

عنوان مقاله:

Population dynamics of Kor tooth-carp, *Aphanius sophiae* (Teleostei: Aphaniidae:) from Kor River basin, Iran

محل انتشار:

بیستمین کنگره ملی و هشتمین کنگره بین‌المللی زیست‌شناسی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

Population dynamics involves the quantitative change in a population or several populations of a species as a result of various different processes (growth, natural mortality, mortality due to fishing, sexual differentiation). It can be used to describe the functioning of populations, and their exploitation, and it is a suitable tool to manage and conserve species especially in the recent climate changes. Population dynamics is one of the important factors that affecting ecosystem which could be influenced by land use and it's more severe when it comes to endemic species. The current study tends to estimate the population dynamics of Kor tooth-carp, *Aphanius sophiae* in the Kor River basin. In order to examine some parameters of population dynamics of *A. sophiae* in the Malous Jan spring-stream system, Baiza, Fars, Iran, an electric shocker was used to do 12 samplings during 12 consecutive months in a transect of 100 meters. Number and sex of 538 captured *A. sophiae* were recorded and their total length, standard length and weight were measured. Then samples were returned to their natural habitat. Physical, chemical and biological characteristics of the spring, such as temperature, dissolved oxygen, pH, width, depth and vegetation, and the plant species in the station were recorded. Based on the obtained results, mean fish length was 23.9 mm with a minimum of 13.2 and maximum length of 53.14 mm. the growth parameters L_{∞} and k were 56.73 and 9.97 respectively. In total, 11 size classes were determined. Sex ration of 1F:0.91M (for 281 Females and 257 Males) was obtained and chi-square test revealed no significant differences. The results imply that understanding the properties of population dynamics is essential and necessary in managing and conserving the ecosystem effectively.

کلمات کلیدی:

Ecological studies, Growth parameters, Conservation management, Freshwater

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