

البحث الخامس: (مستمد من رسالة)

Title: The Reproductive Biology of the Cockle *Cerastoderma glaucum* (Bivalvia:Cardiidae) from Lake Qarun, Egypt.

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Abstract:

The cockle *Cerastoderma glaucum* is an important component of the benthic community in Lake Qarun, Egypt. The reproduction and gonad development of this species were investigated during the period from February ٢٠٠٨ to May ٢٠٠٩. Reproductive maturity was estimated by assessment of length-weight relationship, gonad index and microscopic examination of gonadal smears and sections. Results indicate the lack of periodicity in the sexual cycle. An annual pattern of four spawning was recorded. The depletion of ripe gametes during spawning was rapidly compensated by the onset of gametogenesis. Monthly changes in flesh and gonad weight reflect the reproductive cycle with weight loss during spawning. *C. glaucum* is a gonochoric species without any hermaphrodites or sex reversals. The overall samples presented male biased sex ratio (F: M= ١: ١.٢٩). The size at which ٥٠% of the population reached maturity was ٩.٦ and ٨.٥ mm shell length for females and males, respectively.

KEYWORDS: Lake Qarun; Cockle; *Cerastoderma glaucum*; Reproduction; spawning periods

عميد الكلية

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