Quantitative Eco/evo/etho Díscussions



Hylesia umbrata (Saturniidae: Hemileucinae): A Nonconformist

Wednesday, June 9th: 4pm EDT

Dr. Annette Aiello



The moth family Saturniidae, popularly known as "giant silk moths," includes some of the largest moths in the world, among them many well-known species such as the Luna moth, Cecropia moth, Polyphemus moth, and the numerous species of Io moths. The Hemileucinae, one of the nine subfamilies, have medically important caterpillars whose venom-filled setae are the cause of numerous painful encounters with humans that in extreme cases can be lifethreatening. Among these, adults of the genus Hylesia are known to occur in outbreaks and the species is infamous for its medical importance both as larvae and adults. The subject of this talk, Hylesia umbrata Schaus, 1911, has colorful caterpillars that occur in large aggregations and pupate communally, and though the species is found from Mexico to Costa Rica, Panama, Columbia, Ecuador, Venezuela, Brazil, and Peru, little is known of its life history. During the dry season of 1999 in Panama, we took the opportunity to collect and dissect a Hylesia umbrata cocoon mass and maintain the pupae under laboratory conditions to document the timing of their expected mass emergence and record any parasitoids. The surprising results of the study are presented and discussed.

Dr. Annette Aiello is a staff scientist in entomology at the Smithsonian Tropical Research Institute in Ancon, Balboa, Panama, where she has been studying insect life histories for more than 40 years. Her focus has been the transformations of moths and butterflies, especially their caterpillars: their development, behavior, and defenses, as well as the clues that they and their host plants can contribute to our understanding of species relationships (classification). Her publications include other subjects as well: plants, beetles, leafhoppers, insect outbreaks, mimicry, and even sloth hair. She obtained her BA in biology, magna cum laude, at Brooklyn College in 1972, and an MA and a PhD in biology at the Harvard University Graduate School of Arts and Sciences in 1975 and 1978, respectively. Her PhD thesis was in taxonomic botany: *A Reexamination of Portlandia (Rubiaceae) and Associated Taxa,* with Dr. Richard A. Howard as her advisor. She is a member of The Lepidopterists' Society, the Association for Tropical Lepidoptera, the New York Entomological Society, the Cambridge Entomological Club, and others; and has led educational outreach for eco-tourism programs. She and her Panamanian husband, Ricardo Cortez, live in Panama City, east of the Panama Canal.

Hosted by the <u>Soft Math Lab</u>.

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