

## **Who is sitting next to me? Relatedness in a population of common lizards**

SYLVIA HOFMANN, Halle

Observations of associations of the common lizard, *Zootoca vivipara*, that consist of different or same aged individuals at the same site have generated speculation about the relatedness structure and dispersal patterns of this species.

A total of 682 lizards were sampled from a population in a floodplain nature reserve near Leipzig of East Germany. Relatedness statistics were calculated using five microsatellite DNA loci. Relatedness of individuals who were sighted or captured together at the same site was compared by grouping them on sex and age.

The results showed that associated adults and juveniles were significantly more related than almost all other groups while adults captured together showed the lowest mean values of relatedness, followed by a similar low level of relatedness between subadults. Most "pairs" were found in juveniles. Associations between subadults and juveniles as well as of adults and juveniles consisted mainly of females. In subadults and adults males captured together were non-related.

I found few evidences to support the assumption that common lizards have the ability to discriminate kin from non-kin and that relatedness is relevant for space distance between individuals. The relatedness patterns of associated individuals seems to be more the result of sex biased dispersal than an active kin preferences.

Dr. Sylvia Hofmann Institut für Zoologie, Martin-Luther-Universität Halle-Wittenberg, Domplatz 4, D-06108 Halle,  
Email: [s.hofmann@zoologie.uni-halle.de](mailto:s.hofmann@zoologie.uni-halle.de)