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Age, growth, length-weight relationship and reproduction of the striped seabream (*Lithognathus mormyrus* L., 1758) (Sparidae) in the Beymelek Lagoon (Antalya, Turkey)

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Abstract: Age, growth, length-weight relationship and reproduction were investigated for striped seabream (*Lithognathus mormyrus* L., 1758) collected from Beymelek Lagoon (Antalya, Turkey) between February 2006 and January 2007. The ages of striped seabream ranged from 0 to 3 years for males and from 0 to 4 years for females. Their total lengths and weights ranged between 14.4 and 26.4 cm and 42 and 297 g for males and 14.3 and 27.4 cm and 40 and 329 g for females, respectively. The growth parameters of the von Bertalanffy equation were: $L_{\infty} = 28.3$ cm, $K = 0.456 \text{ year}^{-1}$ and $t_0 = -1.859$ year for males, $L_{\infty} = 28.1$ cm, $K = 0.466 \text{ year}^{-1}$, and $t_0 = -1.982$ year for females and $L_{\infty} = 31.5$ cm, $K = 0.319 \text{ year}^{-1}$ and $t_0 = -2.201$ year for all individuals (male, female, and immature). The fitted length-weight relationships of males and females were $W = 0.0089 \times L^{3.1599}$ ($r^2 = 0.9591$) and $W = 0.0076 \times L^{3.2187}$ ($r^2 = 0.8982$), respectively. Weight increased positive allometrically with the total length for males, while isometrically for females. First sexual maturity length was determined as 17.8 cm for male and 18.5 cm for female striped seabream in Beymelek Lagoon. According to trends of GSI values, it was assumed that the spawning was in April and May.

Key words: Beymelek Lagoon, *Lithognathus mormyrus*, age, growth, length-weight relationship, reproduction

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