

Table S3: Species used in this study.

| No | classification | species | Reference (main references underlined) | observed specimens | described stages (followed staging table: stages) | stages since (incl.) blastoporus [documented as pictures] |
|----|--------------------------------------|---|--|------------------------------|--|---|
| 1 | Caudata | <i>Ambystoma mexicanum</i> | 1. Bordzilovskaya et al. (1989) (stages 1-44), 2. Nye et al. (2003) (stages 45-57) | n.d. | 51 stages including "half stages" (Bordzilovskaya et al. 1989); 13 | 42 [42] +13 [13] |
| 2 | Mammalia, Monotremata | <i>Tachyglossus aculeatus</i> | 1. this study (stages IW1-13, Semon-54,55) 2. Semon (1894a, b, c) (stages 40-53) | 1. 22 2. n. d. | 14 (this study: IW1-13, Semon 54), 14 (Semon 1894c: 40-53) | 13 [13] + 14 [14] |
| 3 | Mammalia, Theria, Marsupialia | <i>Didelphis virginiana</i> | McCrandy (1938) | n.d. | 35 (McCrandy 1938: 1-35) | 20 [20] |
| 4 | Mammalia, Theria, Placentalia | <i>Dasyurus hybridus</i> (= <i>Tatoua hybrida</i>) | Fernandez (1915) | 206+ | 35 (Fernandez 1915: 1-35) | 24 [21] |
| 5 | Archosauria, Aves | <i>Gallus gallus</i> | Hamburger & Hamilton (1951) | 996+ | 45 (Hamburger & Hamilton 1951: 1-45) | 44 [44] |
| 6 | Archosauria, Crocodylia | <i>Alligator mississippiensis</i> | 1. Ferguson (1985) 2. Voeltzkow (1899) | 1. 1500 2. n.d. | 4 early stages (after Voeltzkow 1899), 28 (Ferguson 1985: 1-28) | 32 [32] |
| 7 | Lepidosauria, Sphenodontida | <i>Sphenodon punctatus</i> | 1. Dendy (1899) 2. Moffat (1985) | 1. 90 2. n.d. | 16 (Dendy 1899: C-S) | 16 [15] |
| 8 | Lepidosauria, Squamata | <i>Lacerta vivipara</i> | 1. Dufaure & Hubert (1961) 2. Hubert (1985) 3. Moffat (1985) | 1. 350 2. n.d. 3. n.d. | 40 (Dufaure & Hubert 1961: 1-40) | 36 [36] |
| 9 | Testudines, Cryptodira, Chelonoidea | <i>Caretta caretta</i> | 1. Bilett et al. (1992) 2. Miller (1985) 3. this study | 1. n.d. 2. 1303 3. 5 | 31 (Miller 1985: 1-31) | 22 [20] |
| 10 | Testudines, Cryptodira, Chelonoidea | <i>Chelonia mydas</i> | 1. Miller (1985) 2. Parker (1880) 3. this study | 1. 723 2. 26+ 3. 18 | 31 (Miller 1985: 1-31) | 22 [19] |
| 11 | Testudines, Cryptodira, Chelonoidea | <i>Dermochelys coriacea</i> | Renous et al. (1989) | 97+ | 31 (Miller 1985: 1-31) | 22 [22] |
| 12 | Testudines, Cryptodira, Chelonoidea | <i>Eretmochelys imbricata</i> | Miller (1985) | 567 | 31 (Miller 1985: 1-31) | 22 [12] |
| 13 | Testudines, Cryptodira, Chelonoidea | <i>Lepidochelys olivacea</i> | 1. Crastz (1982) 2. this study | 1. 210 2. 28 | 31 (Crastz 1982: 1-31) | 31 [28] |
| 14 | Testudines, Cryptodira, Chelonoidea | <i>Natator depressa</i> | Miller (1985) | 375 | 31 (Miller 1985: 1-31) | 22 [10] |
| 15 | Testudines, Cryptodira, Chelydridae | <i>Cheleydra serpentina</i> | Yntema (1968) | Not noted | 27 (Yntema 1968: 0-26) | 27 [27] |
| 16 | Testudines, Cryptodira, Emydidae | <i>Chrysemys picta</i> | Mahmoud et al. (1973) | 446 | 23 (Mahmoud et al. 1973: 1-23) | 23 [23] |
| 17 | Testudines, Cryptodira, Emydidae | <i>Graptemys nigrinoda</i> | this study | 35 | 14 (Yntema 1968: 12-15, 17-26) | 14 [14] |
| 18 | Testudines, Cryptodira, Emydidae | <i>Trachemys scripta</i> | Greenbaum (2002) | 104 | 15 (Yntema 1968: 12-26) | 15 [15] |
| 19 | Testudines, Cryptodira, Testudinidae | <i>Testudo hermanni</i> | Guyot et al. (1994) | 161 | 27 (Yntema 1968: 0/1-26) | 27 [27] |
| 20 | Testudines, Cryptodira, Trionychia | <i>Apalone spinifera</i> | Greenbaum & Carr (2002) | 112 | 15 (Yntema 1968: 12-26) | 15 [14] |
| 21 | Testudines, Cryptodira, Trionychia | <i>Carettochelys insculpta</i> | Beggs et al. (2000) | 54 | 15 (Yntema 1968: 12-26) | 15 [15] |
| 22 | Testudines, Cryptodira, Trionychia | <i>Pelodiscus sinensis</i> | 1. Tokita & Kuratani (2001) 2. this study | 1. 67 2. 6 | 23 (Tokita & Kuratani 2001: 5-27) | 23 [23] |
| 23 | Testudines, Pleurodira | <i>Emydura subglabrosa</i> | this study | 18 | 14 (Yntema 1968: 12-15, 17-26) | 14 [14] |

References to Table S3:

- Beggs K, Young J, Georges A, West P (2000) Ageing the eggs and embryos of the pig-nosed turtle, *Carettochelys insculpta* (Chelonia: Carettochelydidae), from northern Australia. Canadian Journal of Zoology 78: 373-392.
- Bordzilovskaya NP, Detlaff TA, Huhon ST, Malacinski GM (1989) Developmental-stage series of Axolotl embryos. In: Armstrong JB, Malacinski GM, editors. Developmental biology of the Axolotl. New York, Oxford: Oxford University Press. pp. 201-219.
- Crastz F (1982) Embryological stages of the marine turtle *Lepidochelys olivacea*. Rev Biol Trop 30: 113-120.
- Dendy A (1899) Outlines of the Development of the Tuatara, *Sphenodon (Hatteria) punctatus*. Quarterly Journal of Microscopical Science s2-42: 1-87.
- Dufaure JP, Hubert J (1961) Table de développement du lézard vivipara: *Lacerta (Zootoca) vivipara*. Archives D'Anatomie Microscopique et de Morphologie Expérimentale 50: 307-327.
- Ferguson MWJ (1985) Reproductive biology and embryology of the crocodilians. In: Gans C, Billet F, Maderson PFA, editors. Biology of the Reptilia Volume 14 - Development A. New York: John Wiley & Sons. pp. 329-491.
- Fernandez M (1915) Die Entwicklung der Mulita - La embriología de la Mulita (*Tatusia hybrida* Desm.). Revista del Museo de la Plata 21: 519.
- Greenbaum E (2002) A standardized series of embryonic stages for the emydid turtle *Trachemys scripta*. Canadian Journal of Zoology 80: 1350-1370.
- Greenbaum E, Carr JL (2002) Staging criteria for embryos of the spiny softshell turtle, *Apalone spinifera* (Testudines: Trionychidae). Journal of Morphology 254: 272-291.
- Guyot G, Pieau C, Renous S (1994) Développement embryonnaire d'une tortue terrestre, la tortue d'Hermann, *Testudo hermanni* Gmelin, 1789. Annales des Sciences Naturelles Zoologie Paris 15: 115-137.
- Hamburger V, Hamilton HL (1951) A series of normal stages in the development of the chick embryo. Journal of Morphology 88: 49-92.
- Hubert J (1985) Embryology of the Squamata. In: Gans C, Billet F, Maderson PFA, editors. Biology of the Reptilia Volume 15 - Development B. New York: John Wiley & Sons. pp. 1-34.
- Mahmoud IY, Hess GL, Klick J (1973) Normal Embryonic Stages of the Western Painted Turtle, *Chrysemys picta bellii*. J Morph 141: 268-280.
- McCrandy E, Jr. (1938) The embryology of the opossum. The American Anatomical Memoirs 16: 225.
- Miller JD (1985) Embryology of marine turtles. In: Gans C, Billet F, Maderson PFA, editors. Biology of the Reptilia Volume 14 - Development A. New York: John Wiley & Sons. pp. 269-328.
- Moffat LA (1985) Embryonic development and aspects of reproductive biology in the tuatara, *Sphenodon punctatus*.
- Nye HLD, Cameron JA, Chernoff E-AG, Stocum L (2003) Extending the table of stages of normal development of Axolotl: Limb development. Developmental Dynamics 266: 555-560.
- Parker WK (1880) Report on the development of the green turtle (*Chelone viridis*, Schneid.). Green: London Longmans. 1-57 p.
- Renous S, Rimbaut-Baly F, Fretey J, Pieau C (1989) Caractéristiques du développement embryonnaire de la tortue luth, *Dermochelys coriacea* (Vandelli, 1761). Annales des Sciences Naturelles Zoologie Paris 10: 197-229.
- Schoenwolf GC (2008) Altas of descriptive embryology. San Francisco: Pearson Education. 125-195 p.
- Semon R (1894a) Beobachtungen über die Lebensweise und Fortpflanzung der Monotremen nebst Notizen über ihre Körpertemperatur. Denkschriften der Medicinisch-Naturwissenschaftlichen Gesellschaft zu Jena 5: 3-15.
- Semon R (1894b) Die Embryonalhüllen der Monotremen und Marsupialier. Denkschriften der Medicinisch-Naturwissenschaftlichen Gesellschaft zu Jena 5: 19-58.
- Semon R (1894c) Zur Entwicklungsgeschichte der Monotremen. Denkschriften der Medicinisch-Naturwissenschaftlichen Gesellschaft zu Jena 5: 61-74.
- Tokita M, Kuratani S (2001) Normal embryonic stages of the Chinese softshelled turtle *Pelodiscus sinensis* (Trionychidae). Zoological Science 18: 705-715.
- Voeltzkow A (1899) Beiträge zur Entwicklungsgeschichte der Reptilien. I. Biologie und Entwicklung der äußeren Körperform von *Crocodylus madagascariensis*. Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft 26: 1-150.
- Yntema CL (1968) A series of stages in the embryonic development of *Cheleydra serpentina*. Journal of Morphology 125: 219-251.