

Note on a large population of *Rana arvalis* in Romania

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Anmerkung zu einer großen Population von *Rana arvalis* in Rumänien

Daten über die Größe von Moorfrosch-Populationen in Rumänien sind selten, obwohl die Art auf Landesebene als gefährdet gilt. Im Jahre 2007 führten wir eine intensive Erhebung an einer bereits zuvor als groß eingestuften Population durch. Als Ergebnis stieg die geschätzte Anzahl der Adulti von 600 (in 2005) auf 2600 (in 2007). Dies ist die größte Bestandsstärke einer Moorfrosch-Population in diesem Lande.

Schlüsselbegriffe: Amphibia, Anura, Ranidae, *Rana arvalis*, Rumänien, Ciuc-Becken, population size, habitat selection.

Abstract

Data on the population size of *Rana arvalis* in Romania are scarce, although this species is considered endangered on the national level. In 2007 we conducted an intensive survey on a previously identified large population. As a result, the estimated population size increased from 600 adults (in 2005) to 2600 adults (in 2007), this being the largest documented moor frog population of the country.

Key words: Amphibia, Anura, Ranidae, *Rana arvalis*, Romania, Ciuc basin, Population size, Habitat selection.

The moor frog (*Rana arvalis*) is one of the rarest anurans of Romania, classified as endangered by COGĂLNICEANU & VENCZEL (1993), critically endangered by IFTIMIE (2005), and protected by Law 462/2001. Its Romanian distribution covers mainly the central and western part of the country (GHIRA et al. 2002, COVACIU-MARCOV et al. 2003). The moor frog populations of the South Eastern Carpathians are among the southernmost in Europe (GLANDT 2006) and show a reduced genetic diversity (RAFINSKI & BABIK 2000, BABIK et al. 2004).

Data on the population sizes of the moor frog in Romania are restricted to two regions: the Ciuc basin (Eastern Carpathians), where two populations were estimated to comprise at least 600 adults (DEMETER & MARA 2006) and north-western Romania, where one population was estimated to comprise around 650 adults (SAS et al. 2006).

In the spring of 2007 we recorded the breeding activity of the moor frog and the common frog (*Rana temporaria*) in a 2.8 km² plot (46.41° N, 25.8° E, at 671–721 m a. s. l.) in the Ciuc basin (Eastern Carpathians), where a large population (301 egg clumps) was identified in the previous years (DEMETER & MARA 2006). For simplicity and because the breeding ponds are situated close to each other (the distances between