Notes on *Priacma serrata* (LeConte, 1861) (Coleoptera: Cupedidae)

In 1861 J. L. LeConte described the species *Cupes serrata* from three beetles from Oregon (Barber & Ellis 1920) and in 1874 erected the new genus, *Priacma* LeConte, for the species. The type is in the Museum of Comparative Zoology at Harvard University. The type bears four labels: a blue circle, a red square (“Type 3682”, handwritten number), a white rectangle (“*Priacma serrata* Lec.”, handwritten) and a white rectangle (“MCZ Museum of Comparative Zoology”, typed). There is no date of collection. *Priacma* is the only extant member of, first, the Tribe Priacmini (Crowson 1962, Atkins 1979) and, latter, the Subfamily Priacminae (Lawrence 1991). Several fossil species of *Priacma* are known, including four recently described from China, (Tan et al. 2006).

*Priacma serrata* has never had its biology described (Hörnschemeyer et al. 2013). Early accounts mention males coming to the odor of bleach (Edwards 1951, Atkins 1957). This has led to its common name as the “*Priacma* bleach beetle” (Wild 2008). The species is reported from fir forests (Edwards 1951, Ross & Pothecary 1970), from a hemlock [*Tsuga* (Endlicher) Carrière] (Ross & Pothecary 1970) and from montane forests (Young 2002). Crowson (1962) reports *P. serrata* has been found under the loose bark of trees. Ross & Pothecary (1970) described mating adults, eggs and first-instar larvae. “An entirely empty and deflated gut” was found in specimens dissected by Atkins (1957). Hörnschemeyer et al. (2013) described the functional morphology of the mouthparts and speculated on how the stout mandibles are used. They also reported empty intestines. The unusual male genitalia are illustrated and described by Edwards (1953a, 1953b). Other morphological studies include: wing structure (Atkins 1958), head structure (Hörnschemeyer et al. 2002) and the thoracic skeleton and musculature (Baehr 1975). The females are rarely collected (Atkins 1979) and are much larger than the males (Ross & Pothecary 1970).

During our annual insect survey work in the Sierra Nevada of California, the author and Cheryl B. Barr have occasionally set out a pan of a commercial solution of bleach (sodium hypochlorite, unspecified percentage) to attract *Priacma serrata*. The locality is: CALIFORNIA: El Dorado County, 1 mile east of Pacific House (N38°45.57’ W120°29.51’; 1180 m). The local vegetation is a mixed pine/fir/hardwood forest. The locality is on private property adjacent to the El Dorado Irrigation Ditch. Over the 26 years of our study we have collected *P. serrata* during the months of May, June and July. On 12 May 2016, we collected 171 adult *P. serrata* as they came to bleach. All of the adults were males. There were no male-male aggressive interactions observed, as suggested might happen by Hörnschemeyer et al. (2013). However, because the range in sizes was remarkable (Fig. 1), it was decided to further examine the specimens. Because some specimens suffered some damage, the length and width of the right elytron was measured as a surrogate for overall size. The elytra were measured with an ocular micrometer in a dissecting microscope. The range in elytron length was 7.3–13.7 mm, with a continuous distribution. Elytral width varied from 1.3–2.7 mm. The ratio of elytral length to elytral width varied from 4.6–6.6, in a bell-shaped curve with a long tail on the larger side and a mode of 5.1. Twenty-five of the specimens