SCIENTIFIC NOTE

TRACHYPACHUS INERMIS MOTSCULSKY (COLEOPTERA: TRACHYPACHIDAE), A NEW STATE RECORD FOR NEW MEXICO, USA

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Trachypachus Motschulsky includes three species in the western United States (Bousquet 2012). The most widespread of the three is Trachypachus inermis Motschulsky (CANADA: AB, BC, NT, SK, YT; USA: AK, CA, CO, ID, MT, NV, OR, SD, UT, WA, WY [KS]). The range of this species, as summarized by Bousquet (2012), “extends from the Kenai Peninsula in Alaska to northwestern Saskatchewan, south to southern Colorado, southern Utah, and the Sierra Nevada and Coast Ranges in California.” Johnson (2012) added the Black Hills of South Dakota to extend the species’ easternmost USA distribution. There is an old specimen collected by J. L. LeConte of questionable provenance from Kansas (Bousquet 2012). Most recent references refer to this species as T. holmbergi Mannheimer, but the valid name is T. inermis (LeConte 1857; Bousquet 2001, 2012).

We report specimens of this species from two National Park Service units, Valles Caldera National Preserve and Bandelier National Monument, in the Jemez Mountains, and from Santa Fe National Forest in the Sangre de Cristo Mountains of north-central New Mexico. These records are the southernmost for this species in the Rocky Mountains and the first for the species and family in New Mexico. Searches of aggregator websites GBIF (www.gbif.org) and iDigBio (www.idigbio.org) showed no specimens from New Mexico, nor did a manual search by Jere Schweikert of the California Academy of Sciences collection. A search of the Oregon State Arthropod Collection by David Maddison, however, yielded records from New Mexico reported below. The Symbiota Collections of Arthropods Network (SCAN, symbiota4.acis.ufl.edu/scan/portal) contains records from San Jacinto State Park in Riverside County, California, at the latitude of 33.8° N, the southernmost record for the species.

We examined 59 specimens with the following locality data: New Mexico: Sandoval County, Bandelier National Monument, elevation 2,712 m, 35.852°N, 106.411°W, 8 April–12 July 1993 (2 specimens), 12 June 2000 (1 specimen), 27 April–17 June 2005 (12 specimens), 18 April–14 June 2006 (4 specimens), 14 April–20 June 2008 (2 specimens), 24 April–1 July 2009 (5 specimens), 23 October–22 April 2013 (11 specimens), 22 April–25 June 2013 (15 specimens), 25 June–August 2013 (2 specimens); Valles Caldera National Preserve, elevation 2,682 m, 35.903°N, 106.424°W, 19–28 July 2011 (1 specimen), 28 July–15 August (1 specimen), 2–23 May 2012 (1 specimen), 23 May–13 June (2 specimens). All specimens were collected in pitfall traps. The Bandelier specimens were collected in mixed-conifer forest dominated by Douglas-fir (Pseudotsuga menziesii (Mirb.)). The Valles Caldera specimens were collected inponderosa pine (Pinus ponderosa Lawson & C. Lawson) forest that was severely burned in a stand-replacing fire (the Las Conchas fire) in 2011 prior to their collection. During the review process, we were made aware of three specimens of T. inermis housed at the Oregon State Arthropod Collection with the following locality data: New Mexico: Santa Fe County, Sangre de Cristo Mountains, Black Canyon Campground, 35.7274°N 105.8400°W, elevation 2,535 m, 5 July 1995, DRM 95.057. D.R. & W.P. Maddison, et al. The specimens were hand-collected in forest (primarily Douglas-fir, with some pines and cottonwoods), under a thin layer of conifer needles, about 1–2 m from the shore of a small creek.

The newly reported locations for this species occur in montane conifer forests of north-central New Mexico at elevations above 2,500 m and approach the southernmost extent of Rocky Mountain montane conifer forest, a biotic community type designated by Brown (1994). To the north, T. inermis is found at a range of elevations and in a variety of boreal and cold-temperate habitats, including anthropogenic habitats (Ball 2001). In the southwestern USA, we expect it to