Changes in the condition factor and relative condition factor of *Rutilus kutum* in the eastern part of the Caspian Sea (Goharbaran)

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Abstract
The main objective of the present study was to investigate the changes in length, weight, condition factor (CF) and relative condition factor (K_{rel}) of *Rutilus kutum* in different seasons and depths in the eastern coasts of the Caspian Sea (Goharbaran region In this study, three fishing methods, including small mesh size beach seine, gillnet and commercial beach seine were used during January 2014 to July 2014. The results showed that the slope (b value) of the length-weight relation was 3.0003 which was not significantly different from 3 methods (P>0.05), indicating isometric growth. Small and large fish were caught in small mesh size beach seine and commercial beach seine, respectively. The average length and weight were significantly different among three fishing methods (P<0.001). The average (±SD) CF of small mesh size beach seine, gillnet and commercial beach seine were calculated as 1.30±0.20, 1.38±0.17, 1.29±0.13 and the K_{rel} were recorded as 1.30±0.19, 1.37±0.17 and 1.29±0.13, respectively. For both variables, there were significant differences among three fishing methods (P<0.05). Also, the averages for CF and K_{rel} were significantly different among the different length classes and seasons (P<0.001). Based on the average K_{rel}, it can be concluded that *Rutilus kutum* had a good feeding and growth conditions in the Goharabaran region.

Keywords: Kutum, Condition Factor, Relative Condition Factor, Caspian Sea.