Arthropod monitoring:

Mosquito Studies – Site record: Psorophora ferox (van Humboldt)

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Sampling by dipper for larval specimens was conducted at the Thayer farm along the edge of the large pond above the Upland Interpretive Center (Figure 1) on the following dates: IV-8; V-20; VII-7; VIII-4; VIII-18: in the overflow area between the pond and edge of woods and in a puddle in a blow-down along the yellow trail on VII-18 and in the pond below the sap bush on VI-29 and VIII-4. No larvae were collected at any site.

Sampling for adults by CDC light trap and CO2 generated by fermentation was conducted at a site below the yellow trail at the end of the overflow area from the above mentioned pond on VIII-17 and IX-2; at the edge of the pond below the Sap Bush on VIII-4; on the berm between the step ponds on IX-15. No adults were collected in any trap.

Twenty minute alighting biting counts were conducted at the edge of the woods on the path leading to the boat launch area on the big pond on VI-29; VII-7; VIII-11. A few adults approached but none alighted long enough to effect collection. An alighting/biting count on IX-23 conducted at the trap site below the yellow trail (see above) yielded single specimen of Ochlerotatus trivittatus (Coquillett) and Psorophora ferox (von Humboldt), the latter a site record.

The relatively low populations indicated by the above sampling records provide an example of the importance of periodicity of precipitation for maintaining populations of temporary water mosquitoes. Rainfall was within normally recorded amounts but, until late in the summer was not sufficient in single events to maintain water levels in temporary pool sites long enough to complete development of larvae that may have hatched due to inundation of eggs.

The collection of Ps. ferox may be of some predictive importance in that the locality of collection is slightly beyond its recorded range, and may be related to gradual increase in mean yearly temperatures.

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Figure 1. Site map of the Thayer Farm.