior during the trawl operation. Therefore the fish does not get tired. These data also supported results from blood parameters. It is believed to temperature shock cause barotrauma but it could not be obtained in this study supports a concrete data yet. It was observed swelling of the eyes and swimming bladder in case of barotrauma. However, it was understood groupers continued to life after barotrauma with compression treatment tanks. Air exposed fish also been observed to occur delayed mortality by 50%. It was observed that the human effect, which is inevitable after each fishing, have no effect on groupers.

Keywords:

Groupers, Barotrauma, Temperature Shock, Fatigue, human effects
