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# The Cerambycidae or Longhorned Wood-Boring Beetles (Insecta: Coleoptera) of Plummers Island, Maryland

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*Abstract.*—Based on historical records in the collection of the National Museum of Natural History, Smithsonian Institution, Washington, D.C., 63 species of Cerambycidae (Coleoptera) are reported from Plummers Island, Maryland. This number represents 24.9% of the Maryland cerambycid fauna. Specimens were collected from March to September, with July yielding the highest total (160 or 38.8%). Only 25 specimens were collected after 1927: three in 1931, three in 1932, one in 1933, one in 1941, 16 in 1968, and one in 2004. Four specimens of the state-listed endangered species *Dryobius sexnotatus* Linsley were collected prior to 1920.

*Key words.*—Historical records, inventory, larval hosts, *Dryobius sexnotatus*.

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The Cerambycidae (longhorned wood boring beetles) is a large family with over 900 species in North America (Turnbow & Thomas 2002). Adults feed on bark, leaves, pollen, or not at all. Larvae bore into stems of herbaceous plants, roots, and wood. Some species are serious pests of shade and forest trees or processed lumber.

Adults can be collected using blacklight, Malaise, and flight-intercept traps, and by headlamping, sweeping and beating foliage, and examining flowers at which adults feed on pollen. There are 253 species reported from Maryland (Staines 1987, Glaser 1992), one of which, *Dryobius sexnotatus* Linsley, is listed as endangered by the state of Maryland (Anonymous 2003).

The insect collection at the National Museum of Natural History (USNM), Smithsonian Institution, Washington, D.C. was examined for specimens collected on Plummers Island, Maryland. The USNM collection is the major repository for specimens from Plummers Island because most of the entomologists that collected on the site were affiliated with the USNM. Species identifications were confirmed, and label data were recorded for all specimens found. Also, literature on various genera was examined for Plummers Island records of cerambycids.

The USNM collection contains at least 413 specimens from Plummers Island, representing 63 species or 24.9% of the Maryland fauna. Specimens were collected from March to September, with July yielding the largest number—160 or 38.8%. Only 25 specimens were collected after 1927: three in 1931, three in 1932, one in 1933, one in 1941, 16 in 1968, and

one in 2004. Hence, the data presented below are primarily historical.

## Species Accounts

*Acmaeops directa* (Newman) breeds in recently dead *Pinus*, *Picea*, *Tsuga*, and *Abies* (Pinaceae) (Linsley & Chemsak 1972). Five specimens were collected in June 1906 and 1914.

*Aegomorphus modestus* (Gyllenhal) has been collected at light (Linsley & Chemsak 1995). One specimen was collected 14 July 1912 at light.

*Aegomorphus quadrigibbus* (Say) has an unknown biology (Linsley & Chemsak 1995). Four specimens were collected from 1907 to 1917.

*Analeptura lineola* (Say) breeds in *Betula* (Betulaceae) and *Pinus* (Staines 1987). Five specimens were collected from 1908 to 1918.

*Aneflormorpha subpubescens* (LeConte) breeds in *Quercus* (Fagaceae) (Staines 1987). One specimen was collected on 1 July 1913.

*Anelaphus parallelus* (Newman) breeds in various hardwoods. Adults are attracted to light (Linsley 1963). Three specimens were collected from 1911 to 1931.

*Anelaphus pumilus* (Newman) breeds in *Quercus*, *Ulmus* (Ulmaceae), *Carya*, and *Tilia* (Tiliaceae). Adults are attracted to light (Linsley 1963). One specimen was collected on 26 May 1914 at light.

*Anelaphus villosus* (Fabricius) breeds in various hardwoods. Adults are attracted to light (Linsley 1963). One specimen was collected on 2 July 1907.

*Astylidius parvus* (LeConte) adults are attracted to

light (Staines 1987). Six specimens were collected from 1908 to 1922; two were at light.

*Astylopsis macula* (Say) breeds in *Ilex* (Aquifoliaceae) (Staines 1987). Nineteen specimens were collected from 1905 to 1918.

*Atimia confusa confusa* (Say) breeds in dead *Thuja*, *Juniperus* (Cupressaceae), and *Taxodium distichum* (L.) L. C. Rich. (Taxodiaceae) (Staines 1987). Two specimens were collected—23 March 1907 and 18 April 1909.

*Batyle suturalis* (Say) larvae mine small dead twigs of *Carya* (Juglandaceae) and *Quercus*. Adults feed on flowers of *Daucus carota* L. (Apiaceae) (Staines 1987). One specimen was collected on 26 June 1902.

*Callidium antennatum antennatum* Newman breeds in *Pinus* and *Picea* (Linsley 1964). One specimen was collected on 22 April 1903.

*Callidium violaceum* (Linnaeus) breeds in *Pinus*, *Larix* (Pinaceae), and *Picea* (Linsley 1964). Four specimens were collected from 1905 to 1909.

*Centrodera sublineata* LeConte adults have been taken at light (Staines 1987). Four specimens were collected from 1903 to 1912.

*Dectes sayi* Dillon & Dillon is a stem borer in *Ambrosia artemisiifolia* L. (Asteraceae) (Piper 1978). Four specimens were collected from 1905 to 1920.

*Distenia undata* (Fabricius) has an unknown biology (Linsley 1962b). Eighteen specimens were collected from 1903 to 1922.

*Dryobius sexnotatus* Linsley is represented by four specimens collected 30 July 1905, 19 July 1913, and 20 July 1920 (two specimens). This species prefers standing over mature *Acer* (Aceraceae), *Fagus* (Fagaceae), *Tilia*, and *Ulmus* (Ulmaceae) (Perry et al. 1974). It is listed as an endangered species by the state of Maryland (Anonymous 2002).

*Ecyrus dasycerus dasycerus* (Say) breeds in *Quercus*, *Acer*, and *Robinia* (Fabaceae). Adults are attracted to light (Staines 1987). Sixteen specimens were collected from 1903 to 1922.

*Eburia quadrigeminata* (Say) bores in the heartwood of *Quercus*, *Fraxinus* (Oleaceae), *Carya*, *Acer*, *Ulmus*, and *Fagus*. Adults are attracted to light (Staines 1987). Nineteen specimens were collected from 1903 to 1922.

*Elaphidion mucronatum* (Say) was represented by 25 specimens from 1903 to 1968. This species breeds in dead branches of various hardwoods and is often taken at light (Staines 1987).

*Enaphalodes atomarius* (Drury) breeds in dead stumps and trees of *Quercus*, *Celtis* (Ulmaceae), *Juglans* (Juglandaceae), and *Carya* (Linsley 1963). Adults are attracted to light. Two specimens were collected—30 July 1910 and 29 July (no year).

*Euderces picipes picipes* (Fabricius) breeds in var-

ious hardwoods (Staines 1987). Eleven specimens were collected from 1902 to 1913.

*Heterachthes quadrimaculatus* Haldeman breeds in *Carya* and *Liriodendron tulipifera* L. (Magnoliaceae). Adults are attracted to light (Staines 1987). Five specimens were collected from 1903 to 1932.

*Hyperplatys aspersa* (Say) breeds in *Prunus* (Rosaceae). Adults are attracted to light (Staines 1987). Three specimens were collected from 1905 and 1911.

*Judolia cordifera* (Olivier) breeds in *Castanea* (Fagaceae); adults have been collected on *Asclepias* flowers (Asclepidaceae) (Staines 1987). Five specimens were collected in 1908 and 1912.

*Leptostylus asperatus* (Haldeman) breeds in *Liquidambar styraciflua* L. (Altingiaceae) (Staines 1987). One specimen was collected 12 July 1905.

*Leptostylus transversus transversus* (Gyllenhal) adults are attracted to light (Staines 1987). Seven specimens were collected from 1905 to 1931.

*Leptura subhamata* Randall breeds in *Tsuga* and *Pinus*; adults have been collected on *Spirea* (Rosaceae) flowers (Staines 1987). Two specimens were collected in 1905 and 1914.

*Lepturges confluens* (Haldeman) adults are attracted to light (Staines 1987). Ten specimens were collected from 1912 to 1922.

*Lepturges pictus* (LeConte) has an unknown biology (Staines 1987). One specimen was collected on 26 July 1903.

*Megacyllene robiniae* (Forster) breeds in *Robinia pseudoacacia* L.; adults are often found on various flowers, especially *Solidago* (Asteraceae) (Linsley 1964). Two specimens were collected on 16 and 17 September 1906.

*Micranoplium unicolor* (Haldeman) adults are attracted to light (Staines 1987). Two specimens were collected in June 1912.

*Molorchus bimaculatus bimaculatus* Say larvae mine dead branches of hardwoods (Staines 1987). Fourteen specimens were collected from 1903 to 1941.

*Neoclytus acuminatus acuminatus* (Fabricius) breeds in various hardwoods (Linsley 1964). One specimen was collected 3 May 1908.

*Neoclytus caprea* (Say) breeds in *Fraxinus*, *Carya*, *Quercus*, and *Ulmus* (Linsley 1964). One specimen was collected 13 April 1919.

*Oberea perspicillata* Haldeman breeds in *Rubus* (Rosaceae) (Linsley & Chemsak 1995). Sixteen specimens were collected from 1903 to 1917.

*Oberea tripunctata* (Swederus) breeds in *Alnus* (Betulaceae) and *Rhododendron* (Ericaceae) (Staines 1987). Four specimens were collected from 1905 to 1914.

*Obrium maculatum* (Olivier) breeds in various hardwoods. Adults are attracted to light (Staines

1987). Four specimens were collected from 1903 to 1924.

*Obrium rufulum* Gahan breeds in *Fraxinus*. Adults are attracted to light (Staines 1987). Seven specimens were collected from 1902 to 1924.

*Oeme rigida rigida* (Say) breeds in *Juniperus virginiana* L. and *Taxodium distichum* (Linsley 1962b). Two specimens were collected in 1909 and 1911.

*Oncideres cingulata cingulata* (Say) girdles twigs of *Juglans* and adults are attracted to light (Staines 1987). Two specimens were collected in September 1923.

*Orthosoma brunneum* (Forster) was the most commonly collected species with 37 specimens. This is a widespread species that breeds in decaying hardwoods and conifers in moist situations and is often taken in light traps (Staines 1987). Specimens have been collected from July to September from 1902 to 2004.

*Parandra brunnea brunnea* (Fabricius) feeds on rotting logs of *Acer*, *Tilia*, *Quercus*, *Populus* (Salicaceae), *Castanea*, *Liriodendron tulipifera*, *Ulmus*, and *Pyrus* (Rosaceae). Adults are attracted to light (Linsley 1962a). Five specimens were collected from 1906 to 1917.

*Prionus imbricornis* (Linnaeus) breeds in rotting logs of various hardwoods (Linsley 1962a). Sixteen specimens were collected from 1902 to 1968.

*Prionus laticollis* (Drury) larvae feed on the roots of living hardwoods (Linsley 1962a). Four specimens were collected from 1912 to 1915.

*Psyrassa unicolor* (Randall) girdles branches of *Carya*, *Juglans nigra* L., *Quercus*, *Fagus*, *Cercis* (Fabaceae), and *Morus* (Moraceae). Adults are attracted to light (Staines 1987). Five specimens were collected from 1902 to 1921.

*Rhopalophora longipes longipes* (Say) breeds in *Cercis* and *Cornus* (Cornaceae) (Staines 1987). Seventeen specimens were collected from 1902 to 1916.

*Saperda imitans* Felt & Joutel has an unknown biology (Staines 1987). One specimen was collected on 29 May 1914.

*Saperda obliqua* Say breeds in *Alnus* (Staines 1987). Four specimens were collected from 1902 to 1931.

*Saperda tridentata* Olivier breeds in *Ulmus*. Adults are attracted to light (Staines 1987). Twenty-three specimens were collected from 1903 to 1932.

*Saperda vestita* Say breeds in *Tilia* (Staines 1987). Four specimens were collected from 1903 to 1914.

*Stenosphenus notatus* (Olivier) breeds in dead limbs of *Carya* and *Celtis* (Staines 1987). One specimen was collected on 21 April 1907.

*Sternidius variegatus* (Haldeman) has been collected at light (Staines 1987). Fifteen specimens were collected from 1903 to 1923.

*Strangalia acuminata* (Olivier) breeds in *Alnus* and

*Viburnum* (Caprifoliaceae) (Staines 1987). Three specimens were collected in 1905.

*Strangalia bicolor* (Swederus) breeds in *Acer* and *Quercus* (Staines 1987). Two specimens were collected—20 June 1909 and 11 July (no year).

*Strangalia luteicornis* (Fabricius) breeds in *Viburnum*, *Fagus*, and *Vitis* (Vitaceae) (Staines 1987). Two specimens were collected in June 1913 and 1914.

*Typocerus acuticauda* Casey has been collected on *Spirea* flowers (Staines 1987). Nine specimens have been collected from 1907 to 1914.

*Typocerus lugubris* (Say) breeds in *Pinus* (Staines 1987). Two specimens were collected in 1908 and 1909.

*Urgleptes facetus* (Say) has an unknown biology (Staines 1987). Three specimens were collected from 1905 to 1918.

*Urgleptes querci* (Fitch) breeds in *Fraxinus* and *Acer*. Adults are attracted to light (Staines 1987). Four specimens were collected from 1903 to 1914.

*Urgleptes signatus* (LeConte) adults are attracted to light (Staines 1987). Seven specimens were collected from 1905 to 1926.

*Xylotrechus aceris* Fisher breeds in *Acer* (Linsley 1964). One specimen was collected on 13 July 1913.

Most cerambycid species are represented by a few specimens; 43 of the 63 species (68.3%) were collected less than five times. Only fourteen species were collected more than 10 times. With no recent collections data analysis is not possible.

The early investigators left few records of their collecting methods or the amount of time spent on the Island. This makes comparison with any future inventory efforts less precise. Future work on this family could focus on an inventory of the current fauna and survey for *Dryobius sexnotatus*.

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