

**Supplementary Figure S1.** 200 × 200 km grid cells used in Table S5.

**Supplementary Table S1.** Image sources for this project. All references that contributed 10 or more photos are listed. A complete list of photos and their sources is provided in Supplementary Table S2. \* we received the revised edition by GENIEZ (2018) after finishing this project; a species checklist with a comparison to GENIEZ (2018) is provided in Supplementary Table S1.

| Source  | photos |
|---|--------|
| GRUBER (2009): Die Schlangen Europas*                                     | 109    |
| SINDACO et al. (2013): Reptiles of the Western Palearctic, Vol. 2, snakes | 134    |
| HOFMANN et al. (2018): A new subspecies of Zamenis hohenackeri            | 28     |
| JABLONSKI et al. (2019): The biogeography of Elaphe sauromates            | 16     |
| TUNIYEV et al. (2012): New Species of Shield-Head Vipers, Pelias olguni   | 10     |
| TUNIYEV et al. (2018a): Taxonomic status of shield-head vipers            | 10     |
| UETZ et al. (2020): Reptile Database                                      | 270    |
| 29 other sources (< 10 photos each)                                       | 38     |
| Total   | 626    |