# Deep spawning of perch (Perca fluviatilis L.) in the newly created Chabařovice Lake, Czech Republic

Martin Čech, Jiří Peterka, Milan Říha, Lukáš Vejřík, Tomáš Jůza, Vladislav Draštík, Michal Kratochvíl, Milan Muška, Jan Kubečka

*Institute of Hydrobiology, Biology Centre of the AS CR, v.v.i., Czech Republic; j.peterka@yahoo.com*

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**Abstract** The distribution of egg strands of perch Perca fluviatilis was studied during April and May 2007, 2008, 2009 and 2010 in Chabařovice Lake, Czech Republic. Three SCUBA divers spent over 150 hours underwater during which they found 896 (2007), 581 (2008), 231 (2009) and 124 (2010) individual egg strands. Depth distribution of egg strands differed significantly between sampling dates, being much deeper in May compared to April, which was most likely due to the warming of upper layers of the water column. Surprisingly, only negligible portion of egg strands was found shallower than 2 m. Egg strands were found up to the depth of 16.6 m in 2007 and up to the depth of 20.2 m in 2008, which are the deepest records ever. Perch regularly used at least 7 different spawning substrates in 2007. While live submerged vegetation (curly pondweed Potamogeton crispus, Eurasian water milfoil Myriophyllum spicatum and common stonewort Chara vulgaris), although more abundant, was generally avoided, dead submerged vegetation (common reed Phragmites communis, worm weed Artemisia sp., trees and branches including black elder Sambucus nigra) was highly preferred. In 2008 and 2009, live submerged vegetation almost disappeared from the lake and vast majority of egg strands was placed on dead submerged vegetation. It appears that those large three-dimensional structures are an ideal spawning substrate for perch since placement of egg strands practically into the open water column ensures that eggs remain well oxygenated for whole 24 hours a day.

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