

SP 23 A CONSERVATION MEDICINE'S REALISATION: HEMOGREGARINES OF MIDDLE EUROPEAN LIZARDS AND THEIR PRESUMPTIVE VECTORS**Andreas R. Hassl**

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Unicellular blood parasites of the Apicomplexan suborder Adeleorina, collectively known as hemogregarines, are common, widely distributed, and speciose pathogens of all reptilian orders. Especially intracellular parasitism by *Karyolysus* in erythrocytes of palearctic lizards seems to be a prevalent phenomenon in the wilderness, although the biology of the parasite is still enigmatic. Its life-cycle has been completed in *Ophionyssus* mites under laboratory conditions only, and ingestion of transovarially infected mite nymphs has been postulated as the vital transmission mode. No data about the occurrence of *Karyolysus* in Central Europe and about the cohabitation with arthropod vectors others than *Ophionyssus* mites have been available until recently. During several herpetological excursions to Austria, Croatia and Hungary we found *Karyolysus* parasites in the erythrocytes of free-living lizards, e.g. *K. lacertae* in Lower Austrian *Zootoca vivipara*, and *K. latus* in the blood of *Algyroides nigropunctatus*, *Podarcis muralis* and *P. melisellensis* from the Croatian island of Cres. More than 80% of the *Karyolysus*-infected lizards were parasitised by *Ixodes ricinus* nymphs and larvae in Lower Austria, and by nymphs of *Haemaphysalis concinna*, a rodent tick, in Croatia. On the other hand *Ophionyssus* mites could not be detected at all.

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