Cathance River Preserve Moth Study

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Problem:

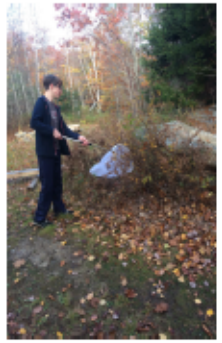
How many types of and amounts of moths are there in the Cathance River Preserve during the months of September and October? How are they affected by air temperature?

Hypothesis:

There are at least three different species of moths in the Cathance River Preserve. They will be more present during warmer air temperatures.

Procedure:

- Place moth light traps at designated trees.
-Paint mandarin-sugar-molasses on designated trees.
-Count moths and record temperatures on data tables.
-Sweep bushes and photograph moths during visits.

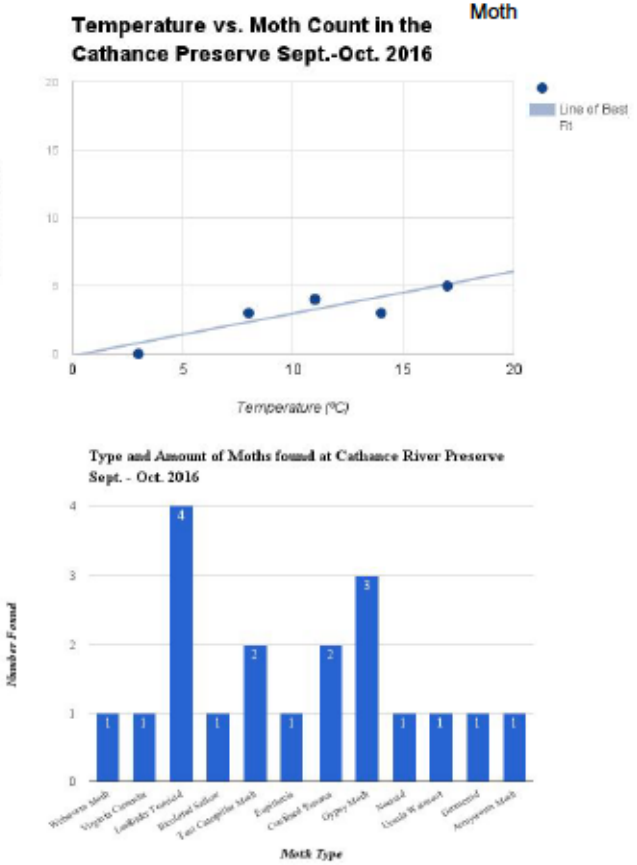


Sweeping bushes

Leaf mine

Large Yellow Underwing Moth

Sweeping bushes



Thank you to David Reed, Matt Dubel (CREA), and Mr. Evans

Analysis:

Four moths were found in the family of the tortricid. Three gypsy moths were found and identified, along with two Tent caterpillars, and Confused Eusarca. The other species and/or family of moths were single finds. This included the Lesser Vagabond Sod Webworm moth, Virginia Ctenucha, Bicolored Sallow, Eupithecia, Noctuid, Ursula Wainscot, Geometrid, and Armyworm moth. According to the line graph, the number of moths increase as the temperature increases.

Conclusion:

Both hypotheses were correct. **First**, 12 major moth types were found, including Webworm moth, Virginia Ctenucha, Leaffolder Tortricid, Bicolored Swallow, Tent Caterpillar Moth, Eupithicia, Confused Eusarca, Gypsy Moth, Noctuid, Ursula Wainscot, Geometrid, and Armyworm Moth. **Second**, more moths were found at higher temperatures. Sweeping the grasses worked the best to procure moths. Many other insects were found as well.

Unidentified Moth