

Growth and Mortality Parameters of Common carp, (*Cyprinus carpio* Linnaeus, 1758) in Shadegan wetland

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Abstract

Growth and Mortality Parameters of *Cyprinus carpio* were studied in Shadegan wetland. Monthly samples were collected from landing at five stations: Doragh, Rogabe, Khorosy, Salmaneh, Atish. During one year's study from April 2013 to March 2014, 1401 specimens were measured. Mean±s.d length values for this female, male and total fish include were 207±20, 200±33 mm respectively and mean±s.d weight Values were 162±98, 116 ±96gr respectively. Length-weight relationship with Excel program of for female, male *this species* were resulted $W=0.00003 L^{2.89}$ (N=397, $R^2=0.91$), $W=0.0004 L^{2.60}$ (N=301, $R^2=0.95$) respectively. The growth parameters of von Bertalanffy equation for female, male and total fish *this species* as below were estimated as, The growth parameters of von Bertalanffy equation were estimated as, L_{∞} : 514, 483 and 514 and K: 0.31, 0.49 and 0.36 and t_0 : -0.5, -0.15, and -0.2 respectively. Mortality coefficients such as total mortality, Z: 1.41, 1.51 and 1.44 natural mortality, M: 0.61, 0.83 and 0.66 and fishing mortality, F: 0.53, 0.67 and 0.83 respectively. Based on results and with comparing to American Fisheries Society (AFS) indices, this species was classified as moderate vulnerable group fishes.

Keywords: *Cyprinus carpio*, Growth, Growth, mortality parameters, Length-weight relationship.