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SCIENTIFIC NOTE

LONGEVITY OF THE WESTERN HERCULES BEETLE, *DYNASTES GRANTII* HORN (COLEOPTERA: SCARABAEIDAE: DYNASTINAE)

FRANK-THORSTEN KRELL AND VICTORIA H. I. KRELL
Department of Zoology, Denver Museum of Nature & Science
2001 Colorado Boulevard
Denver, CO 80205-5798, U.S.A.
frank.krell@dmns.org

Because of their popularity as pets, the captive adult life spans of several of the larger rhinoceros beetle species (Scarabaeidae: Dynastinae) are known. Adults of most species live for 2–10 months, some up to one or even two years (McMonigle 2012a). With an adult life span of 6–23 months in captivity, mostly including a hibernation period, the eastern hercules beetle, *Dynastes tityus* (Linnaeus), is one of the longest-lived dynastine beetles (Rau 1937; Prokop 1969; McMonigle 2008, 2012a, b). The western hercules beetle, *Dynastes grantii* Horn, is reported to have a much shorter adult life of 2–4 months (McMonigle 2008, 2012b). While captive adults of this species, commonly collected in August, occasionally live longer, lasting until February of the following year (W. B. Warner, *in litt.* 2015), males seldom surpass three months. Single females have survived for seven months as a rare exception (O. McMonigle, *in litt.* 2015). McMonigle (2008) considers the disparity in life-span as “the big difference between these species”.

In August 2014, we received a fresh-looking male specimen of *D. grantii* that was caught at the Southwestern Research Station in Cochise County, Arizona (31°53'01"N, 109°12'24"W, elevation 1,650 m, mercury vapor lamp outside classroom, leg. Christopher Grinter, 20 August 2014). One of us (VK) adopted the specimen as a pet and kept it at room temperature in a small terrarium with bark and wood chips. It was fed with fresh apple pieces approximately every four days. The beetle did not hibernate. As expected in a humid environment, its elytral color changed from light grey with dark spots to continuously dark brown in the first week and remained dark thenceforth. The beetle was active and feeding until one day before its death on 26 May 2015, having lived for nine months and one week in captivity without hibernation. When pinned, the grey color returned, as expected with a drying cuticula (Hinton and Jarman 1973), but not as light as it originally was. The specimen is now deposited in the entomology

collection of the Denver Museum of Nature & Science, Colorado.

It would thus appear that the adult life spans in captivity of the closely related *D. tityus* and *D. grantii* are similar after all, and longevity is possible without hibernation.

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