

## Ökologie und Situation der Geburtshelferkröte (*Alytes obstetricans*) im Raum Hagen (NRW)

MARTIN SCHLÜPMANN

Hierseier Weg 18, D-58119 Hagen, martin.schluepmann@t-online.de

### Ecology and status of the midwife toad (*Alytes obstetricans*) in the area of Hagen (North Rhine-Westphalia)

Since 1980 in the area of Hagen (North Rhine-Westphalia) 84 populations with 146 spawning ponds of the midwife toad (*Alytes obstetricans*) were registered. For the investigated area, 148 occurrence records for the midwife toad are compared with 2343 records of amphibians in general, enabling an extensive analysis of spatial and temporal preferences. The range of the used spawning places varied strongly. Persistent und rarely drying out puddles and ponds are preferred. Regularly drying out water bodies are avoided. Dammed waters and brook-fed ponds are also preferred, whereas brooks are significantly avoided. The frequent larval records in sun-exposed watersites are attributed to the open characteristic of many habitats. Important habitat characteristics are partly poorly vegetated and stony soils, rocks or walls with richly crevices and hollows as hiding places by day, often in sunny exposition. In soils with little gravel, small mammal burrows are used. Such conditions are found in gravel pits. Characteristic elements explaining the formerly wide distribution in the cultural landscape are farmyards and villages with ponds and dry-stone walls, caims, rockeries, and stairs, but also pastures with drinking troughs connected with slopes and brick works. Typical habitats in forests are path slopes and clearings in connection with dammed brooks, former bomb craters and water filled cart tracks. Populations are concentrated around the spawning place (max. 50–150 m). Only few specimens were found far away and are probably vagrant animals. Populations usually consist of small numbers of animals, most of them a few to a few dozen specimens, and few records (all in gravel pits) reach up to more than 100 animals. The period of activity extended over more than half of the year, the reproduction time from end of May until summer. Larvae from the early deposited eggs still metamorphose in August and September, the predominantly part of the larvae hibernate and metamorphose until June. During mapping records were made in more than half of the 1 km<sup>2</sup>-grids. In the last 30 years the records and population sizes have strongly decreased, and the species is meanwhile categorised as vulnerable. Mitigation strategies are pointed out.

**Key words:** Amphibia, Anura, Discoglossidae, *Alytes obstetricans*, ecology, phenology, distribution, status, conservation, area of Hagen, Germany.

### Zusammenfassung

Seit 1980 wurden im Raum Hagen 84 Kolonien mit 146 Laichgewässern festgestellt. Für das Untersuchungsgebiet wurden 148 Datensätze mit Geburtshelferkröten-Nachweisen gegenüber 2343 Amphibien-Nachweisen insgesamt erfasst, die so eine eingehende analytische Statistik räumlicher und zeitlicher Präferenzen ermöglichen.