Aspects of the biology of *Labeo cylindricus* (Pisces: cyprinidae) in Lake Baringo, Kenya


**Abstract**

Aspects of the biology of *Labeo cylindricus* from Lake Baringo were investigated, based on experimental beach seining and gillnetting between August and October 2007. The length–weight relationship indicated the species exhibited positive allometric growth ($b = 3.7083$), with a condition factor (K) of $0.84 \pm 0.0298$ S.D. Males dominated fish catches, with an adult sex ratio of males/females of 1:1.7. The fish length-at-50% maturity ($L_{m50}$) was 127.7 and 126.1 mm total length (TL) for males and females, respectively. Fish age and growth were determined from sagittal otoliths considered to be from the young-of-the-year. Clear circuli observed in the otoliths were used to determine fish age in days. Validation by oxytetracycline marking indicated that a single growth increment ($1.1 \pm 0.1$ SE) is formed daily on fish otoliths. Fish length (TL mm) was correlated significantly with age (in days), $TL = 1.398 \text{ Age } + 26.523$ ($r^2 = 0.91$). Fish growth was subsequently estimated to be $1.398 \text{ mm day}^{-1}$. The weights and ages (in days) of fish exhibited a significant ($P < 0.05$) power relationship defined by the equation: $W = 0.0003 \text{ Age}^{2.5804}$ ($r^2 = 0.88$). The results of this study provide parameters that, if appropriately monitored, can be used to predict responses of fish populations in Lake Baringo and elsewhere to human interventions (exploitation) and natural environmental change.