BRANCHING OUT

An Integrated Pest Management NEWSLETTER for Trees and Shrubs

Volume 32 No. 5 June 6, 2025

Contents...

Thank You to Our Scouts and Diagnosticians

Amy Albam, Carol Bradford, Dawn Dailey O'Brien, Don Gabel, Sandra Jensen, Hillary Jufer, Karen Klingenberger, Elizabeth Lamb, Jen Lerner, Jessica O'Callahan, Zaidee Powers, Alice Raimondo, Mina Vescera, Mike Voss, Sandra Vultaggio

Scouting Report Notations:

(#) Numbers in regular type note plate(s) in *Insects that Feed on Trees and Shrubs* (2nd edition) by W.T. Johnson and H.H. Lyon.

(#) Numbers in italics note plate(s) in *Diseases of Trees and Shrubs* (2nd edition) by W.A. Sinclair, H.H. Lyon, and W.T. Johnson.

Scouting Report

Conifers

Balsam Twig Aphid (33)—on Fraser fir in Tompkins Co.

Elongate Hemlock Scale (45)—crawlers in Westchester Co.

Fletcher Scale (42)—adults and eggs present on *Taxus* in Tompkins Co. and on arborvitae in Suffolk Co.

Fletcher scale adults (Dan Gilrein)

Broad-leaved Trees and Shrubs

Ambrosia Beetle (117 similar)—attacking Japanese maple in Bronx Co. Females often push chewed wood material as they bore galleries in wood, forming short "toothpicks" sticking out of bark. These appear to be from black stem borer (*Xylosandrus germanus*), based upon photos. Ambrosia beetles tend to attack trees under stress from flooding, injury or other factors. Larvae feed on fungi growing in galleries, not on wood.

Shotholing/chewed wood material pushed from gallery by ambrosia beetles (bark removed) (Sandra Jensen)

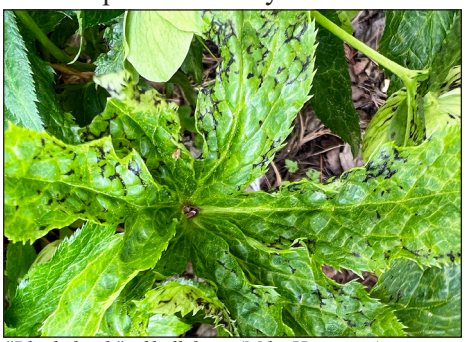
Azalea Bark Scale (160)—crawlers on azaleas in Westchester Co. Rhododendrons are also hosts.

Azalea Whitefly (151)—under leaves of azaleas in Westchester Co.

Bean Aphid—distorting terminal leaves on overwintering host *Euonymus alatus* in Suffolk Co. A few aphids were still present, but winged adults are migrating to summer hosts. More at https://tinyurl.com/BeanAphid

Bean aphid damage; inset: adult & nymph (Dan Gilrein)

"Black Death" of Hellebore—symptoms resembling those of "black death" were noted on hellebore in Tompkins Co. This disease has been reported most often from *Helleborus* x *hybridus*. A carlavirus tentatively assigned the name *Helleborus net necrosis virus* (HeNNV) is thought to be the cause. Most characteristic symptom is black streaking of leaf veins, but definitive causal proof has not yet been achieved. Flower bracts may also show black streaks; symptoms progress on affected plants and they do not recover.



"Black death" of hellebore (Mike Hennigan)

Boxwood Leafminer (94)—adults active in eastern Suffolk Co.

Boxwood Psyllid (137)—adults active in Westchester Co.

Cottony Maple Leaf Scale (165)—egg masses attracting attention on various hosts (mulberry, maple, kousa dogwood, beautyberry, viburnum, others) in Suffolk Co. Dormant-

Cornell University Cooperative Extension

stage oil or crawler-targeted treatments provide control. Natural enemies including a scale-killing fungus and a mealybug-mimicking ladybeetle larva bring populations down eventually.

Cottony maple leaf scale egg masses (Dan Gilrein)

Dead Man's Fingers (*111*)—a *Xylaria* species was observed at the base of a sycamore maple in Suffolk Co. This fungus grows on dead wood but doesn't kill the tree itself. Found in association with the pathogen *Kretzschmaria deusta* in this case.

Xylaria *sp. on sycamore maple (John Mitchell)*

Dusky Birch Sawfly (56)—in Suffolk Co. on gray birch. Small and mid-instars defoliating some branches.

Dusky birch sawfly larvae (Dan Gilrein)

Elm Leafminer (85) & Aphid Gall—on *Ulmus americana* 'Pioneer' in Suffolk Co. Elms are hosts to a variety of aphid galls; this one possibly due to *Tetraneura nigri-abdominalis*, which uses some grasses as secondary hosts. More at https://tinyurl.com/TetraAphid

Elm leafminer & aphid gall (Michael Voss)

European Fruit Lecanium (174)—numerous adult soft scales on tupelo twigs in Suffolk Co. Similar ones also on oak may be oak lecanium.

Fourlined Plant Bug (190) and Meadow Spittlebug (202H)—FLPB leaf damage and meadow spittlebug masses everywhere in Monroe Co.; FLPB adults in Rockland Co. FLPB feeding causes leaf spots, sometimes severe, on many herbaceous and some shrub hosts (weigela, forsythia, viburnum, azalea among others).

Meadow spittlebug mass and FLPB injury (dark spots) (Karen Klingenberger)

Gall Midge on Ash—creating midrib swelling under leaves of green ash in Suffolk Co. These are from *Dasineura tumidosae*; damage is minor.

Gall midge on ash (Riley McKenna)

Gymnosporangium Rusts (*129-133*)—lesions on apple in Tompkins Co. and hawthorn in Westchester Co. Pear trellis rust also just starting on pear leaves in Tompkins, Rockland, and Westchester Cos.

Rust on hawthorn (Hillary Jufer)

Hickory Leafstem Gall Phylloxera (222A, B)—on hickory in Suffolk Co. Leaves breaking off where petioles were weakened by galls following strong winds.

Hickory leafstem gall phylloxera (Dan Gilrein)

Honeylocust Plant Bug (194)—leaf damage in Tompkins Co.

Honeylocust plant bug damage (Sandra Jensen)

Honeylocust Pod Gall Midge (225)—galled leaflets in Rockland Co.

Imported Currantworm—a sawfly, *Euura ribesii*, defoliating currants in Suffolk Co.

Imported currantworms and damage (Dan Gilrein)

Lacebugs (*Stephanitis* spp. (204)—nymphs on andromeda in Westchester Co.

Leaf Curl—dramatic symptoms of leaf rolling, curling noted on tulip poplar at one site and magnolia at another on LI. Symptoms throughout canopy but more exaggerated on lower branches. Does not appear to be an insect- or disease- related effect. Early spring cold snaps and herbicide drift may be possible causes.

Above: magnolia leaf curl (Tom Golon); below: tulip poplar leaf curl (Cliff Goldsmith)

Leafroller (100)—probably oblique-banded leafroller on *Cornus sericea* 'Bud's Yellow' in Tompkins Co. Primary hosts are rosaceous but reported feeding on many others.

Possible obliquebanded leafroller (Mike Hennigan)

Mulberry Leaf Spot (*10*)—*Mycosphaerella mori* (syn. *Phleospora mori*) is a common leaf-spotting fungus on mulberry, noted in Suffolk Co. See *Under the Scope* for spores.

Mulberry leaf spot (Margery Daughtrey)

Oak Gall—leaf galls projecting from both sides on red oak in Tompkins Co. Appears to be *Callirhytis quercusmodesta*. Pin, red, black oaks are hosts. Adult wasps emerge June/July.

Oak gall (Elizabeth Lamb)

Oak Shothole Miner (Fig. 57 p. 206)—on black oak in Suffolk Co. Note holes expanded around small bits of dead tissue caused by ovipositors females used to wound leaf cells for feeding.

Oak shothole miner holes (Margery Daughtrey)

Powdery Mildew (*4*)—reported on a number of plants recently. Serious injury observed on delphinium and pear.

Powdery mildew closeup on delphinium stem (Margery Daughtrey)

Rose Rosette Virus—classic rose rosette symptoms in roses seen in a Schenectady Co. park. Samples will be sent for a PCR test to confirm the tentative diagnosis.

Reddening and hyperthorniness suggest rose rosette disease (Matt Cuevas)

Spongy Moth (61, 62)—third-instar caterpillar on elm in Suffolk Co. Orange markings on upper side are distinctive for this stage (distinguish

Spongy moth caterpillar on tree signage (Michael Voss)

instars: https://tinyurl.com/3xx55k8h). Defoliation proceeds rapidly with older instars.

Spotted Lanternfly—first instar nymphs active around the State, some areas reporting very high numbers on landscape plants.

Spotted lantern-fly nymph (Dan Gilrein)

Striped Oak Bug—on oaks and around residences in Suffolk Co. *Rhabomiris striatellus* is an invader from Europe/Asia Minor, first US report from Suffolk Co. in 2016 of large numbers at one residence. We had two reports of them this spring, very large numbers again in one case. It feeds on oaks (catkins in particular); adults are also somewhat predatory on aphids/other small insects and disappear by mid-summer. More at: https://tinyurl.com/StripedOakBugUK.

Striped oak bug (Chris Kempton)

Unknown Canker—cankering (causal agent not identified) was observed on *Acer davidii* in Tompkins Co.

Unknown cankering (Mike Hennigan)

Viburnum Leaf Beetle (104)—larvae on variegated viburnum in Monroe Co.; adults active in Rockland Co.

Right: viburnum leaf beetle larva/damage; below: VLB damage (Karen Klingenberger)

Whitefly on Japanese Holly—adults in Westchester Co. *Aleuroclava similis* adults are active in late spring, now common on this host. In 2023, however, we identified a new whitefly, *Crenidorsum* sp., possibly *C. micheliae* or *C. turpiniae*, on Japanese holly in Manhattan.

Under the Scope:
Reports from Diagnostic Labs

Arborvitae Tip Dieback (*94*)—sporulation on dead tips allowed ID of the disease: Pestalotiopsis blight.

Arborvitae tip dieback: brown shoot tips with acervuli (left); spores of a Pestalotiopsis *sp. (Jen Lerner)*

Dutch Elm Disease (*119*)—first sample from NYC.

Dark streaking under elm twig bark characteristic of DED (Sandra Jensen)

Mulberry Leaf Spot (*10*)—white multi-celled spores of *Mycosphaerella mori* form globs of white ooze on dead areas.

Conidia of M. mori *from mulberry leaf (Margery Daughtrey)*

Pear Powdery Mildew (*4*) and Anthracnose (*56*)—incubation of a pear sample in the Ithaca Plant Disease Diagnostic Clinic led to detection of a powdery mildew and an anthracnose that

Powdery mildew evident on pear (Sandra Jensen)

Branching Out
Plant Pathology and Plant-Microbe Biology
Cornell University
334 Plant Science Building
Ithaca, NY 14853

had joined forces to blight most of the leaves of an ornamental pear in Sullivan Co.where rainfall was very heavy in May. Great example of the importance of a diagnosis—powdery mildew role may have been missed based on symptoms alone.

Miscellany

Brood XIV periodical cicadas now emerging in parts of Suffolk Co. and eastern MA, with reports from central PA and the DC area, as well as Cincinnati and south. These will disappear by late June.

NY Invasive Species Expo is scheduled for Sept 14-16 at Saratoga Spa State Park. Attendance is free. Watch website for agenda and registration: https://tinyurl.com/2t7w9575

Those red mites on the deck? AKA "concrete mites," *Balaustium* spp. are often seen wandering on hardscape, walls, and patio furniture in spring. Predators much of their lives, they also feed on pollen. Check out Joe Boggs' (OSU) great article and photos: https://bygl.osu.edu/node/1588

Phenology by County

Monroe: Robert's geranium, cornflower, wild strawberry

Onondaga: spiraea, burning bush, deutzia, woody peony, cotoneaster, honeysuckle, roses

Rockland: blackberry, Japanese honeysuckle, mountain laurel, ninebark, multiflora rose

Suffolk: kousa dogwood, multiflora rose, climbing hydrangea, Kentucky coffeetree

Tompkins: horsechestnut, spiraea, viburnums, weigela, rhododendron, deciduous azalea

Westchester: Kousa dogwood, weigela, Japanese snowball, azaleas

Dan Gilrein, Karen Snover-Clift, Margery Daughtrey & Shari Romar, editors

Growing Degree Days

As of June 3, 2025

Station	GDD_{50}	Station	GDD_{50}
Albany	443	Ithaca	302
Binghamton	296	New Brunswick,NJ	653
Boston, MA	465	Poughkeepsie.	529
Bridgeport, CT	487	Riverhead	545
Buffalo	341	Rochester	337
Central Park	684	Syracuse	370
Farmingdale	516	Watertown	255
Hartford, CT	511	Westchester	521

Our Financial Supporters

We thank our supporters for their generous gifts:

- New York State Turfgrass Association
- New York State Arborists-ISA Chapter
- The Orentreich Family Foundation
- William De Vos / Treeworks
- Almstead Tree & Shrub Care Co.
- Bartlett Tree Experts
- Evan Dackow / Jolly Green Tree and Shrub Care
- Long Island Arboricultural Association
- Perennial Charm Nursery
- Stephen Raimondo
- Frank Saladino / Plant Care Solutions, Inc.
- K. Biene Schaefer/Atlantic Nurseries
- Shreiner Tree Care
- Michael Sperber / Nature's Guardian, Inc.
- Edward Wade / Wade Tree Care, Inc.
- David Fernandez / Cayuga Landscape Co.
- Alan Lane / Professional Tree Surgeon's Supply
- George LaMay / LaMay's Tree Service
- Tom Stapleton / Stapleton Tree & Landscape Service
- And our other donors to be acknowledged in future issues

DEC Update on Regional Spongy Moth Outbreaks

Christopher Johnston, Forestry Technician, New York State Department of Environmental Conservation

Introduction

Spongy moth (*Lymantria dispar*) is an invasive insect that has been present in New York since the early 1900s. Always existing at some level throughout the State, and despite the inability of females to fly, populations experience outbreaks with periodic boom-bust cycles.

Above left: flightless adult female and egg mass; center: egg mass on Arborvitae; right: small caterpillars on oak (Dan Gilrein); right: caterpillar (Margery Daughtrey)

Spongy moth is known to feed on a wide range of tree species including some conifers but shows the greatest preference for oaks, particularly chestnut oak, followed by other oaks and aspen. Some less-preferred hardwoods include yellow (tulip) poplar, yellow birch, black locust, striped maple, ash and black gum (tupelo), based upon observations during an outbreak in Pennsylvania in 1981 (Fig. 1). For a more complete host list including susceptible and resistant species see https://tinyurl.com/3bcdhcbs.

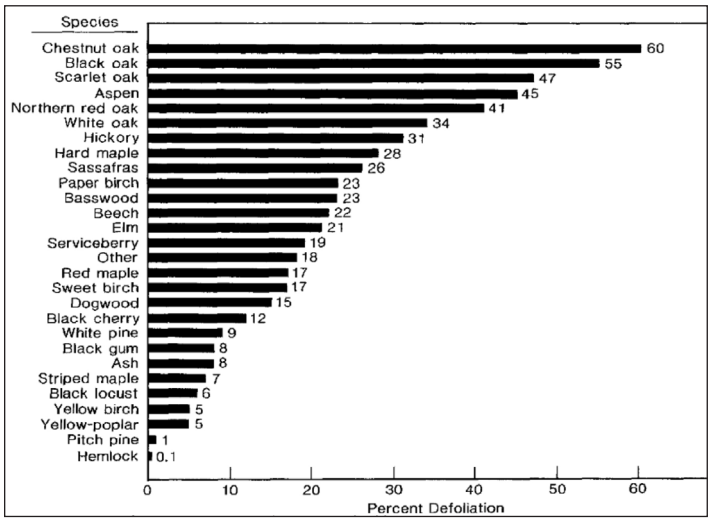


Fig. 1: Average defoliation by tree species, 1981 (central Pennsylvania, from Gansner & Herrick, USDA FS Research Note NE-330, 1985).

While trees are generally able to withstand a few successive years of defoliation, continuous defoliation can cause significant stress to individuals, and in extreme cases or a second defoliation in the same year (say, from orangestriped oakworm) may lead to tree mortality directly or from other factors like Armillaria root rot, twolined chestnut borer, drought, and/or other factors.

For the past 25 years the New York State Department of Environmental Conservation has continuously tracked spongy moth defoliation across the State through yearly aerial surveys. In recent years, New York has experienced several regional outbreaks of spongy moth populations. While significant attention has been given to these outbreaks, regional population booms have been ephemeral, and the number of yearly defoliated acres is dwarfed by the historic large outbreaks recorded during the early 1980s (Fig. 2).

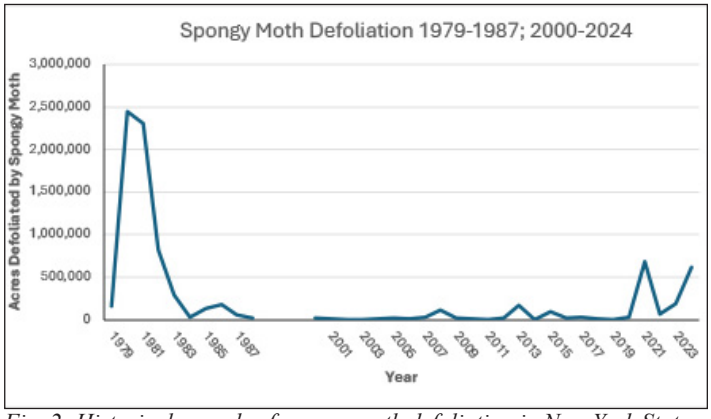


Fig. 2: Historical records of spongy moth defoliation in New York State.

Spongy moth boom...and bust

More recently, in 2020 spongy moth populations began to grow in the Finger Lakes Region, leading to 45,000 acres of defoliated forest. In 2021, the number of defoliated acres skyrocketed to approximately 700,000 acres as the State experienced multiple population booms in western, central, and northern New York. While those

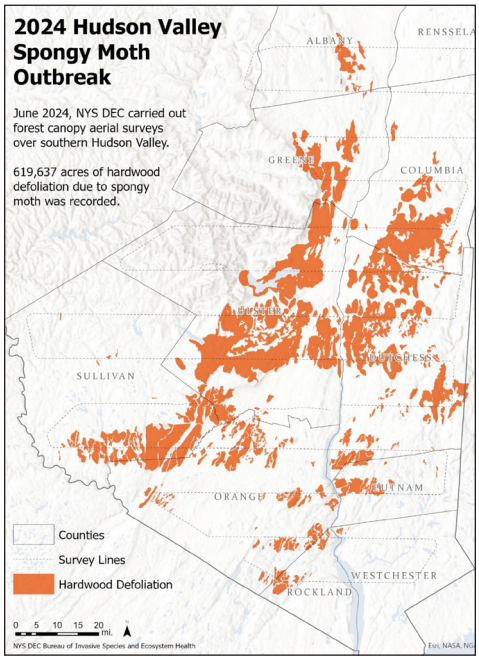
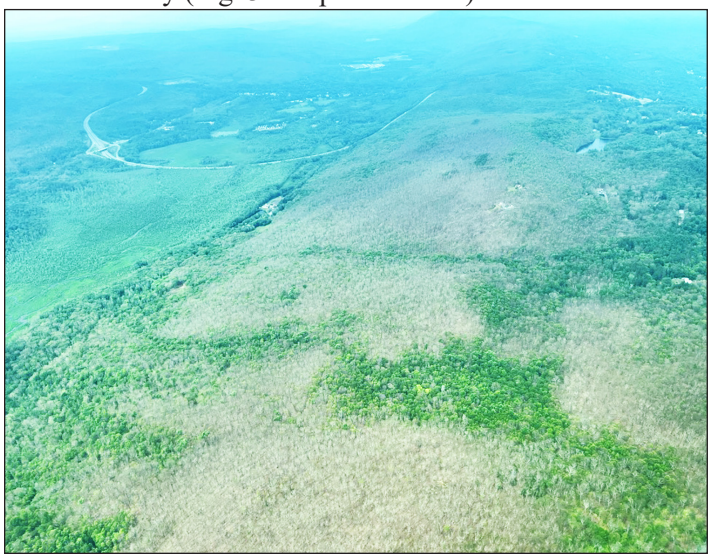


Fig. 3: 2024 spongy moth defoliation in the Hudson Valley region.

regional population booms quickly dissipated, in 2022 population densities began to grow in the Hudson Valley Region where 62,458 acres of forest were defoliated. This number increased in 2023 to 188,313 acres, booming again in 2024 when 619,637 acres were defoliated throughout the Hudson Valley (Fig. 3 and photo below).



NYS DEC Forest Health aerial survey photo of spongy moth defoliation in Lower Hudson Valley, 2024

While the recent population outbreak in the Hudson Valley is being closely monitored by the NYS DEC, it appears likely that spongy moth population levels in this region will be greatly reduced in 2025, particularly in the upper Hudson Valley. As mentioned previously, spongy moth populations have historically acted in boom-bust cycles that are influenced by the relationship between mast, small mammal predation, and the suite of natural enemies that utilize spongy moth as a host. The latter include a spongy moth nucleopolyhedrosis virus (NPV), the fungal pathogen *Entomophaga maimaiga*, and an egg parasitoid wasp, *Ooencyrtus kuvanae*.

Spongy moth NPV has been present in North America for over 100 years, probably introduced with biological controls. While it also occurs naturally and most prominently when spongy moth populations reach high densities, it is also formulated into a biopesticide product used only in USDA Forest Service programs. *O. kuvanae* was introduced in 1908 to aid in suppressing spongy moth populations. *E. maimaiga* was first found killing large numbers of spongy moth caterpillars around eastern North America including NY in 1989. It may have been introduced accidentally or deliberately much earlier but not detected.

Spongy moth caterpillar killed by Entomophaga *fungus. (Steven Katovich, Bugwood.org)*

Both NPV and *Entomophaga* have been effective in quickly suppressing spongy moth populations in New York. For example, following the statewide population boom in 2021, wet weather promoted both NPV and *Entomophaga maimaiga* throughout much of the state, killing off a significant portion of developing caterpillars before they were able to pupate. Combined with reports of high levels of *Ooencyrtus kuyanae* egg parasitism throughout areas like the Southern Adirondacks and Capital Region, populations were quickly reduced below the outbreak threshold by the following year. While the NYS DEC has not received reports regarding the population density of *Ooencyrtus kuyanae* in the Hudson Valley region, an increase in rainfall during the mid-summer months throughout the Hudson Valley in 2024 has sparked optimism that *Entomophaga* and NPV will help keep spongy moth population densities below outbreak thresholds in 2025.

Though not diagnostic, spongy moth caterpillars killed by NPV often have an inverted 'V' shape. (Steven Katovich, Bugwood.org)

Natural controls, natural process

NYS DEC does not conduct aerial insecticide or Btk treatments for spongy moth, instead relying on the existing biocontrols to regulate populations. By allowing these biocontrol agents to function without chemical interference, DEC supports the long-term ecological integrity of forests, preserving beneficial insect populations and minimizing disruptions to the food web. This approach maintains biodiversity, protects pollinators and native Lepidoptera, and ensures that forest ecosystems remain resilient to additional stressors.

As a consequence of multiple years of spongy moth defoliation in the Hudson Valley, some tree mortality is expected over the next one to three years. While most oaks can withstand one year of defoliation, prolonged stress, particularly in dry, nutrient-poor soils, can lead to mortality rates of 15-40%, with the most severe losses occurring where secondary pests like the twolined chestnut borer exploit weakened trees. Tree mortality may not be evident right away. Some trees may linger in a weakened state, showing signs of dieback, sparse foliage, and epicormic sprouting, before succumbing in the years following the outbreak. Although some trees will die, this natural process will create habitat for wildlife, open closed canopy forests for regeneration, and facilitate nutrient cycling that will ultimately contribute to forest diversity and resilience.