

## **Investigations on the Structure of Fish Stocks in Ataturk Dam Lake By Using Acoustical Approaches**

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Ataturk Dam, of which construction was completed in 1992, formed an artificial lake located on the Euphrates River, within the borders of two provinces Sanliurfa and Adiyaman, on the southwestern part of Turkey. The fish fauna of the lake consists of 16 species. Some of these species are natural inhabitants of the river Euphrates. Other species found today in this reservoir are artificially introduced in the 1990s by Turkish General Directorate of State Hydraulic Works. In the scope of this study, the structure of fish stocks present in the Ataturk Dam Lake was investigated by using two fundamental methodologies. Investigations were based upon gill-net sampling, (for the determination of fish species composition) and to assist in the data analysis collected by echo-sounder. For acoustical investigations a SIMRAD EY500 Single Beam 120 kHz echo-sounder was used. It was found that a small planktivorous fish called *Acanthobrama marmid* (Heckel, 1843) consisted of more than 50 % of abundance of all the fishes throughout the lake. *Capoeta trutta* (Heckel, 1843), *Carasobarbus luteus* (Heckel, 1843) and *Acanthobrama marmid* followed each other in contribution to the fish biomass in the lake respectively.