CHIRONOMIDAE (INSECTA: DIPTERA) OF SAN SALVADOR, BAHAMAS: A SEARCH FOR NEW SPECIES

K. M. Wollman¹, P. Kranzfelder², and A. M. Anderson¹*

¹Department of Biology
Northern State University
Aberdeen, SD 57401
²Department of Entomology
University of Minnesota
St. Paul, MN 55108
*Corresponding Author Email: alyssa.m.anderson@northern.edu

ABSTRACT

Chironomidae (Diptera), a fly family commonly known as the non-biting midges, are found worldwide and contain approximately 5,500 described species. They typically live their immature stages in a body of water, later emerging as an adult. Following the transition period from pupa to adult, a pupal exuviae, the cast pupal skin, is left floating on the surface of the water. These exuviae are species-specific, allowing identification of species, and thus providing a means to use exuviae as a biological indicator of aquatic ecosystems. While this family is diverse, there is not a strong knowledge of species in the Neotropical region, with only 900 species known to the area. Furthermore, only sixteen species of Chironomidae are known from the Bahamas. Our purpose is to enhance the knowledge of Chironomidae in the Bahamas, specifically focusing on those from San Salvador Island. Chironomidae were collected from various water bodies on San Salvador in June 2013 and were stored in ethanol following collection. Specimens are now being identified to determine species new to the Bahamas or potentially new to science. If new species are found, this will help improve knowledge of the Bahamian and world fauna, therefore, enhancing the ability to use Chironomidae for biological monitoring.