THE ASSESSMENT OF FISH STOCKS IN ÇILDIR LAKE

Project Leader: **Doç. Dr. Sedat V. YERLİ[1]**
Researchers: **Yılmaz BEKİROĞLU[2], Doç. Dr. Ertunç GÜNDÜZ[1], Mustafa ÇALIŞKAN[1], A. Fuat CANBOLAT[1], Aydın AKBULUT[1], Dr. Nuray EMİR[1], Mustafa ZENGİN[2], Ülkü ATAÇ[2], Mustafa KOÇKAYA[1], Çetin TORAMAN[3]**

[1] **Middle East Technical University, Erdemli Marine Sciences Institute**
[2] **Ministry of Agriculture and Rural Affairs, Central Fisheries Research Institute**
[3] **Ministry of Agriculture and Rural Affairs, Kars Agriculture Directory**

The aim of this project was observation of main bio-economical properties of fish species in Çıldır Lake, stock assessment, determination of physical and chemical properties of the lake water, and techniques on catching and arowing.

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The main important fish species caught in Çıldır Lake were investigated in view of some bio-ecological characteristics, the assessment of fish stocks and fisheries management. At the same time, the physical and chemical characteristics of water and fauna of phytoplankton and zooplankton were investigated due to the importance of lake as habitat.

Cyprinus carpio, *Capoeta capoeta*, *Barbus plebejus* and *Leuciscus cephalus* species which are live in the lake, average fork length values respectively (1993-1994); 24.9-31.8, 25.4-30.5, 20.0-27.5 and 17.8-27.8 cm change between. Their spawning times in order; June-September, May-June, May-June and May-July around. All fish species, males reach to sexual maturation at the age of 3, females at the age of 4.

When nonorderly, catching statistics are observed it was assessed there was an important decrease in fish stocks. Stock amounts of fish in the lake were assessed as; *Cyprinus carpio* 122.56 tons, *Capoeta capoeta* 117.15 tons, *Barbus plebejus* 18.08 tons and *Leuciscus cephalus* 57.51 tons.

Phyto-plankton this belong to *Bacillarophyta*, *Cholorophyta*, *Cyanopyta*, *Dinophyta* and *Euglonophyta* were found. Dominant group around these is *Bacillarophyta* and most widespread species are *Cymatopleura and Cyclotella.* Around 24 zooplankton that were determined, the most widespread ones are *Daphnia galeata, Biapertura affinis, Acanthodiaptomus denticornis* and *Cyclops abyssorum.*