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## EFFECTS OF WATER LEVEL FLUCTUATION ON REPRODUCTION AND SPAWNING HABITS OF FISH SPECIES IN LAKE BALATON

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### Abstract

In 2004, the types of shoreline were estimated on Lake Balaton, such as rip-rap covered, reedy, concrete or grit. Exact area of a specific face of a rock in the rip-rap covered parts can be determined by digital image analysis. Wetted rocky area of the shore was estimated as a function of water level in 10 cm steps of level changes. Taking into account the reproduction characteristics of the studied fish species (Cyprinidae) the potential substrates for spawning are dominantly the shallow zones near the shoreline. The lake becomes substrate deficient when the water level decreases to -50 cm. This may cause problems in the reproduction of species of bream, so it would be very important to open River Zala and the Kis-Balaton reconstructed wetland for spawning fish. The reproduction area can not sustain the spawn-taking of fish (i.e.: carp, catfish, asp) even when the water level is normal.

*Keywords:* Balaton, area of spawn-taking, rip-rap covered shoreline

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