

## Updates on the Arthropod Invasion

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### Southern pine beetle

NYS DEC winter mortality surveys found many live older larvae, but also many dead adults that appeared to have recently attacked trees possibly in fall or winter. Monitoring traps are set up around Long Island (12 plus additional sites at Wertheim and Fire Is), the lower Hudson Valley (15 traps in pitch and red pine stands) and Clinton and Saratoga Counties (3 traps). Beetles were first found in Long Island traps checked on April 20. Trap samples to date have been notable for the very large number of SPB predators and in some the relatively low numbers of SPB. There are still some areas with active infestations and NYS DEC and the Pine Barrens Commission have crews doing ground surveys to complement aerial surveys done earlier. Sawyers will be conducting suppression efforts where able in areas of active infestations. In early May Connetquot State Park, which lost a majority of its pines, hosted volunteers replanting pitch and white pine seedlings. Some inquiries about dead landscape conifers were negative for SPB; in one case dead Norway spruces appears to have suffered root disturbance leaving them vulnerable to attack by six-spined engravers, which has somewhat similar exterior symptoms. SPB is also a problem in CT where it has killed old Norway spruces around Maltby Lakes, West Haven, CT.



Southern pine beetle emergence holes and pupae in bark. Inset: Adult Southern pine beetles © D. Gilrein

### Ambrosia beetles

Black stem borer (*Xylosandrus germanus*) is becoming a more serious pest around Upstate NY in recent years, attacking apparently healthy apple trees. One recent inquiry concerned maples killed in an ornamental plant nursery. Beetles appear to be responding to ethanol (or other volatiles) given off by trees typically produced under stress, though attacked trees usually appear to be in good condition. One study found permethrin (Astro, Perm-Up, etc.) bark sprays more effective than others in deterring attack. Initial spring beetle flights are highly correlated with daily maximum temperatures around 68°F or above, with nearly no flight or attacks occurring below this temperature. First application might be timed around when these conditions are expected. Several other exotic ambrosia beetles are established in our region or nearby. Granulate ambrosia beetle (*X. crassiusculus*) is present in parts of southeastern NY including Westchester and has been associated with attacks to apparently healthy trees.

**Spring beetle flights are highly correlated with daily maximum temperatures around 68°F or above.**



Signs of ambrosia beetle attack in Callery pear. Inset: Granulate (L) and black stem borer (R) ambrosia beetles. Note the dull declivity (back third) on granulate a.b. © D. Gilrein

### “New” elm leafminer

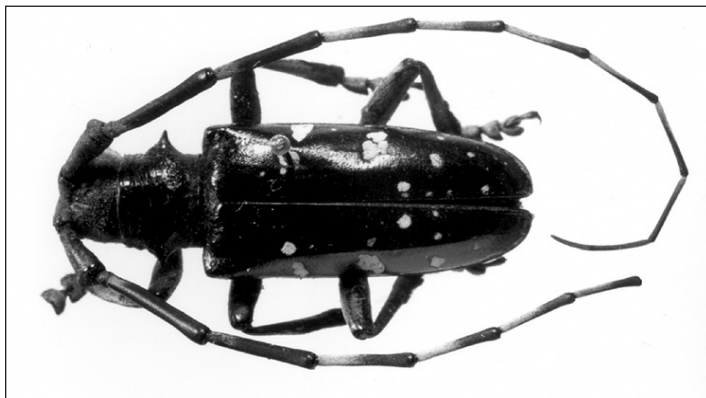
Last fall a homeowner in Sagaponack, Long Island noticed hundreds of blue-green caterpillars falling on threads from a Siberian elm. Foliage was heavily mined and the caterpillars were preparing to find protected places for their cocoons to overwinter. Another arborist nearby had seen a similar phenomenon. Samples of larvae and adults sent to Erik van Nieuwerkerken at the Naturalis Biodiversity Center in Leiden (Neth.) identified them as *Stigmella multistriata*. The moths have been found in traps in Indiana and Ontario and the species was only recently described, probably introduced here from East Asia. Until now the host was unknown.



*Stigmella multispicata* mines in Siberian elm and (Inset) adult moth © D. Gilrein

### ALB in New York

Good progress has been made in NY City. The eastern Queens survey is complete and the area may be deregulated soon, possibly even later this year. Brooklyn and western Queens will continue as regulated areas. Surveys are continuing on Long Island, especially around where found in E. Farmingdale (July 2013), but landscape professionals and others working in the core areas should also be watchful. There have been no new infestations although one suspect hickory trunk with very similar oviposition sites and exit holes was found to be a different longhorned beetle (*Goes* sp.). The ‘living-hickory borer’ (*G. pulcher*) can produce these symptoms too. As ALB flight season approaches those working in or near quarantine areas should watch for adults and take care not to move wood outside the boundary. The central Long Island quarantine area will be expanded another two miles following discovery of trees with exit holes in Wyandanch and E. Farmingdale. The new quarantine map will soon be posted to the NYS Dept of Agriculture and Markets website [www.agriculture.ny.gov/PI/alb.html](http://www.agriculture.ny.gov/PI/alb.html).



Asian longhorned beetle adult © Kent Loeffler

### “New” aphids

This spring I had two inquiries concerning Asian aphids on bark of cutleaf Japanese maples. Samples from one were identified as *Periphyllus californiensis*, the ‘Californian maple aphid.’ The insect is known from the West (CA, WA, UT) and reported from many eastern states including NY although I had not previously encountered it. The aphid has an unusual ‘hibernating’ stage on leaves in summer. Photos and more information are at [influentialpoints.com/Gallery/Periphyllus\\_californiensis\\_Californian\\_maple\\_aphid.htm](http://influentialpoints.com/Gallery/Periphyllus_californiensis_Californian_maple_aphid.htm). *Tuberocephalus sakurae*, a species that severely galls foliage on ‘Kwanzan’ and possibly other cherries, was found in several locations on Long Island the last two years. The species, finally confirmed by a specialist, has an unknown summer host, but related species use *Gnaphalium* (cudweeds or everlastings) and *Artemisa* (e.g. common mugwort).



*Tuberocephalus sakurae* aphids and gall on Kwanzan cherry © D. Gilrein

### A new plant bug

Thanks to an editor at BugGuide.net, a new (to North America) plant bug has been identified from a photo ([bugguide.net/node/view/1227263/bgimage](http://bugguide.net/node/view/1227263/bgimage)) taken at a West Islip property as *Rhodomiris striatellus* by Thomas Henry at the Smithsonian, who since confirmed from specimens received. According to one source immature stages feed in spring on oak catkins. The property owner noted ‘hundreds... all over everything,’ so plant damage is probably minor relative to the annoyance, but we lack information on summer hosts. More photos from the UK are at [www.britishbugs.org.uk/heteroptera/Miridae/rhodomiris\\_striatellus.html](http://www.britishbugs.org.uk/heteroptera/Miridae/rhodomiris_striatellus.html)