

Gypsy Moths

Update on Gypsy Moth impacts to Watershed Forests

DCR –DWSP Water Supply Protection Trust
September 5, 2018



Background

- Native to Europe and Asia
- Accidentally introduced around 1870 in Boston
- Eats lots of tree leaves; prefers oak and aspen



Larvae hatch in the spring from eggs laid the previous summer.

Females (white) lay eggs in a single mass. Eggs overwinter.



Natural Enemies

- Fungus: *Entomophaga maimaiga*
- Virus: nucleopolyhedrosis virus (NPV)

I have been extremely concerned by the large numbers of mature dead or partially defoliated oak trees in central Massachusetts between Amherst and Boston. Every square-mile has hundreds of them from what I have seen... It also appears that many of these trees are struggling to re-foliate despite ample rainfall this summer. I fear that many may die over the winter. What's worse is that new egg mass counts of gypsy moths remained quite high over this entire region, and I fear we face more extensive defoliation next year. This was a big surprise to me because I expected another massive epizootic of *Entomophaga maimaiga* that occurred last year (2017) and is largely responsible for the decline in defoliation we observed this year compared to 2017. This year we had even more rainfall than last year in May and June and I expected another epizootic to drive gypsy moth densities to very low levels. Those low densities now exist in southeast Massachusetts and Rhode Island but not in central Massachusetts. We observed very little mortality this summer from *Entomophaga maimaiga*. Joe Elkington

<https://media.giphy.com/media/5bkFoGsJA4oAxtJ4WY/giphy.gif>



DCR –DWSP Quabbin/Ware Region Presentation
October 17, 2017



DCR Response

- Survey
- Inventory
- Targeted salvage
- <https://arcg.is/oarDan>
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