

**A review of tail anomalies in lizards (Reptilia: Sauria) in Poland
with additional records**

Zuzanna Purwin, Piotr Kazimirski, Paweł Błęcki & Przemysław Zdunek

REFERENCES

1. ARNOLD E.N. 1988. Caudal autotomy as a defense. In: GANS C., HUEY R. (Eds.). *Biology of the Reptilia*. Volume 16. Ecology B: Defense and Life History. Alan R. Liss, New York: 235–273.
2. BŁĘCKI P., KAZIMIRSKI P, ZDUNEK P. 2025. Obserwacja rozdwojenia ogona u jaszczurki żyworodnej, *Zootoca vivipara* (Lichtenstein, 1823), z północnej polski, z nakreśleniem tego typu anomalii u polskich jaszczurek (Reptilia: Sauria). *Przegląd Przyrodniczy* XXXVI(2), 93–97.
3. QUAH E.S.H., GRISMER L.L. 2024. Tail bifurcation in *Gehyra mutilata* (Wiegmann, 1834) and an updated compilation of tail abnormality records in Gekkota. *Herpetology Notes* 17, 359–365.
4. BATEMAN P.W., FLEMING P.A. 2009. To cut a long tail short: A review of lizard caudal autotomy studies carried out over the last 20 years. *Journal of Zoology* 277, 1–14.
5. ALIBARDI L. 2009. *Morphological and Cellular Aspects of Tail and Limb Regeneration in Lizards: A Model System with Implications for Tissue Regeneration in Mammals*. Springer-Verlag, Berlin, Germany.
6. JACYNINAK K., MCDONALD, R.P., VICKARYOUS M.K. 2017. Tail regeneration and other phenomena of wound healing and tissue restoration in lizards. *Journal Experimental Biology* 220, 2858–2869.
7. RENET J. 2013. Deux cas d'anomalie caudale chez le lézard ocellé *Timon lepidus lepidus* (Daudin, 1802) dans le sud-est de la France (Bouches-du-Rhône). *Nature de Provence, Revue du CEN PACA* 2, 99–101.
8. BADIANE A. 2017. Trifurcation caudale chez le lézard des murailles *Podarcis muralis* (Laurenti, 1768) (Squamata: Lacertidae). *Bulletin de la Société Herpétologique de France* 163, 106–107.
9. BARR J.I., SOMAWEERA R., GODFREY S.S., GARDNER M.G., BATEMAN P.W. 2020. When one tail isn't enough: abnormal caudal regeneration in lepidosaurs and its potential ecological impacts. *Biological Reviews* 95, 1479–1496.
10. BAUM T.J., KAISER H. 2024. Tail furcations in lizards: a revised summary and the second report of tail duplication in the Western Fence Lizard, *Sceloporus occidentalis* Baird & Girard, 1852. *Herpetology Notes* 17, 459–475.

11. HAYES W.K., IVERSON J.B., KNAPP C.R., CARTER R.L. 2012. Do invasive rodents impact endangered insular iguana populations? *Biodiversity and Conservation* 21, 1893–1899.
12. BEIJDRORFF F., ZDUNEK P. 2024. Multiple tail furcations in a common house gecko *Hemidactylus frenatus* from Thailand. *Herpetological Bulletin* 170, 48.
13. JUSZCZYK W. 1987. Płazy i gady krajowe. Część 3. Gady – Reptilia, wydanie drugie. Państwowe Wydawnictwo Naukowe, Warszawa.
14. MOSER J. 2000. Beobachtung eines doppelschwänzigen Zauneidechsen-Weibchens. *ÖKO.L, Zeitschrift für Ökologie, Natur- und Umweltschutz* 22, 36.
15. BLANKE I. 2010. Die Zauneidechse zwischen Licht und Schatten. *Zeitschrift für Feldherpetologie* 7 (Supplement), 1–176.
16. GRAMENTZ D. 2013. Die Farbvarianten der Zauneidechse in Berlin und dem stadtnahen Umland. *Die Eidechse* 24, 35–42.
17. ESPASANDIN I. 2017. Cola bífida en *Anguis fragilis* (Linnaeus, 1758). *Boletín de la Asociación Herpetológica Española* 28(2), 11–12.
18. FUNKE O. 2001. Auffälliges Vorkommen von Gabelschwanzregeneraten in einer Population von *Podarcis muralis merremia* (Risso, 1826) in Südfrankreich. *Die Eidechse* 12; 84–85.
19. FERNANDEZ-FERNANDEZ D. 2020. Cola bífida en *Podarcis muralis* (Laurenti, 1768). *Boletín de la Asociación Herpetología Española* 31(1), 26–28.
20. HEAD A., AMER A., FOSTER E.G., FRAIRE L., LIVINGSTON E.H., MOORE M.M., GANGLOFF E.J. 2024. Caudal regeneration in the invasive Common Wall Lizard, *Podarcis muralis* (Laurenti, 1768), in Ohio, USA, with a report of a rare tail trifurcation. *Herpetology Notes* 17, 367–369.
21. DUDEK K., EKNER-GRZYB A. 2014. Field observation of two tailed sand lizard *Lacerta agilis* Linnaeus, 1758 and a common lizard *Zootoca vivipara* (Jacquin, 1787) in Poland. *Natura Sloveniae* 16, 65–66.
22. KOLENDA K., WIECZOREK M., NAJBAR A., NAJBAR B., SKAWIŃSKI T. 2017. Limb malformation and tail bifurcation in sand lizards (*Lacerta agilis*) and common lizards (*Zootoca vivipara*) from Poland. *Herpetology Notes* 10, 713–716.

ACKNOWLEDGEMENTS

The authors would like to thank Aleksandra Kolanek for providing observations from her private archive.