

Maine's State Forestry-Related Quarantines—Gypsy Moth

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At the same time that many Maine residents are taking to the woods to hunt deer and other game to fill their freezers, I and my coworkers have been in those same woods hunting gypsy moth.

Each year when the leaves fall from the trees you can find us in towns along the gypsy moth quarantine border, wearing blaze-orange, bearing binoculars and scanning trees, logs, rocks and other surfaces for signs of the insect. We look in towns where the number of male moths in our pheromone traps indicates that there may be an established gypsy moth population. Because the pheromone, which mimics the scent of a female gypsy moth, is highly attractive to the male moth, and because male moths can fly well and cannot establish a new population on their own, we look for other life stages. In the fall our targets are the buff-colored egg masses, a fuzzy, shining tan this time of year, as well as larval skins and pupal cases.



Gypsy moth adult female, egg mass and pupal case

With field work focused on the gypsy moth quarantine, my thoughts turn to another duty in administering our state quarantines—telling people that they exist, and what they mean. There are five state-administered quarantines in Maine. In addition to the state quarantines there are federal quarantines that cover interstate movement of some forest pests and restrict movement of forest pests not yet found within the state such as emerald ash borer. The Maine Forest Service Forest Health and Monitoring Division administers quarantines on *Ribes* (the alternate host of white pine blister rust), European larch canker, pine shoot beetle, hemlock woolly adelgid and the aforementioned gypsy moth. Lists of towns within the quarantined areas and maps are available on the MFS Website (www.maineforestservice.gov/idmquar.htm) or by request (allison.m.kanoti@maine.gov or (207) 287-3147).

Since gypsy moth egg masses are “in season” now is a good time to cover what the gypsy moth quarantine is, and how it may impact woodlot owners.

The gypsy moth was intentionally brought to North America in the late 1860's by E. Leopold Trouvelot, and was accidentally released at his property in Medford, Ma. By 1906 it had become established within the borders of Maine in several York County towns (Roger and Burgess 1910). At present, it is established south (mostly) of a line that runs from Houlton in the east to Parkertown Township in the West. An established population has also been found in the northern townships of Baxter State Park.

The gypsy moth is a pest of quarantine significance because at outbreak levels it can cause high levels of mortality in its host trees. It is best known for being a severe oak pest, particularly white oak, and many are surprised to learn it is of concern in Maine. However, there is a sizable

area of susceptible forest within Maine's boundaries. Gypsy moth is one of those insects that would be a mother's dream—it eats everything. Well, not quite everything, but it will feed on over 300 species of trees and shrubs. In Maine, in addition to the oaks, some of its preferred food plants are aspens, birches, tamarack, and alder.

Maine is alone in New England in being only partially regulated for this pest. However, areas in adjacent Canada are also free from gypsy moth. Gypsy moth continues to creep and leap northward—it leaps most easily as egg masses which are present for much of the year (Late July through May). Egg masses can move on forest products, but also on machinery, camping gear, and anything else the heavy-bodied female finds herself on when it is time to deposit her eggs (and usually that is quite near to where she pupated). Adults, larvae and pupae also have the potential to establish new populations. Establishment is slowed by the cold winters in the areas not yet home to the gypsy moth, hence the creeping.

How does this quarantine impact woodlot owners? A lot depends on where your woodlot is, whether you harvest products from it, and if you do, where those products go. If the woodlot is within the quarantine area, the quarantine rules impact everything coming off the woodlot. Firewood, logs, roundwood of all sorts and chips all must either stay in the quarantined area or go to an approved receiver outside of the quarantine area. Many small and large mills in the unregulated area have agreements which allow them to receive regulated products. If you are moving products out of state to an area outside the gypsy moth quarantine, the federal quarantine rules will affect your products. These are administered out of the USDA Animal Plant Health Inspection Service (APHIS) office in Hermon, ME ((207) 848-5199). If the woodlot is outside the gypsy moth quarantine area then the quarantine has little impact on you. However, if you plan to move products to the non-quarantined part of Canada, you may need to contact our office for a Gypsy Moth Permit (although many receivers in Canada have agreements with the Canadian government that allow them to receive material without this permit).

Gypsy moth populations are generally down this year (I think I saw fewer than a dozen male moths this summer, even though I live within the quarantine area and work with the pheromones). 2002 was the last year we had map-able gypsy moth related defoliation in Maine. Population controls such as diseases, parasites, predators and weather have kept this insect in check. Future outbreaks are likely and the quarantine remains relevant and important in protecting uninfested areas of the State and allowing freer movement of forest products from those areas.

Questions about the forestry quarantines in Maine can be directed to Allison Kanoti: allison.m.kanoti@maine.gov or (207) 287-3147.

References:

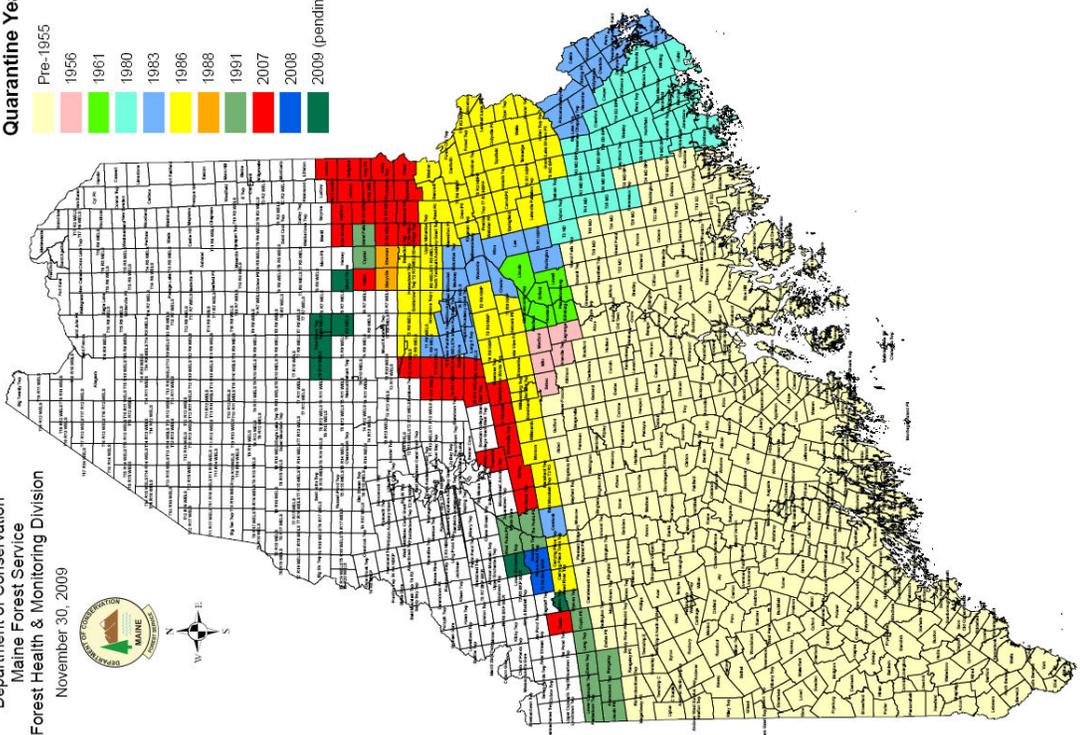
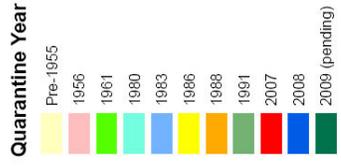
For a wealth of information about the Gypsy moth in North America (some of which was used in this article) see the US Forest Service Website:

<http://www.fs.fed.us/ne/morgantown/4557/gmoth/>.

Roger, D.M. and A.F. Burgess. 1910. Report on the field work against the gipsy moth and the brown-tail moth. USDA Bureau of Entomology Bulletin No. 87.

Gypsy Moth Quarantine by Year Map

Department of Conservation
Maine Forest Service
Forest Health & Monitoring Division
November 30, 2009



If you are harvesting forest products...
...in one of the shaded townships...
...then:

Forest products must:

1. Stay in the quarantined area, or
2. Go to an approved receiver outside of the quarantine area (receiver have a formal, written compliance agreement with the Maine Forest Service).

If you have questions about moving products within Maine, contact the Maine Forest Service. For questions about moving products out-of-state, contact USDA APHIS, PPQ (contact information below).

...in one of the un-shaded townships...
...then:

Forest products going into Canada may require a Gypsy Moth Permit (available from the Maine Forest Service)

A summary of the gypsy moth quarantine rules with links to the full rules, maps and lists of quarantined towns are available at: www.maine.gov/doc/mfs/idmquar.htm.

Contact Information:

Maine Forest Service, allison.m.kanoti@maine.gov, (207) 287-3147, 168 SHS, 50 Hospital Street, Augusta, ME 04333. Fax: (207) 287-2432. (In-state movement of forest products, gypsy moth permits)

USDA APHIS, PPQ, (207) 848-5199, 15 Iron Road, Suite 1, Hermon, ME 04401 (Out-of-State movement of regulated items)