



## Invasive Species Categorization for the Lower Hudson

The following document presents the species categorizations for invasive species in the Lower Hudson region of the Lower Hudson Partnership for Regional Invasive Species Management.

The Lower Hudson region encompasses New York county (Manhattan), Bronx, Westchester, Putnam, Dutchess, Rockland, Orange and the lower half of Ulster (divided by Route 209).

Species are categorized into Tiers according to a standard state-wide system. New York State ranking evaluations are given for species where they exist. NYS Ranks with an asterisk (\*) indicate updated ranks as of 12/22/16.

This list should not be considered complete. Additional species will be evaluated and categorized as time allows. Our categorization decisions have been based on currently known and recorded distributions as well as local expert knowledge of invasive species occurrences. Most species' distributions are incompletely reported -- everyone can help to provide a better picture of the current distributions by reporting observations to the New York State invasive species database, iMapInvasives (<http://imapinvasives.org>).

If you disagree with the assigned category or would like us to consider species which are not addressed here, you may send a note explaining your reasoning to [invasives@nynjtc.org](mailto:invasives@nynjtc.org) to be considered by the Lower Hudson PRISM focal species working group prior to the 2020 season.

The current members of the Lower Hudson PRISM working group for terrestrial plants include: Linda Rohleder, Daniel Atha, David Decker, Clara Holmes, Tait Johansson, Tom Lewis, Chris Mangles, Jessica Schuler, Tim Wenskus, Michael Young, and Keri VanCamp. Additional contributors include: John Mickelson, Molly Marquand, and Tierney Rosenstock.

Current members of the species categorization working group for aquatic plants include: Amy Cahill, Chris Doyle, Meredith Taylor, Michael Spada, Nicole White, and Lindsay Yoder.

Current members of the forest pests working group include: Jen Lerner, Jonathan Rosenthal, Radka Wildova, Guy Pardee, and Tim Wenskus.

## Document Change Log

Date	Description of Change
11/29/2017	Corrected typos in common names, added Document Change Log table. Updated working group member names in Introduction.
12/4/2017	Added <i>Impatiens glandulifera</i> (Himalayan balsam, policemen's helmet) to Tier 1, and <i>Symplocos paniculata</i> (sapphireberry) to Tier 2.
1/8/2018	Added <i>Broussonetia papyrifera</i> to Tier 2, moved <i>Digitalis purpurea</i> from Excluded to Tier 5, added the following to Tier 5 <i>Houttuynia cordata</i> , <i>Hyacinthoides hispanica</i> , <i>Lamium galeoboldon</i> , <i>Leucosium aestivum</i> , <i>Macleaya cordata</i> , <i>Mahonia bealei</i> , <i>Petasites japonicus</i> , and <i>Petasites hybridus</i> Added <i>Nandina domestica</i> and <i>Pennisetum alepecouroides</i> to Tier 1.
1/22/2018	Added <i>Primula japonica</i> to Tier 2. Added <i>Prunus avium</i> to Tier 4. Added <i>Corydalis solida</i> and <i>Euphorbia lathyrus</i> to Tier 5. Corrected typo on Wild teasel. Added Index.
2/12/2018	Added to Tier 5 <i>Quercus acutissima</i> , <i>Ripidium ravennae</i> , <i>Schoenoplectus mucronatus</i> , <i>Pulmonaria officinalis</i> , <i>Duetzia scabra</i> , <i>Koeleruteria paniculata</i> , and <i>Luzula luzuloides</i> . Added <i>Lysimachia nummularia</i> to Tier 4. Moved <i>Miscanthus sinensis</i> to Tier 2 to treat it consistently with other species by only considering naturalized populations in the decision. Moved <i>Rhodotypos scandens</i> to Tier 3 due to the number of populations now known throughout the LH PRISM region. Moved <i>Reynoutria x bohémica</i> ( <i>Fallopia x bohémica</i> , <i>Polygonum xbohémica</i> ) to Tier 4 to be grouped with Japanese knotweed since separation of the two is difficult for the average observer. Corrected typo in notes field for <i>Macleaya</i> . Added variety to <i>V. opulus</i> .
4/8/2019	v.2.0. Moved <i>Koeleruteria paniculata</i> , <i>Mahonia bealei</i> , and <i>Spiraea japonica</i> from Tier 5 to Tier 2, moved <i>Kalopanax septemlobus</i> from Tier 1 to Tier 2, moved <i>Malus sieboldii</i> and <i>Phellodendron amurense</i> from Tier 2 to Tier 3, moved <i>Albizia julibrissin</i> from Excluded to Tier 5. Added 28 new terrestrial plants. Added classifications for forest pests and pathogens, and aquatic plants.

## Tier 1 – Threat Invasive Species of the Lower Hudson PRISM

LH PRISM Threat = these are species that do not yet occur within the Lower Hudson region.

Management guideline: Focus on surveys in likely introduction areas. Prioritize prevention, education and outreach. Eradication of all detected populations where practical.

**Tier 1 – Early Detection/Prevention** – Highest level of survey efforts. Should conduct delineation surveys and assign to appropriate Tier if detected. (a) inside buffer but not in PRISM, (b) outside PRISM and buffer, but close (eastern North America), (c) Far outside PRISM and buffer (not in east NA) but introduction pathway exists.

TERRESTRIAL AND AQUATIC PLANTS		
Scientific Name	Common Name	NYS Rank
<i>Achyranthes japonica</i>	Japanese chaff flower	H
<i>Aldrovanda vesiculosa</i>	Water wheel	U
<i>Alternanthera philoxeroides</i>	alligatorweed	H
<i>Carex kobomugi</i>	Asiatic sand sedge, Japanese sedge	M
<i>Carex macrocephala</i>	Largehead sedge	M
<i>Crassula helmsii</i>	Swamp crop, Pygmyweed	H
<i>Cyperus difformis</i>	Variable flat-sedge	M
<i>Glyceria maxima</i>	Reed manna grass	H
<i>Hygophila polysperma</i>	Hygrophila, Swampweed	H
<i>Impatiens glandulifera</i>	Himalayan balsam, Policeman's helmet	M
<i>Imperata cylindrica</i>	Cogon grass	H
<i>Ipomoea aquatica</i>	Swamp morning-glory	H
<i>Lagarosiphon major</i>	Oxygenweed	H
<i>Lepidium latifolium</i>	Broad-leaved pepper-grass	H
<i>Ludwigia adscendens</i>	Water primrose	VH
<i>Ludwigia hexapetala</i>	Uruguayan primrose willow	VH
<i>Ludwigia peploides</i>	Floating primrose willow	VH
<i>Marsilea quadrifolia</i>	European water-fern	M
<i>Murdannia keisak</i>	Marsh dewflower	H
<i>Myriophyllum aquaticum</i>	Parrot feather	H
<i>Myriophyllum heterophyllum</i> x <i>M. laxum</i>	Broadleaf milfoil hybrid	VH
<i>Nandina domestica</i>	Heavenly bamboo	M
<i>Nelumbo nucifera</i>	Sacred lotus	M
<i>Nitellopsis obtusa</i>	Starry stonewort	VH

<i>Oplismenus hirtellus</i> ssp. <i>undulatifolius</i>	Wavyleaf basketgrass	H
<i>Pennisetum alepecurioides</i>	Fountain grass	
<i>Pistia stratiotes</i>	Water lettuce	VH
<i>Tamarix</i> ssp. ( <i>T. chinensis</i> , <i>T. parviflora</i> , <i>T. ramosissima</i> )	Saltcedar, Tamarisk	VH
<i>Salvia minima</i>	Water fern	H
<i>Salvia molesta</i>	Giant Salvinia	H
<i>Schoenoplectiella mucronata</i>	Bog bulrush	H
<i>Stratiotes aloides</i>	Water soldiers	H
<i>Vitex rotundifolia</i>	Beach Vitex, Roundleaf chastetree	H

PATHOGENS		
Scientific Name	Common Name	NYS Rank
<i>Amylostereum areolatum</i>	Sirex wasp fungus	H
<i>Ceratocystis fagacearum</i>	Oak wilt	
<i>Geosmithia morbida</i>	Walnut canker; Thousand cankers disease	M
<i>Phytophthora ramorum</i>	Sudden oak death	M
	Beech leaf disease	

TERRESTRIAL INVERTEBRATES		
Scientific Name	Common Name	NYS Rank
<i>Adelges piceae</i>	Balsam woody adelgid	H
<i>Anoplophora glabripennis</i>	Asian longhorn beetle	H
<i>Apis mellifera scutellata</i> x <i>A. m. ligustica</i> , <i>A.m. iberiensis</i>	Africanized honey bee	M
<i>Ips typographus</i>	European spruce beetle	
<i>Lycorma delicatula</i>	Spotted lanternfly	
<i>Lymantria dispar asiatica</i> or <i>Lymantria dispar japonica</i>	Asian gypsy moth	H
<i>Myrmica rubra</i>	European fire ant	
<i>Pityophthorus juglandis</i>	Walnut twig beetle	M
<i>Sirex noctilio</i>	Sirex woodwasp	H
<i>Solenopsis invicta</i>	Red imported fire ant	
<i>Tetropium fuscum</i>	Brown spruce longhorned beetle	
<i>Trichoferus campestris</i>	Velvet longhorn beetle	

VERTEBRATES
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Scientific Name	Common Name	NYS Rank
<i>Sus scrofa</i> (excluding <i>Sus scrofa domestica</i> )	Eurasian boar	VH

**NOTES:**

*Impatiens glandulifera* – From the Global Invasive Species Database

(<http://www.iucngisd.org/gisd/species.php?sc=942> accessed 12/4/2017) “*Impatiens glandulifera*, or Himalayan balsam, is a problematic invasive which has spread throughout Europe, parts of North America and New Zealand following introductions as an ornamental. It is an annual herb which thrives in riparian zones and disturbed areas. Its high reproductive rate, early germination, propensity for establishing thick stands, rich nectar production, hardiness, and habitat tolerance and plasticity have allowed it to spread rapidly, dominate landscapes, and compete with and displace native plant species. Eradication has proven very difficult once established and preventative measures are recommended.”

*Nandina domestica* – is placed in Tier 1 due to its link to two incidents of bird kills from eating the berries reported from southern states. This plant is known to invade forested areas in the south.

*Pennisetum alepeuroides* – has been reported to have naturalized in NY (Long Island), NJ, PA as well as Midwestern states. The National Park Service plant alert states this species “could become a serious weed in natural areas.”

## Tier 2 – Emerging Invasive Species in the Lower Hudson PRISM

LH PRISM Emerging = these species are just starting to become established in localized parts of the Lower Hudson region.

Management Guideline: Eradication, or Containment and spread prevention along with restricting the area of invasion by focusing on removing outlying and border populations. These species should be a high priority for surveys, prevention, and education and outreach.

**Tier 2 – Eradication** – Highest level of response efforts. High impact species with low enough abundance to make eradication feasible within the PRISM. Need delineation surveys to determine extent.

TERRESTRIAL AND AQUATIC PLANTS		
Scientific Name	Common Name	NYS Rank
<i>Actinidia arguta</i>	Hardy kiwi	H?*
<i>Actinidia polygama</i>	Silver vine	U*
<i>Akebia quinata</i>	Five-leaf Akebia, Chocolate vine	M
<i>Alnus glutinosa</i>	European alder, black alder	M
<i>Arthraxon hispidus</i>	Small carpetgrass, Hairy jointgrass	H
<i>Arum italicum</i>	Italian arum	
<i>Arundo donax</i>	Giant reed	H
<i>Brachypodium sylvaticum</i>	Slender false brome	VH
<i>Broussonetia papyrifera</i>	Paper Mulberry	
<i>Cabomba caroliniana</i>	Fanwort	H
<i>Callicarpa dichotoma</i>	Purple beautyberry	
<i>Cercidiphyllum japonicum</i>	Katsura tree	
<i>Corydalis incisa</i>	Purple kaman, Incised fumewort	U*
<i>Cynanchum rossicum</i>	Pale swallow-wort	VH
<i>Cytisus scoparius</i>	Scotch broom	H
<i>Dioscorea oppositifolia</i>	Chinese yam	H
<i>Dipsacus laciniatus</i>	Cut-leaf teasel	H
<i>Egeria densa</i>	Brazilian elodea	H
<i>Eichhornia crassipes</i>	Water hyacinth	M
<i>Elaeagnus angustifolia</i>	Russian olive	M
<i>Elsholtzia ciliata</i>	Crested late summer mint	
<i>Eragrostis curvula</i>	Weeping lovegrass	M
<i>Gypsophila paniculata</i>	Tall baby's-breath	H
<i>Heracleum mantegazzianum</i>	Giant hogweed	H
<i>Hydrilla verticillata</i>	Hydrilla, Water thyme	VH
<i>Hydrocharis morsus-ranae</i>	European frogbit	VH

<i>Kalopanax septemlobus</i>	Castor aralia	H
<i>Koelreuteria paniculata</i>	Golden rain tree	
<i>Lespedeza cuneata</i>	Chinese bush-clover	H
<i>Ligustrum sinense</i>	Chinese privet	H
<i>Lysimachia vulgaris</i>	Garden yellow-loosestrife	H
<i>Malus hupehensis</i>	Tea crabapple	
Mahonia bealei (Berberis bealei)	Leatherleaf mahonia, Beale's barberry	
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	VH
<i>Nymphoides peltata</i>	Yellow floating-heart	H
<i>Perilla frutescens</i>	Beefsteak plant	M
<i>Photinia villosa</i>	Oriental Photinia	H*
<i>Primula japonica</i>	Japanese primrose	
<i>Prunus subhirtella</i> (incl. var. pendula and var. ascendens)	Higan cherry	
<i>Pueraria montana</i>	Kudzu	VH
<i>Rubus laciniatus</i>	Cut-leaf blackberry	
<i>Salix atrocinerea</i>	Large gray willow	VH
<i>Salvia glutinosa</i>	Jupiter's distaff, Sticky sage	M*
<i>Silphium perfoliatum</i>	Cup-plant, Rosinweed	H
<i>Spiraea japonica</i>	Japanese spirea, Japanese meadowsweet	M
<i>Styphnolobium japonicum</i>	Pogoda tree	
<i>Symplocos paniculata</i>	Sapphireberry	
<i>Syringia reticulata</i>	Tree lilac	
<i>Viburnum dilatatum</i>	Linden arrowwood	M
<i>Viburnum plicatum</i>	Japanese snowball	NA
<i>Viburnum sieboldii</i>	Siebold's arrowwood	M
<i>Wisteria floribunda</i>	Japanese wisteria	M
<i>Wisteria sinensis</i>	Chinese wisteria	M

**PATHOGENS**

<b>Scientific Name</b>	<b>Common Name</b>	<b>NYS Rank</b>

**TERRESTRIAL INVERTEBRATES**

<b>Scientific Name</b>	<b>Common Name</b>	<b>NYS Rank</b>
<i>Dendroctonus frontalis</i>	Southern pine beetle	
<i>Haemaphysalis longicornis</i>	Longhorned tick	

<i>Operophtera brumata</i>	Winter moth	
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VERTEBRATES		
Scientific Name	Common Name	NYS Rank

**NOTES:**

*Actinidia polygama* – [ Notes to be provided ]

*Akebia quinata* – significant problem near original plantings. Distribution localized enough for eradication possibility.

*Alnus glutinosa* - invasiveness rank should probably be re-evaluated. Experience with infestations near the city indicates bad invader. Potentially very bad in wetlands, waterways – worth controlling early. Few populations outside of NYC area in LH PRISM.

*Arum italicum* – highly invasive in other areas of the country, toxic to mammals (irritant), bird dispersed, shade-tolerant, tolerates a diversity of soil moisture, difficult to eradicate. 4 spontaneous populations found in Lower Hudson currently.

*Broussonetia payrifera* – spontaneous infestation is known in two counties in our PRISM, one large dense infestation has occurred. At least one southern state ranks this as significant threat (NC).

*Corydalis incisa* – spreading rapidly along the Bronx River corridor.

*Elaeagnus angustifolia* – widespread invasive in the West and Midwest. Low abundance numbers here.

*Elsholtzia ciliata* - significant infestation in Connecticut.

*Eragrostis curvula*- [ Notes to be provided ]

*Malus hupehensis* – [ Notes to be provided ]

*Lonicera maackii* – Identification confusion among the bush honeysuckles, may be inaccurately reported.

*Perilla frutescens* – significant invasive in the mid-Atlantic region. Know infestation in Central Park in the LH PRISM.

*Primula japonica* – has been observed in several locations in the Lower Hudson and neighboring states spreading extensively in wet areas. Due to its large leaves, potential to cover large areas of wetland habitat, we feel it has potential to have impact, is likely to be more difficult to control if numbers grow, and so it's prudent to control escaped populations before they spread further.

*Salvia glutinosa* – a significant large infestation in Dutchess County. Sticky seeds, spreading.

*Symplocos paniculata* – Several known infestations in southern New York and Connecticut had many stems and dense understories of seedlings. Some are multiple acres (Long Island, and CT). Also a copious fruit producer.

*Viburnum dilatatum* – aggressive invader, critical not to let this one get out of control, already widespread in New Jersey and Long Island, a handful of larger locations and a few smaller escapees found in our region, but not so many that we can't consider it eradicatable

*Viburnum plicatum*- [ Notes to be provided ]

*Viburnum sieboldii* – [ Notes to be provided ]

*Wisteria floribunda* – [ Notes to be provided ]

*Wisteria sinensis* – [ Notes to be provided ]



### Tier 3 – Established Invasive Species of the Lower Hudson PRISM

LH PRISM Established = these species are common or abundant through most of the Lower Hudson valley but not in most of the surrounding regions.

Management guideline: Focus on containment and spread prevention with special attention to borders with areas uninvaded by this species and threatened conservation targets. Surveys should detect this species to help prevent spread.

**Tier 3 – Containment –** Target strategic management to slow the spread, as likely too widespread for eradication, but many surrounding regions could be at risk if left unattended.

TERRESTRIAL AND AQUATIC PLANTS		
Scientific Name	Common Name	NYS Rank
<i>Acer pseudoplatanus</i>	Sycamore maple	H
<i>Aegopodium podagraria</i>	Bishop's goutweed ( bishop's weed)	M
<i>Ampelopsis brevipedunculata</i> (A. glandulosa)	Porcelain berry, Amur peppervine	H
<i>Anthriscus sylvestris</i>	Wild chervil	H
<i>Aralia elata</i>	Japanese angelica-tree	VH
<i>Caragana arborescens</i>	Siberian peashrub	H
<i>Cardamine impatiens</i>	Narrowleaf bittercress	H
<i>Clematis terniflora</i>	Japanese virgin's-bower, Yam-leaved virgin's-bower	H
<i>Cynanchum louiseae</i>	Black swallowwort	VH
<i>Euonymus fortunei</i>	Winter creeper, Climbing spindle-tree	H
<i>Euphorbia cyparissias</i>	Cypress spurge	H
<i>Euphorbia esula</i>	Leafy spurge	H
<i>Ficaria verna</i>	Lesser celandine, fig buttercup	VH
<i>Frangula alnus</i>	Smooth buckthorn	H*
<i>Humulus japonicus</i>	Japanese hops	H
<i>Ligustrum obtusifolium</i>	Border privet	H
<i>Lonicera maackii</i>	Amur honeysuckle	VH
<i>Malus sieboldii</i> (M. toringo)	Toringo crabapple	U
<i>Miscanthus sinensis</i>	Chinese silver grass	H*
<i>Najas minor</i>	Brittle naiad	M
<i>Nasturtium officinale</i> (Rorippa nasturtium-aquaticum)	Watercress	M

<i>Paulownia tomentosa</i>	Princess tree, Empress tree	M
<i>Persicaria perfoliata</i> ( <i>Polygonum perfoliatum</i> )	Mile-a-minute weed, Asiatic tearthumb	VH
<i>Phellodendron amurense</i>	Amur corktree	H
<i>Pyrus calleryana</i>	Bradford pear	M
<i>Rhodotypos scandens</i>	Black jetbead	M
<i>Trapa natans</i>	Water chestnut	VH
<i>Ulmus pumila</i>	Siberian elm	M

PATHOGENS		
Scientific Name	Common Name	NYS Rank
<i>Batrachochytrium dendrobatidis</i>	Chytrid fungus	
<i>Xyella fastidiosa</i>	Bacterial leaf scorch	

TERRESTRIAL INVERTEBRATES		
Scientific Name	Common Name	NYS Rank
<i>Adelges tsugae</i>	Hemlock woolly adelgid	H
<i>Agrilus planipennis</i>	Emerald ash borer	VH
<i>Amyntas spp.</i>	Asian earthworms	H
<i>Bipalium adventitium</i>	Broadhead planarian	
<i>Fiorinia externa</i>	Elongated hemlock scale	
<i>Phytomyza gymnostoma</i>	Allium leaf miner	

VERTEBRATES		
Scientific Name	Common Name	NYS Rank

**NOTES:**

*Aegopodium podagraria* – under-reported in the Lower Hudson. Is more common than reports indicate.

*Lonicera maackii* – Due to Identification confusion among the bush honeysuckles, may be inaccurately reported but focal group members believe it to be less common than *L. morrowii* in the Lower Hudson.

*Malus sieboldii* (*M. toringo*) – likely not eradicatable. Dense aggressive infestations at Vassar and in NYC.

*Miscanthus sinensis*- likely too widely planted to conceive of eradication so Tier 2 not feasible, but is emerging as an invader in areas of the Lower Hudson so we consider it Tier 3.

*Paulownia tomentosa* – invader of coastal areas in our region and spreading up Hudson river.

*Pyrus calleryana* – A few populations are extensive enough that control is not feasible, but is emerging



as an invader in areas of the Lower Hudson so we consider it Tier 3.  
*Rhodotypos scandens* - significant problem near original plantings.  
*Ulmus pumila* – a significant invader in Long Island, NYC and along the Hudson. Very under-reported.

## Tier 4- Widespread Invasive Species of the Lower Hudson PRISM

LH PRISM Widespread = these are species that are abundant throughout the Lower Hudson valley and also in most or all of the surrounding regions.

Management guideline: lower priority for management *unless* it is to protect conservation targets or to prevent spread into areas where it does not currently exist.

**Tier 4- Local Control** – Eradication from PRISM not feasible; focus on localized management over time to contain, exclude, or suppress to protect high-priority resources like rare species or recreation assets. Be strategic when deciding if/where to control.

TERRESTRIAL AND AQUATIC PLANTS		
Scientific Name	Common Name	NYS Rank
<i>Acer platanoides</i>	Norway maple	VH
<i>Ailanthus altissima</i>	Tree-of-heaven	H*
<i>Alliaria petiolata</i>	Garlic mustard	VH
<i>Artemisia vulgaris</i>	Mugwort, Common mugwort	H
<i>Berberis thunbergii</i>	Japanese barberry	VH
<i>Berberis vulgaris</i>	Common barberry, European barberry	M
<i>Celastrus orbiculatus</i>	Oriental bittersweet	VH
<i>Centaurea stoebe</i>	Spotted knapweed	H
<i>Centaurea jacea</i>	Brown knapweed, Brown starthistle	M
<i>Centaurea nigra</i>	Black knapweed, Lesser knapweed	M
<i>Cirsium arvense</i>	Canada thistle	H
<i>Cirsium vulgare</i>	Bull thistle	M
<i>Dipsacus fullonum</i>	Fuller's teasel, Wild teasel	H
<i>Elaeagnus umbellata</i>	Autumn olive	VH
<i>Euonymus alatus</i>	Burning-bush, Winged spindle-tree	VH
<i>Hedera helix</i>	English ivy	M
<i>Iris pseudacorus</i>	Yellow iris	H
<i>Lonicera japonica</i>	Japanese honeysuckle	VH
<i>Lonicera morrowii</i>	Morrow's Honeysuckle	VH
<i>Lythrum salicaria</i>	Purple loosestrife	VH
<i>Microstegium vimineum</i>	Japanese stilt grass	VH
<i>Morus alba</i>	White mulberry	M
<i>Myosotis scorpioides</i>	True forget-me-not, Water forget-me-not	U
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	VH
<i>Pastinaca sativa</i>	Wild parsnip	M*
<i>Phalaris arundinacea</i>	Reed canarygrass	H

<i>Phragmites australis</i>	Common reed grass	VH
<i>Potamogeton crispus</i>	Curly-leaf pondweed	H
<i>Prunus avium</i>	Bird cherry	M
<i>Reynoutria x bohemica</i> ( <i>Fallopia x bohemica</i> , <i>Polygonum xbohemica</i> )	Bohemian knotweed	VH
<i>Reynoutria japonica</i> ( <i>Fallopia japonica</i> , <i>Polygonum cuspidatum</i> )	Japanese knotweed	VH
<i>Rhamnus cathartica</i>	Common buckthorn	VH
<i>Robinia pseudoacacia</i>	Black locust	VH
<i>Rorippa amphibia</i> ( <i>Nasturtium amphibium</i> )	Yellow watercress	U
<i>Rosa multiflora</i>	Multiflora rose	VH
<i>Rubus phoenicolasius</i>	Wineberry	VH

PATHOGENS		
Scientific Name	Common Name	NYS Rank
<i>Cryphonectria parasitica</i>	Chestnut blight	
<i>Discula destructiva</i>	Dogwood anthracnose	
<i>Geomyces destructans</i>	White-nose syndrome	VH
<i>Neonectria spp.</i>	Beech bark disease	
<i>Ophiostoma spp.</i>	Dutch elm disease	
<i>R.kalkhoffii</i>	Rhizosphaera needlecast disease	

TERRESTRIAL INVERTEBRATES		
Scientific Name	Common Name	NYS Rank
<i>Cryptococcus fagisuga</i>	Beech scale	H
<i>Drosophila suzukii</i>	Spotted wing drosophila	
<i>Halyomorpha halys</i>	Brown marmorated stink bug	
<i>Lilioceris lili</i>	Lily leaf beetle	
<i>Lymantria dispar dispar</i>	European gypsy moth	H
<i>Pyrrhalta viburni</i>	Viburnum leaf beetle	
<i>Tomicus piniperda</i>	Pine shoot beetle	

VERTEBRATES		
Scientific Name	Common Name	NYS Rank



**NOTES:**

*Berberis vulgaris* – can be locally abundant, but generally not common, widespread throughout our region

*Centaurea* sp.- all listed together due to difficulty of distinguishing *C. jacea* and *C. nigra* from *C. stoebe* and that they do co-occur. They are widespread and have been in the US for a longtime.

*Cirsium vulgare* – It is widespread but it's more of an incidental invader that might be managed with other invasives but should not be a primary management target. Can be problematic in disturbed, degraded sites.

*Morus alba* – significant invader, hybridizes with *M. rubra* so is a threat to our native species

*Myosotis scorpioides* – very widespread, problematic in marsh habitats. Can be easily confused with native species. Identification should be confirmed prior to control.

*Pastinaca sativa* – widespread, mostly in roadside and ruderal habitat. Can be problematic for human health.

*Reynoutria x bohemica* - this species is likely commonly misidentified as Japanese knotweed. Surveyors and managers should take care to obtain a correct identification prior to reporting.

*Reynoutria japonica* - This species is commonly confused with *Reynoutria x bohemica* and is actually less common in the region than records indicate. Surveyors and managers should take care to obtain a correct identification prior to reporting.

## Tier 5 - Watch Invasive Species of the Lower Hudson PRISM

LHPRISM Watch = these are non-native species that are not known to be invasive in the region, or there is a lack of information available to evaluate their invasiveness, but may be exhibiting the potential to become invasive at locations within the PRISM.

Management guideline: Focus on survey and reporting

**Tier 5 (Monitor)** – Species that need more research, mapping, and monitoring to understand their invasiveness. This includes naturalized species and cultivated-only species that are known to be invasive in other regions but are not yet invasive here.

TERRESTRIAL AND AQUATIC PLANTS		
Scientific Name	Common Name	NYS Rank
<i>Acer ginnala</i>	Amur maple	M
<i>Acer palmatum</i>	Japanese maple	
<i>Albizia julibrissin</i>	Silk tree, Mimosa	L
<i>Amorpha fruticosa</i>	False indigo bush	NA
<i>Belamcanda chinensis</i>	Blackberry lily	
<i>Buddleja davidii</i>	Orange-eye butterfly-bush	L
<i>Carex flacca</i>	Blue sedge	
<i>Cephalotaxus harringtonia</i>	Japanese plum yew	
<i>Clerodendrum trichotomum</i>	Harlequin glorybower	
<i>Cornus kousa</i>	Kousa dogwood	
<i>Corydalis solida</i>	Spring fumewort	
<i>Digitalis grandiflora</i>	Yellow foxglove	
<i>Digitalis purpurea</i>	Purple foxglove	M
<i>Deutzia scabra</i>	Fuzzy pride-of-Rochester	
<i>Eleutherococcus sieboldianus</i> ( <i>E. pentaphyllus</i> )	Five-leaved aralia	
<i>Euonymus europaeus</i>	European spindle-tree (spindle-tree)	M
<i>Euphorbia lathrys</i>	Mole plant	M
<i>Houttuynia cordata</i>	Chameleon plant	U
<i>Hyacinthoides hispanica</i>	Spanish bluebells	
<i>Ilex crenata</i>	Japanese holly	L
<i>Kolkwitzia amabilis</i>	Beautybush	
<i>Lamium galeoboldon</i>	Yellow archangel	M
<i>Leucojum aestivum</i>	Summer snowflake	U
<i>Lonicera tatarica</i>	Tartarian honeysuckle	VH

<i>Luzula luzuloides</i>	Oak forest woodrush	
<i>Lysimachia clethroides</i>	Gooseneck yellow-loosestrife	N-A
<i>Lysimachia punctata</i>	Spotted loosestrife, Large yellow-loosestrife	M
<i>Lythrum virgatum</i>	European wand loosestrife	VH*
<i>Macleaya cordata</i>	Plume poppy	
<i>Ornithogalum umbellatum</i>	Common star-of-Bethlehem	M*
<i>Petasites japonicus</i>	Fuki, Butterbur	
<i>Petasites hybridus</i>	Butterbur	M*
<i>Pinellia ternata</i>	Crow-dipper	
<i>Populus alba</i>	White poplar	M
<i>Pulmonaria officinalis</i>	Lungwort	
<i>Quercus acutissima</i>	Sawtooth oak	M
<i>Reynoutria sachalinensis</i> ( <i>Fallopia sachalinensis</i> )	Giant knotweed	VH
<i>Ripidium ravennae</i>	Ravena grass	
<i>Rosa rugosa</i>		M
<i>Styrax japonicus</i>	Japanese snowbell	
<i>Ulmus parvifolia</i>	Chinese elm, lacebark elm	
<i>Vallisneria spiralis</i>	Eel grass	M
<i>Viburnum lantana</i>	Wayfaring-tree	M
<i>Viburnum opulus var. opulus</i>	European cranberry bush, Guelder rose	M
<i>Vinca minor</i>	Common periwinkle, Lesser periwinkle	M
<i>Zelkova serrata</i>	Japanese zelkova	

PATHOGENS		
Scientific Name	Common Name	NYS Rank
	White pine needle damage	

TERRESTRIAL INVERTEBRATES		
Scientific Name	Common Name	NYS Rank
<i>Piceacecis abietiperda</i>	Norway spruce shoot gall midge	

VERTEBRATES		
Scientific Name	Common Name	NYS Rank





Notes:

*Amorpha fruticosa* – Considered native across much of U.S., as close to NY as PA (BONAP). This may lead to misguided planting of it as a ‘native species’. This species appears to be showing invasive tendencies in NJ.

*Buddleja davidii* – request reevaluation of NYS invasiveness ranking. Pennsylvania infestation of acres. Report of escapees along railroad track in Dutchess co, gardeners reporting escapees in Westchester.

*Corydalis solida* – there have been a handful of reported naturalized populations Dutchess and Ulster Co. also Hartford, CT. This species is perennial and produces both tubers and seeds. Due to tuber production, it may prove difficult to control manually once established. May be spreading in contaminated soils.

*Digitalis grandiflora* – has been found in one naturalized population.

*Digitalis purpurea* – has been seen spreading from garden setting into woods edge with prolific reproduction

*Euonymus europaeus* – present in small numbers, not really exhibiting invasive tendencies. Monitor for now.

*Euphorbia lathyrus* – it is unclear if much suitable habitat exists in the Lower Hudson but one population has been reported in our region

*Houttuynia cordata* – the Global Invasive Species Database says “high reproductive and vegetative growth rate and quickly overtakes the gardens where it is planted. Control of this species is difficult as it will reproduce rhizomatically from fragments” and garden forums indicate that this species is difficult to eradicate. There have been no naturalized populations reported in the PRISM other than existing plantings expanding.

*Hyacinthoides hispanica* – more investigation is needed into whether this species is producing spontaneous populations

*Ilex crenata* - Frequent though rarely abundant on L.I.; few reports in LH PRISM

*Kolkwitzia amabilis* - Reported as escaped in several states, not yet officially recorded in NY, but T. Lewis has observed it naturalizing within LH PRISM.

*Lamium galeobaldon* – an aggressive ground cover but mostly spreading from plantings

*Leucosium aestivum* – persists from cultivation but it is unclear if any spontaneous populations are produced

*Lonicera tatarica* - this species was recorded as Tier 5 because of the confusion among bush honeysuckles and lack of clarity about the recorded locations for this species. There have been less confirmed records of escapees than other bush honeysuckles. (Note: *Lonicera x bella* is treated separately).

*Lysimachia clethroides* – Naturalized in S-most NY and parts of CT

*Lysimachia punctata* - Apparently more widespread than *L. clethroides* but similarly near areas of cultivation

*Lythrum virgatum* - Not as-yet known from NY but reported in PA and MA (BONAP)

*Macleaya cordata* – has been recorded in one park in NYC and is known to be very aggressive in gardens.

*Ornithogalum umbellatum* – reports of spread in mid-Atlantic states

*Petasites* ssp. (*P. japonicus*, *P. hybridus*) – garden forum comments report this species has highly invasive with specific reports of escapes into wetland areas. It has been observed in our region



spreading along a stream corridor from a planting and spreading across a road from a garden setting.

*Populus alba* – Listed as invasive in CT and as an emerging invasive in NJ.

*Reynoutria sachalinensis* - this species was recorded as Monitor because it does not seem to be exhibiting as aggressive tendencies as the other knotweed species in the Lower Hudson region.

*Viburnum lantana* –

*Viburnum opulus var. opulus* – a few sites are known in our region but overall distribution is unclear

*Vinca minor* - Widely planted groundcover plant that readily spreads into natural areas from planted locations or cut yard debris. Does not appear to reproduce by seed.

## Excluded Species from the Lower Hudson PRISM List

The focal species working group has chosen to exclude these species from the list at the current time. This may be because the species has a low invasiveness rank, no known local occurrences, and/ or too much uncertainty about possible impacts. Species may be reviewed for inclusion at a later date.

TERRESTRIAL AND AQUATIC PLANTS		
Scientific Name	Common Name	NYS Rank
<i>Arctium minus</i>	Lesser burdock	
<i>Artemisia absinthium</i>	Common wormwood, Oldman wormwood	
<i>Cichorium intybus</i>	Chicory	NA
<i>Commelina communis</i>	Asiatic dayflower	
<i>Convallaria majalis</i>	European lily-of-the-valley	
<i>Convolvulus arvensis</i>	Field bindweed	NA
<i>Daucus carota</i>	Wild carrot, Queen Anne's lace	NA
<i>Digitaria ischaemum</i>	Smooth crabgrass	
<i>Digitaria sanguinalis</i>	Hairy crabgrass	
<i>Digitaria velutina</i>	Velvet fingergrass	NA
<i>Epilobium parviflorum</i>	Small-flowered hairy willowherb	
<i>Epipactis helleborine</i>	Broadleaf helleborine	L*
<i>Ginkgo biloba</i>	Ginkgo	H
<i>Hemerocaulis fulva</i>	Common daylily	L
<i>Hypericum perforatum</i>	Common St. Johns-wort	L
<i>Lotus corniculatus</i>	Birds-foot trefoil	M
<i>Lychnis flos-cuculi</i>	Ragged robin	NA
<i>Melilotus albus</i>	White sweetclover	NA
<i>Melilotus officinalis</i>	Yellow sweetclover	NA
<i>Phalaris canariensis</i>	Annual canarygrass, Common canarygrass	NA
<i>Phleum pratense</i>	Timothy	M
<i>Robinia hispida</i>	Bristly locust	L
<i>Trifolium repens</i>	White clover	
<i>Tussilago farfara</i>	Coltsfoot	M
<i>Typha x glauca</i>	Hybrid cattail	H
<i>Verbascum thapsus</i>	Common mullein	NA

PATHOGENS		
Scientific Name	Common Name	NYS Rank

TERRESTRIAL INVERTEBRATES		
Scientific Name	Common Name	NYS Rank

VERTEBRATES		
Scientific Name	Common Name	NYS Rank

**NOTES:**

*Digitaria velutina* - Does not appear to occur anywhere close to NY. *D. ciliaris*, Southern crabgrass, reportedly reaches southern NY but is not considered native (NYFA). *D. violascens*, Violet crabgrass, is introduced in N. America but reported from MA (GoBotany).

*Phalaris canariensis* - Evidently occurs in many parts of NY and New England but its current status in LH PRISM is not clear.

*Typha x glauca* – we have decided not to place this species in a Tier because of disagreement in the profession about whether it should be considered native (it is a spontaneous hybrid of two native or potentially native species).

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Common barberry	4	<i>Dipsacus fullonum</i>	4
Common buckthorn	4	<i>Dipsacus laciniatus</i>	2
Common canarygrass	Excluded	<i>Discula destructiva</i>	4
Common daylily	Excluded	Dogwood Anthracnose	4
Common mugwort	4	<i>Drosophila suzukii</i>	4
Common mullein	Excluded	Dutch elm disease	4
Common periwinkle	5	Eel grass	5
Common reed grass	4	<i>Egeria densa</i>	2
Common St. Johns-wort	Excluded	<i>Eichhornia crassipes</i>	2
Common star-of-Bethlehem	5	<i>Elaeagnus angustifolia</i>	2
Common wormwood	Excluded	<i>Elaeagnus umbellate</i>	4
<i>Convallaria majalis</i>	Excluded	<i>Eleutherococcus sieboldianus or pentaphyllus</i>	5
<i>Convolvulus arvensis</i>	Excluded	Elm, Siberian	3
Corktree, Amur	3	Elodea, Brazillian	2
<i>Cornus kousa</i>	5	Elongate hemlock scale	3
<i>Corydalis incisa</i>	2	<i>Elsholtzia ciliata</i>	2
<i>Corydalis solida</i>	5	Emerald ash borer	3
Crabapple, Tea		Empress tree	3
Crabapple, Toringo	3	English ivy	4
Crabgrass, Hairy		<i>Epilobium parviflorum</i>	Excluded
Crabgrass, Smooth	Excluded	<i>Epipactis helleborine</i>	Excluded
Cranberry bush, European	5	<i>Eragrostis curvula</i>	2
<i>Crassula helmsii</i>	1	<i>Euonymus alatus</i>	4
Crested late summer mint	2	<i>Euonymus europaeus</i>	5
Crow-dipper	5	<i>Euonymus fortune</i>	3
<i>Cryphonectria parasitica</i>	4	<i>Euphorbia cyparissias</i>	3
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Cut-leaf blackberry	2	Eurasian boar	1
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<i>Cynanchum louiseae</i>	3	European alder	2
<i>Cynanchum rossicum</i>	2	European barberry	4
<i>Cyperus difformis</i>	1	European cranberry bush	5
Cypress spurge	3	European fire ant	1
<i>Cytisus scoparius</i>	2	European frogbit	2
<i>Daucus carota</i>	Excluded	European gypsy moth	4
<i>Dendroctonus frontalis</i>	2	European lily-of-the-valley	Excluded
<i>Deutzia scabra</i>	5	European spindle-tree (spindle-tree)	5
Dewflower, Marsh	1	European spruce beetle	1
<i>Digitalis grandiflora</i>	5	European wand loosestrife	5
<i>Digitalis purpurea</i>	5	European water-fern	1
<i>Digitaria ischaemum</i>	Excluded	False indigo bush	5
<i>Digitaria sanguinalis</i>	Excluded	Fanwort, Carolina	2
<i>Digitaria velutina</i>	Excluded	Fern, water	1
<i>Dioscorea oppositifolia</i>	2	<i>Ficaria verna</i>	3

Field bindweed	Excluded	<i>Heracleum mantegazzianum</i>	2
Fig buttercup	3	Himalayan balsam	1
<i>Fiorinia externa</i>	3	Hogweed, Giant	2
Five-leaf Akebia	2	Holly, Japanese	5
Five-leaved aralia	5	Honeysuckle, Amur	3
Floating primrose willow	1	Honeysuckle, Japanese	4
Forget-me-not, True	4	Honeysuckle, Morrow's	4
Forget-me-not, Water	4	Honeysuckle, Tartarian	5
Fountain grass	1	Hops, Japanese	3
Foxglove, Purple	5	<i>Houttuynia cordata</i>	5
Foxglove, Yellow	5	<i>Humulus japonicus</i>	3
<i>Frangula alnus</i>	3	Hyacinth, water	2
Frogbit, European	2	<i>Hyacinthoides hispanica</i>	5
Fuki	5	Hybrid cattail	Excluded
Fuller's teasel	4	<i>Hydrilla verticillate</i>	2
Fumewort, Incised	2	Hydrilla	2
Fumewort, Spring	5	<i>Hydrocharis morsus-ranae</i>	1
Fuzzy pride-of-Rochester	5	<i>Hygrophila polysperma</i>	1
Garden yellow-loosestrife	2	<i>Hypericum perforatum</i>	Excluded
Garlic mustard	4	<i>Ilex crenata</i>	5
<i>Geosmithia morbida</i>	1	<i>Impatiens glandulifera</i>	1
<i>Geomyces destructans</i>	4	<i>Imperata cylindrica</i>	1
Giant hogweed	2	Incised fumewort	2
Giant knotweed	5	<i>Ipomoea aquatica</i>	1
Giant reed	2	<i>Iris pseudacorus</i>	4
Giant Salvinia	1	Iris, Yellow	4
Ginkgo	Excluded	Italian arum	2
<i>Ginkgo biloba</i>	Excluded	Japanese angelica-tree	3
<i>Glyceria maxima</i>	1	Japanese barberry	4
<i>Golden raintree</i>	2	Japanese chaff flower	1
Gooseneck yellow-loosestrife	5	Japanese holly	5
Goutweed, Bishop's	3	Japanese honeysuckle	4
Guelder rose	5	Japanese hops	3
<i>Gypsophila paniculate</i>	2	Japanese knotweed	4
<i>Haemaphysalis longicornis</i>	2	Japanese maple	5
Hairy crabgrass	Excluded	Japanese meadowsweet	5
Hairy jointgrass	2	Japanese plum yew	5
<i>Halyomorpha halys</i>	4	Japanese primrose	2
Hardy kiwi	2	Japanese sedge	1
Harlequin glorybower	5	Japanese snowball	2
Heavenly bamboo	1	Japanese snowbell	5
<i>Hedera helix</i>	4	Japanese spirea	2
Helleborine, Broadleaf	Excluded	Japanese stilt grass	4
<i>Hemerocaulis fulva</i>	Excluded	Japanese virgin's-bower	3
Hemlock woolly adelgid	3	Japanese wisteria	2



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 Jointgrass, Hairy 2  
 Jupiter's distaff 2  
 Katsura tree 2  
*Kalopanax septemlobus* 2  
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 Kiwi, Hardy 2  
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 Knotweed, Bohemian 4  
 Knotweed, Giant 5  
 Knotweed, Japanese 4  
*Koelreuteria paniculata* 2  
*Kolkwitzia amabilis* 5  
 Kousa dogwood 5  
 Kudzu 2  
*Lagarosiphon major* 1  
*Lamium galeoboldon* 5  
 Large gray willow 2  
 Large yellow-loosestrife 5  
 Leafy spurge 3  
 Leatherleaf mahonia 2  
*Lepidium latifolium* 1  
*Lespedeza cuneate* 2  
 Lesser burdock Excluded  
 Lesser celandine 3  
 Lesser knapweed 4  
 Lesser periwinkle 5  
 Lettuce, water 1  
*Leucosium aestivum* 5  
*Ligustrum obtusifolium* 3  
*Ligustrum sinense* 2  
 Lily leaf beetle 4  
 Lily-of-the-valley, European Excluded  
 Linden arrowwood 2  
 Linden viburnum 2  
 Locust, Black 4  
 Lotus, Sacred 1  
*Lonicera japonica* 4  
*Lonicera maackii* 3  
*Lonicera morrowii* 4  
*Lonicera tatarica* 5  
 Longhorned tick 2  
 Loosestrife, European wand 5  
 Loosestrife, Garden yellow 5  
 Loosestrife, Gooseneck yellow 5  
 Loosestrife, Large yellow 5  
 Loosestrife, Purple 4  
 Loosestrife, spotted 5  
*Lotus corniculatus* Excluded  
 Lovegrass, Weeping 2  
*Ludwigia adscendens* 1  
*Ludwigia grandiflora ssp. hexapetala* 2  
*Ludwigia peploides* 1  
 Lungwort 5  
*Luzula luzuloides* 5  
*Lychnis flos-cuculi* Excluded  
*Lycorma delicatula* 1  
*Lymantria dispar dispar* 4  
*Lymantria dispar asiatica or Lymantria dispar japonica* 1  
*Lysimachia clethroides* 5  
*Lysimachia nummularia* 4  
*Lysimachia punctate* 5  
*Lysimachia vulgaris* 2  
*Lythrum salicaria* 4  
*Lythrum virgatum* 5  
*Macleaya cordata* 5  
*Mahonia bealei* 2  
*Malus hupehensis* 2  
*Malus sieboldii* 3  
*Malus toringo* 3  
 Maple, Norway 4  
 Maple, Sycamore 3  
 Marsh dewflower 1  
*Marsilea quadrifolia* 1  
 Meadowsweet, Japanese 2  
*Melilotus albus* Excluded  
*Melilotus officinalis* Excluded  
*Microstegium vimineum* 4  
 Mile-a-minute weed 3  
 Mimosa 5  
 Mint, Crested late summer 2  
*Miscanthus sinensis* 2  
 Mole plant 5  
 Moneywort 4  
 Morning-glory, swamp 1

Morrow's Honeysuckle 4	Pear, Bradford 3
<i>Morus alba</i> 4	Peashrub, Siberian 3
Mugwort 4	<i>Pennisetum alepecurioides</i> 1
Mulberry, Paper 2	Pepper-grass, Broad-leaved 1
Mulberry, White 4	Peppervine, Amur 3
Mullein, Common Excluded	<i>Perilla frutescens</i> 2
Multiflora rose 4	Periwinkle, Common 5
<i>Murdannia keisak</i> 1	Periwinkle, Lesser 5
Mustard, Garlic 4	<i>Persicaria perfoliata (Polygonum perfoliatum)</i> 3
<i>Myosotis scorpioides</i> 4	<i>Petasites hybridus</i> 5
<i>Myriophyllum aquaticum</i> 1	<i>Petasites japonicus</i> 5
<i>Myriophyllum heterophyllum</i> x <i>M. laxum</i> 1	<i>Phalaris arundinacea</i> 4
<i>Myriophyllum heterophyllum</i> 2	<i>Phalaris canariensis</i> Excluded
<i>Myriophyllum spicatum</i> 4	<i>Phellodendron amurense</i> 3
<i>Myrmica rubra</i> 1	<i>Phleum pretense</i> Excluded
Naiad, brittle 3	<i>Photinia villosa</i> 2
<i>Najas minor</i> 3	Photinia, Oriental 2
<i>Nandina domestica</i> 1	<i>Phragmites australis</i> 4
Narrowleaf bittercress 3	<i>Phytomyza gymnostama</i> 3
<i>Nasturtium officinale</i> 3	<i>Phytophthora ramorum</i> 1
<i>Nelumbo nucifera</i> 1	<i>Piceacecis abietiperda</i> 5
<i>Neonectria spp</i> 4	<i>Pinellia ternata</i> 5
<i>Nitellopsis obtuse</i> 1	Pine shoot beetle 4
Norway maple 4	<i>Pistia stratiotes</i> 1
Norway spruce shoot gall midge 5	<i>Pityophthorus juglandis</i> 1
<i>Nymphoides peltata</i> 2	Plume poppy 5
Oak forest woodrush 5	Pogoda tree 2
Oak wilt 1	Policeman's helmet 1
Oldman wormwood Excluded	Poplar, White 5
Olive, Autumn 4	Poppy, Plum 5
Olive, Russian 2	<i>Populus alba</i> 5
<i>Operophtera brumata</i> 2	Porcelain berry 3
<i>Ophiostoma spp</i> 4	<i>Potamogeton crispus</i> 3
<i>Oplismenus hirtellus ssp. Undulatifolius</i> 1	Pride-of-Rochester, Fuzzy 5
Orange-eye butterfly-bush 5	Primrose willow, Floating 1
Oriental bittersweet 4	Primrose willow, Uruguayan
Oriental Photinia 2	Primrose, Japanese 2
<i>Ornithogalum umbellatum</i> 5	Primrose, Water 1
Oxygenweed 1	<i>Primula japonica</i> 2
Pale swallowwort 2	Princess tree 3
Paper Mulberry 2	Privet, Border 3
Parrotfeather 1	Privet, Chinese 2
Parsnip, Wild 4	<i>Prunus avium</i> 4
<i>Pastinaca sativa</i> 4	<i>Prunus subhirtella</i> 2
<i>Paulownia tomentosa</i> 3	<i>Pueraria montana</i> 2

<i>Pulmonaria officinalis</i>	5	<i>Schoenoplectiella mucronata</i>	1
Purple beautyberry	2	Scotch broom	2
Purple foxglove	5	Sedge, Asiatic sand	1
Purple keman	2	Sedge, Japanese	1
Purple loosestrife	4	Sedge, Largehead	1
Pygmyweed	1	Siberian elm	3
<i>Pyrrhalta viburni</i>	4	Siberian peashrub	3
<i>Pyrus calleryana</i>	3	Siebold's arrowwood	2
Queen Anne's lace	Excluded	Silk tree	5
<i>R. kalkhoffii</i>	4	<i>Silphium perfoliatum</i>	2
Ragged robin	Excluded	Silver vine	2
Raintree, Golden	2	<i>Sirex noctilio</i>	1
Red imported fire ant	1	Sirex wasp fungus	1
Reed canarygrass	4	Sirex woodwasp	1
Reed manna grass	1	Slender false brome	2
Reed, Giant	2	Small carpetgrass	2
<i>Reynoutria japonica</i> ( <i>Fallopia japonica</i> ,		Small-flowered hairy willowherb	Excluded
<i>Polygonum cuspidatum</i> )	4	Smooth buckthorn	3
<i>Reynoutria sachalinensis</i> ( <i>Fallopia sachalinensis</i> )	5	Smooth crabgrass	Excluded
<i>Reynoutria x bohemica</i> ( <i>Fallopia x bohemica</i> ,		Snowball, Japanese	2
<i>Polygonum xbohemica</i> )	4	Snowflake, Summer	5
<i>Rhamnus cathartica</i>	4	<i>Solenopsis invicta</i>	1
Rhizosphaera needlecast disease	4	Southern pine beetle	2
<i>Rhodotypos scandens</i>	3	Spanish bluebells	5
<i>Robinia hispida</i>	Excluded	Spindle-tree, Climbing	3
<i>Robinia pseudoacacia</i>	4	Spindle-tree, European	5
<i>Rorippa amphibia</i>	5	Spindle-tree, Winged	4
<i>Rosa multiflora</i>	4	<i>Spiraea japonica</i>	2
<i>Rosa rugosa</i>	5	Spiraea, Japanese	2
Rose, Guelder	5	Spotted knapweed	4
Rose, Multiflora	4	Spotted lanternfly	1
Rosinweed	2	Spotted loosestrife	5
Roundleaf chastetree	1	Spotted wing drosophila	4
<i>Rubus laciniatus</i>	2	Spring fumewort	5
<i>Rubus phoenicolasius</i>	4	Spurge, Cypress	3
Russian olive	2	Spurge, Leafy	3
Sacred lotus	1	St. Johns-wort, Common	Excluded
Sage, Sticky	2	Star-of-Bethlehem, Common	5
<i>Salix atrocinerea</i>	2	Star-thistle, Brown	4
Saltcedar	1	Starry stonewort	1
<i>Salvia glutinosa</i>	2	Sticky sage	2
Salvinia, giant	1	Stilt grass, Japanese	4
<i>Salvinia minima</i>	1	Stonewort, starry	1
<i>Salvinia molesta</i>	1	<i>Stratiotes aloides</i>	1
Sapphireberry	2	<i>Styphnolobium japonicum</i>	2



*Styrax japonicus* 5  
Sudden oak death 1  
*Sus scrofa* (excluding *Sus scrofa domestica*) 1  
Summer snowflake 5  
Swallowwort, Black 3  
Swallowwort, Pale 2  
Swamp morning-glory 1  
Swamp stonecrop 1  
Swampweed 1  
Sweetclover, White Excluded  
Sweetclover, Yellow Excluded  
Sycamore maple 3  
*Symplocos paniculate* 2  
*Syringia reticulata* 2  
Tall baby's-breath 2  
Tamarisk 1  
*Tamarix* ssp. (*T. chinensis*, *T. parviflora*, *T. ramosissima*) 1  
Tartarian honeysuckle 5  
Tea crabapple 2  
Tearthumb, Asiatic 3  
Teasel, Fuller's 4  
Teasel, Wild 4  
*Tetropium fuscum* 1  
Thistle, Bull 4  
Thistle, Canada 4  
Thyme, Water 2  
Timothy Excluded  
*Tomicus piniperda* 4  
Toringo crabapple 3  
*Trapa natans* 4  
Tree lilac 2  
Tree-of-heaven 4  
Trefoil, Birds-foot Excluded  
*Trichoferus campestris* 1  
*Trifolium repens* Excluded  
True forget-me-not 4  
*Tussilago farfara* Excluded  
*Typha x glauca* Excluded  
*Ulmus parvifolia* 5  
*Ulmus pumila* 3  
Uruguayan primrose willow 1  
*Vallisneria spiralis* 5  
Variable-leaf watermilfoil 2  
Velvet fingergrass Excluded  
Velvet longhorned beetle 1  
*Verbascum Thapsus* Excluded  
*Viburnum dilatatum* 2  
*Viburnum lantana* 5  
Viburnum leaf beetle 4  
*Viburnum opulus* 5  
*Viburnum plicatum* 2  
*Viburnum sieboldii* 2  
*Vinca minor* 5  
Virgin's bower, Japanese 3  
Virgin's bower, Yam-leaved 3  
*Vitex rotundifolia* 1  
Vitex, Beach 1  
Walnut canker; Thousand cankers disease 1  
Walnut twig beetle 1  
Water chestnut 3  
Water fern, 1  
Water fern, European 1  
Water forget-me-not 4  
Water hyacinth 2  
Water lettuce 1  
Water primrose 1  
Water soldiers 1  
Water thyme 2  
Watercress 3  
Watercress, yellow 5  
Watermilfoil, Broadleaf hybrid 1  
Watermilfoil, Broadleaf 2  
Watermilfoil, Eurasian 4  
Watermilfoil, Variable-leaf 2  
Waterwheel 1  
Wavyleaf basketgrass 1  
Wayfaring-tree 5  
Weeping lovegrass 2  
White clover Excluded  
White mulberry 4  
White-nose syndrome 4  
White pine needle damage 5  
White poplar 5  
White sweetclover Excluded  
Wild carrot Excluded  
Wild chervil 3  
Wild parsnip 4  
Wild teasel 4  
Willow, Floating primrose willow 1



Willow, Large gray 2  
Willow, Uruguayan primrose 1  
Willowherb, small-flowered hairy Excluded  
Wineberry 4  
Winged spindle-tree 4  
Winter creeper 3  
Winter moth 2  
*Wisteria floribunda* 2  
*Wisteria sinensis* 2  
Wisteria, Chinese 2  
Wisteria, Japanese 2  
Woodrush, Oak forest 5  
Wormwood, Common Excluded  
Wormwood, Oldman Excluded  
*Xylella fastidiosa* 3  
Yam, Chinese 2  
Yam-leaved virgin's-bower 3  
Yellow archangel 5  
Yellow foxglove 5  
Yellow watercress 5  
*Zelkova serrata* 5