

Überprüfung der Bestände streng geschützter Amphibienarten im Kreis Trier-Saarburg und der Stadt Trier

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Survey of strictly protected amphibian species in the administrative district Trier-Saarburg and the city of Trier

We checked the recent occurrences of three strictly protected amphibian species (*Epidalea calamita*, *Bombina variegata*, *Alytes obstetricans*) within and in direct proximity to one (Trier-Saarburg) out of 24 districts of Rhineland-Palatinate and the independent city of Trier. For the three mapping occasions per locality, we considered data of the environmental agency (1980ths/1990ths) and more recent data from online species mapping portals. Our results show a considerable amount of local extinction, and more than the half of the previously known populations of all three species have disappeared. Out of 21 previously known natterjack toad populations, only nine could be proved (43 %). Main reason for extinctions is the abandonment of former quarries and the resulting change of use (unimpeded succession or back filling). Out of 15 newly checked localities, four previously unknown populations could be discovered, all in active quarries in proximity to currently or formerly active quarries with presence of natterjack toads. Furthermore, out of fourteen previously known yellow-bellied toad populations, only five could be confirmed (36 %), all on or in direct proximity to active or on former military training areas with species-protection measures. All *B. variegata* populations in former quarries apparently went extinct. New mapping of 24 potentially suitable localities was not successful. Eight previously known midwife toad populations have been checked, but only half of them were confirmed. Mapping of 29 new localities only led to the discovery of one previously unknown population. Three midwife toad populations can still be found in secondary habitats (two active quarries and a motocross area), two could be found in primary habitats (forest ponds). Due to the acute vulnerabilities of many present populations of all three species, species-protection measures are urgently necessary. Furthermore, regional concepts have to be developed regarding the recultivation (i. e. back filling) of former extraction areas (quarries) and their future management (averting unimpeded succession).

Key words: Red List, species decline, biodiversity loss, *Epidalea calamita*, *Bombina variegata*, *Alytes obstetricans*.

Zusammenfassung

Wir überprüften die aktuelle Bestandssituation von drei streng geschützten Amphibienarten (*Epidalea calamita*, *Bombina variegata*, *Alytes obstetricans*) in und in direkter