



Pulling the plug – Restoration of Lake Sulzkarsee (Styria, Austria), an alpine lake degraded by fish introduction

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Alpine Lake Sulzkarsee is the only lake in the National Park Gesäuse, Austria (1446 m a.s.l., 7 m max. depth). The originally fishless lake was a breeding habitat for Alpine newts (*Ichthyosaura alpestris*), Common toads (*Bufo bufo*) and Common frogs (*Rana temporaria*). During the late 1970s the lake was stocked with salmonids and minnows (*Phoxinus phoxinus*) and amphibians disappeared. After salmonids were removed by gillnetting in 2003 the minnows considerably increased in numbers and exhibited strong top-down control on zooplankton. Between 2016 and 2018 a total of 45000 minnows were translocated. To eradicate the remaining minnow population, Lake Sulzkarsee was pumped dry in October 2018 and was limed. Six weeks later the lake basin had filled up again. However, some fish remained and reproduced in 2019. The remaining minnows will be targeted by intensive fishing. Plankton and amphibian densities will be monitored. In October 2019 a 6 m sediment core had been taken for palaeolimnological investigations.

Verbreitung, Ökologie und Schutz des Bergmolches (*Ichthyosaura alpestris*)

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Programm und Zusammenfassungen



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