

Egg incubation period in the Hermann's tortoise *Testudo hermanni* Gmelin, 1789 (Testudines, Cryptodira, Testudinidae)

Period inkubacije jaja kopnene kornjače *Testudo hermanni* Gmelin, 1789 (Testudines, Cryptodira, Testudinidae)

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During fieldwork near the Prijedor village (Budva Municipality, Montenegro: 42° 17' 26.30" N; 18° 48' 59.90" E), we observed a female Hermann's tortoise digging a nest (Fig. 1). Hermann's tortoises are active from March until the end of October (Vetter 2006), and their reproductive activities peak during March-April and August-September (Kaufmann 1992, Willemssen & Hailey 2003, Vetter 2006, Loy & Cianfrani 2009). Egg laying occurs at the end of May or the beginning of June (Eendebak 2001, Vetter 2006). Incubation lasts for about 60 days (Cutuli et al. 2013). According to Cruce & Răducan (1976), Cheylan (1981) and Nougarede (1998) incubation time ranges from 90–124 days in the wild, and from 56–102 days under artificial conditions within a range of temperatures from 22–35°C (Kirche 1967; Ehrengart 1971; Esteban 1987; Hailey & Lombourdis 1990; Eendebak 1995). Nesting activities usually start in the morning or at the end of the day (Swingland & Stubbs 1985, Fertard 1992).

On the 2nd June 2014 around 16:00, we observed a large female tortoise digging a nest. The tortoise was in the open, beside an asphalt village road. The vegetation of the given area is macchia, where the dominant plants are: *Quercus ilex*, *Phillyrea media*, *Juniperus oxycedrus*, *Rosa sempervirens*, *Smilax aspera*, *Ruscus aculeatus*, *Myrtus communis*, *Laurus nobilis*, *Rubia peregrina*, and *Salvia officinalis*. We photographed the tortoise, marked the place with stones where the nest was, and did not disturb the animal. We visited the place again in the morning of 3 June and took a photo of the eggs (Fig. 2), and decided to survey the nest every 4–5 days from the 2nd June to the 7th August. When we visited it on the 15th August we found it empty, and assumed that the young had hatched and left the nest. We found several small remains of egg shells near the nest. We calculated that the eggs were incubated for 67–75 days (71 ± 4), which is in accordance with previous findings (Eendebak 1995; Bertolero et al. 2011).



Figure 1. Hermann's tortoise digging a nest on 2 June.

Slika 1. Kopnena kornjača koja kopa gnijezdo 2.

lipnja.



Figure 2. Hermann's tortoise eggs photographed on 3 June.

Slika 2. Jaja kopnene kornjače fotografirana 3 lipnja.

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