

SCIENTIFIC NAME: *Philanthus nasalis*
COMMON NAME: Antioch sphecid wasp
CLASS, FAMILY: Insecta, Sphecidae

ORIGINAL DESCRIPTION: Bohart, R.M. 1972. New North American *Philanthus*. Proceedings of the Entomological Society of Washington 74:401 (figs. 5-6, facial views of male holotype and female paratype).

TYPE MATERIAL: *Holotype:* Male – California: Contra Costa County; Antioch, 14 Oct 1954, M. Wasbauer, collector. Deposited in the collection of the Bohart Museum of Entomology, University of California, Davis. Also 4 male and 15 female paratypes, same locality, 25 Sep to Oct 25, various years and collectors.

RANKING/STATUS: G1S1 (NatureServe – CNDDDB)

GENERAL DESCRIPTION: Black sphecid wasps with ivory white markings. Length of males, about 8 mm; of females, about 11.5 mm.

DIAGNOSTIC CHARACTERS: *Philanthus nasalis* has white, anteriorly bi-emarginate bands on the abdomen. Females have a narrow, extremely protruding median lobe on the clypeus. Males are similar to those of *P. barbiger* in having the punctures on tergum III larger than those on the scutum, but are separated from that species by having sparse, setigerous clypeal punctures.

OTHER ILLUSTRATIONS: Bohart and Grissell (1975) show the known distribution of the species (at the time their study was published) in Map 8, and illustrate the protruding medial clypeal lobe of the female (fig. 11) and white abdominal bands (fig. 30).

DISTRIBUTION: Originally described from the Antioch Dunes in Contra Costa County, this species had not been collected there since 1959 and was feared extinct. In 1991 Helen Court of the California Academy of Sciences identified sphecid wasps in a synoptic collection made by Randall Morgan during a ten-year study of the insect fauna of Santa Cruz County, and found 21 specimens of *Philanthus nasalis*. The identity of these specimens was confirmed by Dr. Bohart at UC Davis, who concluded that they represented a dark variety of the species, not different enough to be considered a subspecies. The specimens were collected in the Zayante and Ben Lomond sand hills, areas that include other endemic plant and animal species on the Department of Fish and Game's Special Animals List. One additional specimen from Mt. Hermon, Santa Cruz County, collected in 1931, is in the entomology collection at UC Davis.

HABITAT: Inland marine sand hills. Collection notes for the Santa Cruz County records state that specimens are from "sand deposits" and a sand quarry.

LIFE HISTORY/BEHAVIOR: Adults of *Philanthus nasalis* nest in sandy ground and fly exclusively in the fall, with museum specimens collected from mid-August to late October. Adults have been collected on *Croton californicus*, *Ericameria* sp., *Eriogonum* sp., *Eriogonum nudum decurrens*, *Gnaphalum beneolens*, and *G. "zayanteense."*

Court (1993), in her letter to the Fish and Wildlife Service, pointed out that Bohart and Grissell borrowed nearly 30,000 California *Philanthus* specimens from 15 institutions during their study, yet only 20 of these were *nasalis*, indicating that the species is narrowly distributed and uncommon.

SELECTED REFERENCES:

- Bohart, R. M., and E.E. Grissell. 1975. California wasps of the subfamily Philanthinae (Hymenoptera, Sphecidae). *Bulletin of the California Insect Survey*, 19:1-57.
- Court, H. 1993. Letter to the U.S. Fish and Wildlife Service, Portland, OR, detailing the rediscovery of *Philanthus nasalis* in Santa Cruz County, California.

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