Umsiedlung einer großen Population der Geburtshelferkröte (*Alytes obstetricans*) aus einer Tongrube im Kanton Solothurn (Schweiz)

Vorgehen, Resultate und Erfahrungen für künftige Projekte

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Relocation of a large population of midwife toads (*Alytes obstetricans*) from a clay pit in the canton of Solothurn (Switzerland) Approach, results and lessons for future projects

Due to a construction project a large population of midwife toads (*Alytes obstetricans*) lost its native habitat in a clay pit near Hägendorf (canton of Solothurn, Switzerland). To compensate the loss, replacement habitats were planned and built at six nearby localities. Three of these sites had been ready at the time where midwife toads were relocated. In the course of two consecutive years, native midwife toads were captured and removed to the replacement sites. This operation required a total effort of 600 man-hours and was facilitated by a group of 25 volunteers. In total, 1,345 adult and juvenile toads as well as more than 2,000 larvae of different developmental stages were relocated. Because each of the removed toads had been photographed individually, the number of returnees from replacement habitats could be assessed by means of computer-aided comparisons of these pictures. Despite that replacement habitats had been fenced, at least 58 individuals returned after their relocation back to the clay pit up to three times. In doing so they covered a distance of at least 300 meters. Censuses of local toad populations done during the first three years following the end of the replacement period allowed for a first effectiveness monitoring of the measures taken. The results show, as a rough estimate, that two thirds of the relocated toads had migrated to unknown places one year since the replacements had terminated or had died off. However, reproduction of midwife toads is taking place at the replacement sites already, contributing to the setup of local populations. In the first years following the relocation of toads the total number of midwife toads at all replacement sites together amounted to approximately fifty percent of the population that formerly lived in the clay pit. With regard to future relocation events with midwife toads it is recommended to give even more emphasis to the transfer of larval stages. If adult individuals are relocated a reliable enclosure must be set up around replacement habitats to prevent toads from immediately remigrating to the site of their origin. A successful relocation of midwife toad populations remains in some way unpredictable even if all actions are well planned and carefully taken.

Key words: Midwife toad, relocation, recapture, effectiveness monitoring.

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