A remarkable age and size record of a male Jewelled Lizard, *Timon lepidus* (Daudin, 1802)

Six years ago, the authors reported on the (preliminary) record age of a Jewelled Lizard, *Timon lepidus* (Daudin, 1802), in the herpetocultural facility of the Zoologisches Forschungsmuseum Alexander Koenig (ZFMK), Bonn, Germany (Esser & Böhme 2009). This specimen, a male originating from near Cadiz, southern Andalusia, Spain, was received in 1986 as an adult whose age was judged of at least four years. After 24 years of captive maintenance, at an age of ca. 28 years, this male had become the ancestor of a successful breeding group. However, in 2002 the big old male showed first signs of senility, for example, one eye became blind.

A literature review had shown that the normal maximum age of *Timon lepidus* was between 11 and 17 years (Decaux 1897, Flower 1925, Slavens & Slavens 1993, Cheylan & Grillet 2004). Leeper (1951) gave even 20 years as the possible maximum age but this information was challenged by Mertens (1975: „ohne freilich präzise Angaben zu machen“ = „without providing precise data“) and Bischoff et al. (1984: „soll erreicht worden sein“ = claimed to have been reached). All these data refer to captive specimens. In contrast, according to skeletochronological results (Castilla & Castanet 1986), the life span of *T. lepidus* in the wild rarely exceeds five years. In this study, six years were reached by only 8 % of the females and 17 % of the males. According to these authors, the documented maximum age of free-ranging Jewelled Lizards was 11 years.

As mentioned above, the male described here showed the first age-dependent handicaps when it was twenty years old. But its unilateral blindness did not hinder it to copulate with the two females sharing its terrarium (one of them being only few years younger) and continue to produce offspring.

Even in 2007 a clutch of fertilized eggs was laid, and all eggs were successfully incubated. In total, nearly 40 juveniles originated from these matings between 2001 and 2009. After the hibernation of 2007/08, the second eye of the old male started to grow blind, and food uptake became more difficult. Henceforth, the lizard was kept separately to better control its well-being.

After six years, at the end of hibernation of 2014/15, the health state of this lizard became so bad it had to be euthanized. After 30 years of captive maintenance at ZFMK's herpetocultural facility ("Tierhaus"), this particular lizard was finally preserved and cataloged under ZFMK 96786 (Fig. 1). Since these lizards continue to grow throughout life (though more and more retarded after sexual maturity and with increasing age: see BISCHOFF et al. 1984) it also achieved an unusual size. Measurements documented a snout-vent length (SVL) of 232 mm, a head length of 77.2 mm, and a pileus length of 68.9 mm.

Since *Timon lepidus* is – apart from the legless anguid *Pseudopus apodus* (PALLAS, 1775) – the largest lizard species in Europe, its total length is often exaggerated in the literature (see BISCHOFF et al. and references cited therein). Documented maximum SVL values for males are: 210 mm (BOULENGER 1920: Nizza, South France), 216 mm (PETERS 1962, Banyuls-sur-mer, South France), 229 mm (BUSACK 1987: southern Spain) and 235 mm (JOGER in BISCHOFF et al. 1984: Type specimen of *Lacerta senegalensis* GRAY, 1838, a synonym of *T. lepidus*, not of *T. nevadensis*, *T. tangitanus* or *T. pater*, thus with unknown locality but certainly not from Senegal). This last-named specimen at the British Museum (BM 1946.9.2.17) was considered the biggest representative of its species by BISCHOFF et al. (1984), but CASTILLA (1989) in her unpublished PhD thesis (cited in SALVADOR 1998) gave a maximum value of even 260 mm SVL. It is not clear whether this size record was taken from a particular specimen that could be re-examined. SALVADOR (1998) himself gave

Fig. 1: ZFMK 96786, the 35 year-old male *Timon lepidus* (DAUDIN, 1802), from near Cadiz, Spain. Photo: P. GEISSLER.

only 172 mm SVL as the maximum value of the samples studied by him. In any case, the present extremely old male of nearly 35 years represents also one of the biggest *T. lepidus* ever measured.

REFERENCES: Bischoff, W. & Cheylan, M. & Böhme, W. (1984): *Lacerta lepida* Daudin, 1802 – Perleidechse; pp. 181-210. In: Böhme, W. (Ed.): Handbuch der Reptilien und Amphibien Europas, vol. 2/I, Echsen II (*Lacerta*). Wiesbaden (AULA). Boulenger, G. A. (1920): Monograph of the Lacertidae, vol. 1. London (Trustees of the British Museum), pp. x, 352. Busack, S. D. (1987): Morphological and biochemical differentiation in Spanish and Moroccan populations of the lizard, *Lacerta lepida*.- Journal of Herpetology, Houston, etc.; 21 (4): 277-284. Castilla, A. M. & Castanet, J. (1986): Growth, age and longevity of *Lacerta lepida* assessed by skeletochronography; pp. 331-335. In: Roček, Z. (Ed.): Studies in Herpetology. Prague (SEH), pp. 754. Cheylan, M. & Grillet, P. (2004): Le lézard ocellé. Paris (Belin Éveil nature), pp. 95. Decaux, C. (1897): Un lézard ocellé conservé en captivité depuis quatorze ans.- La Nature, Paris; 1255: 43-44. Esser, S. & Böhme, W. (2009): (Vorläufiger) Altersrekord einer Perleidechse, *Timon lepidus* (Daudin, 1802), im Tierhaus des Zoologischen Forschungsmuseums Alexander Koenig in Bonn.- Elaphe, Rheinbach; 17 (4): 44-47. Flower, S. S. (1925): Contribution to our knowledge of the duration of life in vertebrate animals. III. Reptiles.- Proceedings of the Zoological Society, London, 95: 911-981. Leeper, F. (1953): Nogmaals de onderdom van reptielen en amfibien.- Lacerta, s'Gravenhage; 11: 55-56. Mertens, R. (1970): Über die Lebensdauer einiger Amphibien und Reptilien in Gefangenschaft.- Zoologischer Garten, Leipzig; 39 (1/6): 193-209. Peters, G. (1962): Ein Beitrag zur Ökologie der Perleidechse (*Lacerta l. lepida* Daudin).- Mitteilungen des Zoologischen Museums Berlin, Berlin; 38: 401-414. Salvador, A. (1998): Fauna Iberica, vol. 10 (Reptiles). Madrid (MNCN), pp. 709. Slavens, F. L. & Slavens, K. (1993): Reptiles and amphibians in captivity. Breeding, longevity and inventory. Current January 1, 1993. Seattle (Slaveware), pp. 521.

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