Zooplankton Studies in Lentic Ecosystems - Phase VI: Vertical Migration

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The purpose of this project was to determine if vertical migration occurs among any of the zooplankton populations in the littoral zone of Lake Springfield. Samples were collected on five separate days during a two week period in June of 2021. On each of the five test days, collections were made at six equal time intervals throughout the day, starting at sunrise and ending at sunset. Physical parameters of depth, 1% light, impinging light, as well as both air and water temperatures were measured using the appropriate equipment. Chemical parameters of pH, CO2 and D.O. were analyzed using a HACH limnology test kit, while NO3 and PO4 were analyzed with HACH test strips. Zooplankton samples were collected at 0.0m, 0.5m, 1.0m and 1.5m depths using a 1 Liter Fieldmaster Student VanDorn bottle and then filtered through an 80 micron mesh zooplankton net. All samples were then counted and analyzed with a Ward Zooplankton Counting Wheel, under an American Optics dissecting microscope. Based on data collected in this project, it is evident that the various zooplankton populations do exhibit vertical migration in the littoral zone of Lake Springfield.

Awards Won:

Third Award of $1,000