

***Zootoca vivipara* as a guide to Natura 2000**

F.J.A. KUENEN & A. SPITZEN, Nijmegen.

Of all reptile species in the Netherlands, *Zootoca vivipara* is the only one which is not on the Dutch red list of endangered species. Probably it will be added to this list within the very near future as results from the National Ecological Monitoring network show a declining trend for the last decade. One of the underlying causes is most probably the fragmentation of the habitat of *Zootoca*.

In 1998 a study showed that over half of the suitable locations in the eastern part of the province of Noord Brabant had disappeared in a period of 15 years (van Delft & Kuenen, 1998). Many of these locations had become unsuitable for *Zootoca vivipara* due to intensive landuse. Still Infrastructure, agriculture and urban areas exert an ever-increasing stress on the remaining habitat.

To reduce or even reverse the effects of habitat fragmentation, a National Ecological Network is to be realized as part of Natura 2000. This network of nature reserves, corridors and stepping stones should help in protecting many species among which *Zootoca vivipara*.

In a project called NENA (National Ecological Network Assessment) *Zootoca vivipara* will be used as a model species to assess the National Ecological Network. By combining recent and historical cartographic data, demographic data and molecular data we hope to construct a model, capable of predicting the effects of the National Ecological Network on populations of species with low migratory capabilities.

The outcome of the model may serve as a guidance for adjusting nature management in existing and still-to-be constructed nature reserves. It also will estimate the success of a corridor before it is being realized.

F.J.A. KUENEN & A. SPITZEN

Stichting RAVON (Reptile Amphibian Fish Research Netherlands),