

HERPETOFAUNA AND THE HABITATS DIRECTIVE IN THE NETHERLANDS: CASES OF THE SAND LIZARD (*Lacerta agilis*) AND THE NATTERJACK TOAD (*Bufo calamita*) (O)

A. Zuiderwijk

University of Amsterdam, Dept. Herpetology, Zoological Museum Amsterdam, Amsterdam, The Netherlands

The Sand lizard is listed on Appendix IV of the EC Council Habitats Directive and is a red-list species in The Netherlands. The Natterjack Toad is listed on Appendix IV of the EC Council Habitats Directive and, in contrast, is a commonly occurring species in The Netherlands.

In 2001 the Habitats Directive is implemented in de Dutch legislation and both species are under strict protection of the national law. The presence of species of the Habitats Directive regularly conflicts with local development of urban and industrial areas. Several cases were presented in regional and national newspapers with critical remarks to the relevancy of the present species.

In case of the Natterjack Toad the application of the Habitats Directive in the Netherlands is complicated if not impossible. The species occurs frequently in urban areas and relatively little is known about its ecology and population dynamics in these areas. Examples from the last two years are given.

The Sand lizard is wide spread in the coastal dune areas where the pressure of land use is high. To assess the impact of planned project development on the local and regional populations of Sand lizards the government needs quick and clear answers on the following questions. The lizards in the questionable habitat are they part of a metapopulation or are they isolated genetically from other sandlizard populations? If isolated, is the population expected to be capable to survive in short and long term? To be able to provide answers to these questions we developed a program with: 1) the description of the history of the local habitat and 2) the assessment of a number of population parameters, including genetic diversity.

The mentioned facts have been investigated for three isolated Sand lizard populations. Results will be shown. Discrepancies between the National Red List and the EC Council legislation will be discussed.

Key words: *Lacerta agilis*, *Bufo calamita*, National Red List, EC Habitats Directive

THE EUROPEAN TREE FROG REINTRODUCTION IN LATVIA (O)

Ju. Zvirgzds, I. Duncce

Amphibian Department, Riga Zoo, Riga, Latvia

The European tree frog (*Hyla arborea*) is listed in IUCN Red List of Threatened Animals as a near threatened species (LRnt), and in Latvian Red List as 1st Category species. It is also included in Annex IV of the Council of Europe Directive 92/43/EEC. The Latvian tree frog population has disappeared already for several decades, and in 1988 the Laboratory of Ecology of Riga Zoo started the reintroduction program, releasing captive-bred individuals. The initial breeding stock was acquired from Byelorussian wild population, which was one of the closest. Captive breeding was stimulated by using hormonal treatment. During the years 1988-1992 more than 4000 laboratory-bred froglets were released into the wild nature. The release took place in SW Latvia, and a special nature reserve of 350 ha was established around the release site. All releases were conducted in one locality, enabling accurate further monitoring of population dispersal. Our monitoring data show that the stable and regenerating population is established, with already 5-6 developed naturally generations after initiation of program (14 years ago). Up to date 110 new tree frog sites are recorded, and total area of population dispersal covers already about 800 km². The monitoring of population continues. Our successful program could serve as example of native amphibian population reestablishment through release of captive-bred specimens. The Laboratory of Ecology of Riga Zoo continues its work in developing breeding technologies for native species, as well as for about 20 threatened tropical amphibian species.

Key words: reintroduction, *Hyla arborea*, captive breeding