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Scientific Journals Home Page On the Age, Growth and Reproduction of the Barbel, Barbus plebejus escherichi (Steindachner, 1897) in the Oltu Stream of Çoruh River (Artvin-Turkey)

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<u>Abstract:</u> In this study, the age, growth and reproduction properties of 627 barbels, Barbus plebejus escherichi (Steindachner, 1897), from Oltu Stream in the Çoruh River Basin were investigated during a period from August 1994 to July 1996. The age of this species ranged between age groups 1 and 10, the second age group being dominant. Individuals were composed of 64.59% males and 35.41% females. von Bertalanffy growth parameters and length-weight relationships were $L_{\star}=29.35x(1-e^{-0.139(t+1.640)})$,

 $W_{t}=281.11x(1-e^{-0.139(t+1.640)})^{2.843}W=0.0189.FL^{2.843}$ (r=0.96) in males and $L_{t}=32.77x(1-e^{-0.116(t+1.891)})$,

W_t=392.10x(1-e^{-0.116(t+1.891)})^{2.911}, W=0.0152.FL^{2.911} (r=0.97) in females. Condition coefficients of

males and females were calculated to be 1.221 and 1.220 respectively. Sexual maturity was 11.45-13.75 cm fork length (2-3 years old) in males and 13.65-15.95 cm (3-4 years old) in females. Fecundity was calculated to be 1256 (3rd age group)-8445 (7th age group) eggs/female. The spawning period was between May and July when the water temperature was between 14 and 19[°]C in both years.

Key Words: Age, Growth, Reproduction, Barbel, Barbus plebejus escherichi.

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