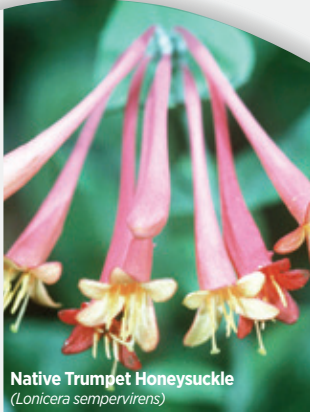


Alternatives to Ornamental Invasive Plants

A SUSTAINABLE SOLUTION FOR NEW YORK STATE



Native Trumpet Honeysuckle
(*Lonicera sempervirens*)



Native Cardinal Flower
(*Lobelia cardinalis*)

Invasive plants have damaged many wild areas of New York State—help protect our natural areas by using native alternatives to invasive ornamentals.



Cornell University
Cooperative Extension

DEFINITIONS

Control means, as appropriate, eradicating, suppressing, reducing, or managing invasive species populations, preventing spread of invasive species from areas where they are present, and taking steps such as restoration of native species and habitats to reduce the effects of invasive species and prevent further invasions.

Ecosystem means the complex of a community of organisms and its environment functioning as an interactive unit.

Free-living State means unconfined and outside the control of a person.

Invasive Species means a species that is nonnative to the ecosystem under consideration, and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. For the purposes of New York State's laws and regulations, the harm must significantly outweigh any benefits.

Native Plant means with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem, or in New York State.

Nonnative Species means a species not indigenous to an ecosystem under consideration or to New York State, and includes an individual specimen.

Part 575 means a new Chapter V, Subchapter C of Title 6 NYCRR (New York Codes, Rules and Regulations) usually cited as: "6 NYCRR Part 575 Prohibited and Regulated Invasive Species".

Prohibited Invasive Species means a species that poses a clear risk to New York's economy, ecological well-being and/or human health as listed as prohibited under 6 NYCRR Part 575 Section 575.3. Except as otherwise provided by Part 575, no person shall knowingly possess with the intent to sell, import, purchase, transport, or introduce any prohibited invasive species.

Regulated Invasive Species means a species that has the potential to cause significant harm to New York's economy, ecological well being and/or human health and could be effectively contained through regulatory programs and is listed as regulated under 6 NYCRR Part 575 Section 575.4. Except as otherwise provided by Part 575, no person shall knowingly introduce into a free-living state or introduce by a means that one knew or should have known would lead to the introduction into a free-living state any regulated invasive species, although such species shall be legal to possess, sell, buy, propagate and transport.

New York is one of many states throughout the U.S. that has taken steps towards improving the environment by reducing the spread of invasive plants. Invasive species are among the top causes of biodiversity loss across the globe.

Horticulturalists and gardeners can be part of the solution by growing and planting alternatives to ornamental invasive plants!

This brochure provides alternative plants which are similar in appearance and cultural requirements as the inva-



**PROHIBITED:
Canada Thistle**

Cirsium arvense

sive plants they are intended to replace. The alternative plants suggested may be native or non-native, but are not considered invasive. These are just a few of many possibilities. The plants listed are hardy in most of New York but check your hardiness zone as well as site conditions and seek additional advice

at your local Cornell Cooperative Extension office (http://cce.cornell.edu/learnAbout/Pages/Local_Offices.aspx). More information on woody alternatives suggested in this publication is available from the searchable database developed by the Cornell Urban Horticulture Institute at: <http://woodyplants.cals.cornell.edu/home>.

The NYS DEC regulations and complete list of prohibited and regulated species can be found at:

<http://www.dec.ny.gov/animals/99141.html>

Check local laws, as some NY municipalities have further restrictions on invasive species.

PROHIBITED Plants with Alternatives

Prohibited Plants

The New York State prohibited plant list consists of 69 invasive plants. As of March 2015, it is illegal to sell, import, purchase, transport, propagate or introduce any prohibited invasive species. Most of the prohibited plants are considered weeds. Listed here are selected Prohibited Plants that have ornamental characteristics and are sometimes cultivated.

*In the following pages, the convention for marking photos of alternative species is: *Native to the United States; **Native to New York State (hybrids and cultivars of native species included)*



PROHIBITED:
Japanese knotweed
Reynoutria japonica

Aquatics

INVASIVE:



Yellow Flag Iris
Iris pseudacorus

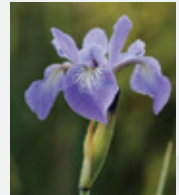
ALTERNATIVES:



White Turtlehead**
Chelone glabra



Japanese Iris
Iris ensata



Blueflag Iris*
Iris versicolor



Cardinal Flower**
Lobelia cardinalis

PROHIBITED Plants with Alternatives

Vines

INVASIVE:



Porcelain Berry
Ampelopsis brevipedunculata

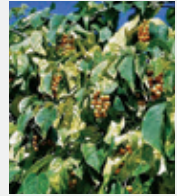
ALTERNATIVES:



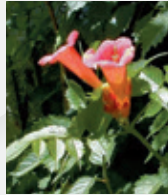
Dutchman's Pipe**
Aristolochia macrophylla



Trumpet Honeysuckle**
Lonicera sempervirens



American Bittersweet**
Celastrus scandens



Trumpet-creeper**
Campsis radicans
(Aggressive spreader)



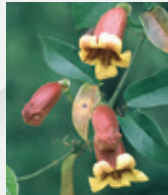
Fox Grape**
Vitis labrusca

INVASIVE:



Japanese Honeysuckle
Lonicera japonica

ALTERNATIVES:



Crossvine*
Bignonia capreolata



Trumpet Honeysuckle**
Lonicera sempervirens



Fox Grape**
Vitis labrusca

PROHIBITED Plants with Alternatives

Trees

INVASIVE:



Japanese Angelica Tree

Aralia elata

ALTERNATIVES:



Pagoda Dogwood**

Cornus alternifolia



Witch Hazel**

Hamemilis virginiana



Staghorn Sumac**

Rhustypkina 'Laciniata'
(Cutleaf cultivar, will spread)

INVASIVE:



Amur Cork Tree

Phellodendron amurense

ALTERNATIVES:



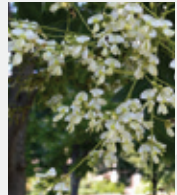
Honeylocust*

Gleditsia triacanthos
var. inermis



Kentucky Coffeetree**

Gymnocladus dioicus



Japanese Pagoda Tree

Styphnolobium japonicum



Hackberry**

Celtis occidentalis

PROHIBITED Plants with Alternatives

Herbaceous Plants

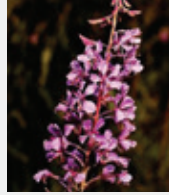
INVASIVE:



Garden and Purple Loosestrif

Lysmachia vulgaris, Lythrum salicaria

ALTERNATIVES:



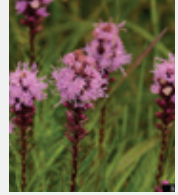
Fireweed**

Chamerion angustifolium



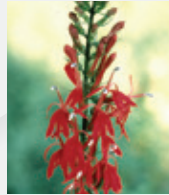
Meadowsweet

*Filipendula purpurea, F. rubra**



Blazing Stars

Liatris spicata, L. aspera



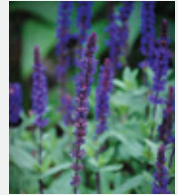
Cardinal Flower**

Lobelia cardinalis



Obedient Plant**

Physostegia virginiana



Perennial Sage

Salvia nemorosa (S. x superba; S. x sylvestris)

INVASIVE:



Golden and Yellow Groove Bamboo

Phyllostachys aurea, P. aureosulcata

ALTERNATIVES:



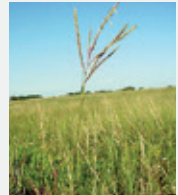
Bottlebrush Buckeye**

(for grove effect)
Aesculus parviflora



Black Willow**

Salix Nigra



Big Bluestem**

Andropogon gerardii



Sugarcane Plumegrass**

Saccharum giganteum

PROHIBITED Plants with Alternatives

Shrubs

INVASIVE:

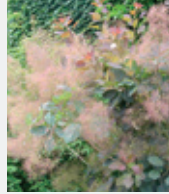


Japanese Barberry

Berberis thunbergii

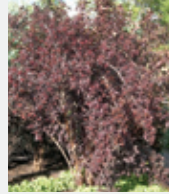
ALTERNATIVES:

For standard purple cultivars of *B. thunbergii*:



Smokebush

Cotinus coggygria
(Purple cultivars)



Eastern Ninebark**

Physocarpus opulifolius
(Purple cultivars)



Weigela

Weigela florida
(Standard purple cultivars)

For yellow or gold cultivars of *B. thunbergii*:



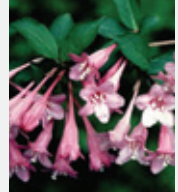
Eastern Ninebark**

Physocarpus opulifolius
'Dart's Gold'



Old Fashioned Weigela

Weigela florida
(Yellow cultivars)



Old Fashioned Weigela

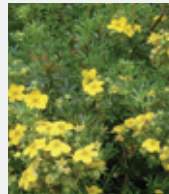
Weigela florida
(Dwarf purple cultivars)

For green cultivars of *B. thunbergii*:



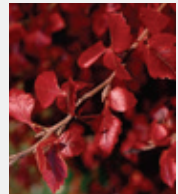
Spicebush*

Lindera benzoin



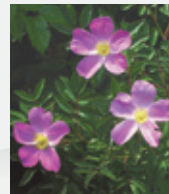
Bush Cinquefoil**

Potentilla fruticosa



Fragrant Sumac**

Rhus aromatica
(Dwarf cultivars)



Virginia Rose**

Rosa virginiana



Weigela

Weigela florida
(Standard purple cultivars)

PROHIBITED Plants with Alternatives

Shrubs

INVASIVE:



Autumn Olive

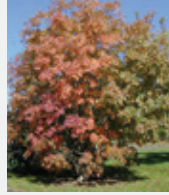
Elaeagnus umbellata

ALTERNATIVES:



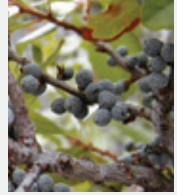
Eastern Baccharis**

Baccharis halimifolia



American Smoketree*

Cotinus obovatus



Northern Bayberry**

Morella pensylvanica



Serviceberry**

Amelanchier canadensis

INVASIVE:



Border Privet

Ligustrum obtusifolium

ALTERNATIVES:



Boxwood

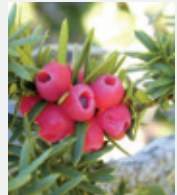
Buxus sp.



Holly

Ilex spp.

*(some species native to U.S.)



Yew

Taxus spp.



American Arborvitae**

Thuja occidentalis



Black Chokeberry**

Photinia melanocarpa

PROHIBITED Plants with Alternatives

Shrubs

INVASIVE:



**Shrub Honeysuckle:
Bellor Fly**

Lonicera x bella



**Shrub Honeysuckle:
Amur**

L. maackii



**Shrub Honeysuckle:
Morrow's**

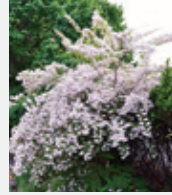
L. morrowii



**Shrub Honeysuckle:
Tartarian**

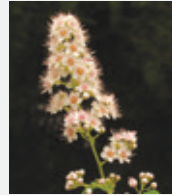
L. tartarica

ALTERNATIVES:



Beautybush

Kolkwitzia amabilis



**White
Meadowsweet****

Spiraea alba



**Nippon or
Vanhoutte
Spirea**

Spiraea nipponica



**Red Osier
Dogwood****

Cornus sericea

REGULATED Plants with Alternatives

Regulated Plants

The NYS DEC regulated list consists of six invasive plants. Regulated species may be possessed, sold, purchased, propagated or transported but may not be introduced into a free-living state (e.g. planted in or adjacent to public lands or waters or natural areas).



Shrubs

INVASIVE:



Winged Euonymus or Burning Bush

Euonymus alatus

ALTERNATIVES:



Blueberry

Vaccinium corymbosum
(in sites with acid soil)



Red or Black** Chokeberry**

Aronia arbutifolia,
Photinia melanocarpa



Gray Dogwood**

Cornus racemosa



Dwarf*, Hybrid*, or Large* Fothergilla

Fothergilla gardenii,
F. x intermedia,
F. major



Witherod Viburnum*

Viburnum nudum
var. *cassinoides*

REGULATED Plants with Alternatives

INVASIVE:



Wintercreeper Euonymus
Euonymus fortunei

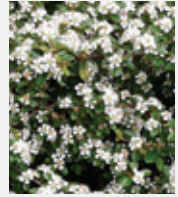
ALTERNATIVES:



Bearberry**
Arctostaphylos
uva-ursi



Sweetfern**
Comptonia
peregrina



Bearberry Cotoneaster
Cotoneaster
dammeri



Allegheny Spurge**
Pachysandra
procumbens



Wild Blue Phlox**
Phlox
divaricata

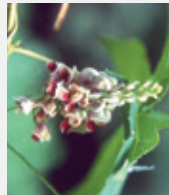
Vines

INVASIVE:



Sweet Autumn Clematis
Clematis
terniflora

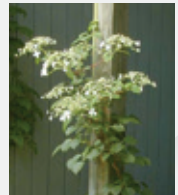
ALTERNATIVES:



Groundnut**
Apios
americana



Virgin's Bower**
Clematis
virginiana



Climbing Hydrangea
Hydrangea
anomala subsp.
Petiolaris

REGULATED Plants with Alternatives

Trees

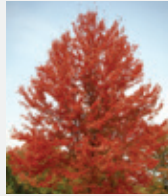
INVASIVE:



Norway Maple

Acer platanoides

ALTERNATIVES:



Freeman Maple**

Acer x freemanii



Sugar Maple**

Acer saccharum



London Planetree

Platanus x acerfolia

For red cultivars of *A. platanoides* including 'Crimson King' consider purple but smaller trees:



Basswood**

Tilia americana



Eastern Redbud*

Cercis canadensis
(Purple cultivars)



Crabapple

Malus 'Royal Raindrops'

INVASIVE:



Black Locust*

Robinia pseudoacacia

ALTERNATIVES:



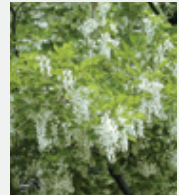
Honeylocust*

Gleditsia triacanthos
var. *inermis*



Hickories**

Carya cordiformis,
C. ovata



Yellowwood**

Cladrastis kentukea



Kentucky Coffeetree*

Gymnocladus dioica

For additional information on appropriate tree selection visit the Urban Horticulture Institute's website. Refer to the site assessment checklist.

Herbaceous Plants

INVASIVE:



**Chinese (Japanese)
Silver Grass or
Maiden Grass**

Miscanthus sinensis

ALTERNATIVES:



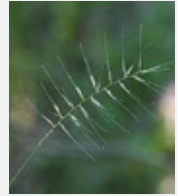
**Feather Reed
Grass**

*Calamagrostis x
acutiflora*



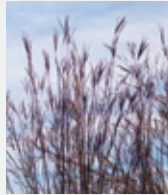
**Korean Feather
Reed Grass**

*Calamagrostis
brachytricha*



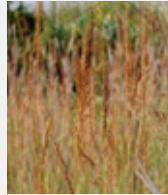
**Bottlebrush
Grass****

Elymus hystrix



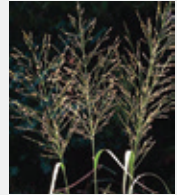
**Big Blue
Stem****

Andropogon gerardi



Indian Grass **

Sorghastrum nutans



Switch Grass*

*Panicum virgatum &
cultivars*

PHOTO CREDITS

COVER: Trumpet Honeysuckle: *Robert H. Mohlenbrock*, USDA SCS;
Native Cardinal Flower: *Thomas G. Barnes*, on USDA NRCS PlantsDatabase.

PROHIBITED AQUATICS SECTION: Yellow Flag Iris: *Nancy Loewenstein*, Auburn University, Bugwood.org; **White Turtlehead:** *Rob Routledge*, Sault College, Bugwood.org; **Japanese Iris:** *Trial Gardens Archive*, University of Georgia, Bugwood.org; **Blueflag Iris:** *Rob Routledge*, Sault College, Bugwood.org; **Cardinal Flower:** *John D. Byrd*, Mississippi State University, Bugwood.org.

PROHIBITED VINES SECTION: Porcelain Berry: *James H. Miller*, USDA Forest Service, Bugwood.org; **Dutchman's Pipe:** Cornell Woody Plant Database; **Trumpet Honeysuckle:** Cornell Woody Plant Database; **American Bittersweet:** Cornell Woody Plant Database; **Trumpet-creeper:** Cornell Woody Plant Database; **Fox Grape:** Cornell Woody Plant Database; **Japanese Honeysuckle:** *Chuck Bergeron*, University of Georgia, Bugwood.org; **Crossvine:** *Jerry A. Payne*, USDA Agricultural Research Service, Bugwood.org; **Trumpet Honeysuckle:** Cornell Woody Plant Database; **Fox Grape:** Cornell Woody Plant Database.

PROHIBITED TREES SECTION: Japanese Angelica Tree: *T. Davis Sydnor*, The Ohio State University, Bugwood.org; **Pagoda Dogwood:** *Jaknouse*, GNU Free Documentation License; **Witch Hazel:** Cornell Woody Plant Database; **Staghorn Sumac:** Cornell Woody Plant Database; **Amur Cork Tree:** *Patrick Breen*, Oregon State University, Bugwood.org; **Honeylocust:** Cornell Woody Plant Database; **Kentucky Coffeetree:** *Jason Sharman*, Vitaltree; **Japanese Pagoda Tree:** Cornell Woody Plant Database; **Hackberry:** *Adam Shaw*, Licensed under Creative Commons.

PROHIBITED HERBACEOUS PLANTS SECTION: Garden and Purple Loosetrife: *Leslie J. Mehrhoff*, University of Connecticut, Bugwood.org; **Fireweed:** *Bonsak Hammeraas*, Bioforsk - Norwegian Institute for Agricultural and Environmental Research, Bugwood.org; **Meadowsweet:** *JC Raulston Arboretum*; **Blazing Stars:** *Becca MacDonald*, Sault College, Bugwood.org; **Cardinal Flower:** *John D. Byrd*, Mississippi State University, Bugwood.org; **Obedient Plant:** *The Dow Gardens Archive*, Dow Gardens, Bugwood.org; **Perennial Sage:** *JC Raulston Arboretum*; **Golden and Yellow Groove Bamboo:** *James R. Allison*, Georgia Department of Natural Resources, Bugwood.org; **Bottlebrush Buckeye:** Cornell Woody Plant Database; **Black Willow:** Cornell Woody Plant Database; **Big Bluestem:** *Chris Evans*, Illinois Wildlife Action Plan, Bugwood.org; **Sugarcane Plumegrass:** *James H. Miller*, USDA Forest Service, Bugwood.org.

PROHIBITED SHRUBS SECTION: Japanese Barberry: *John Ruter*, University of Georgia, Bugwood.org; **Smokebush:** Cornell Woody Plant Database; **Eastern Ninebark:** Cornell Woody Plant Database; **Weigela:** Cornell Woody Plant Database; **Eastern Ninebark "Dart's Gold":** *R. A. Nonenmacher*, Creative Commons Attribution-Share Alike 4.0 International license; **Old Fashioned Weigela (a):** Cornell Woody Plant Database; **Old Fashioned Weigela (b):** Cornell Woody Plant Database; **Spicebush:** Cornell Woody Plant Database; **Bush Cinquefoil:** Cornell Woody Plant Database; **Fragrant Sumac:** Cornell Woody Plant Database; **Virginia Rose:** *Public domain (web)*, original provenance unknown; **Weigela:** Cornell Woody Plant Database; **Autumn Olive:** *James R. Allison*, Georgia Department of Natural Resources, Bugwood.org; **Eastern Baccharis:** Cornell Woody Plant Database; **American Smoketree:** Cornell Woody Plant Database; **Northern Bayberry:** Cornell Woody Plant Database; **Serviceberry:** Cornell Woody Plant Database; **Border Privet:** *Leslie J. Mehrhoff*, University of Connecticut, Bugwood.org; **Boxwood:** Cornell Woody Plant Database; **Holly:** Cornell Woody Plant Database; **Yew:** Cornell Woody Plant Database; **American Arborvitae:** Cornell Woody Plant Database; **Black Chokeberry:** New Brunswick Department of Agriculture and Aquaculture; **Shrub Honeysuckle:** *Bellor Fly: Leslie J. Mehrhoff*, University of Connecticut, Bugwood.org; **Shrub Honeysuckle:** *Amur: John M. Randall*, The Nature Conservancy, Bugwood.org; **Shrub Honeysuckle:** *Morrow's: Leslie J. Mehrhoff*, University of Connecticut, Bugwood.org; **Shrub Honeysuckle:** *Tartarian: Patrick Breen*, Oregon State University, Bugwood.org; **Beautybush:** Cornell Woody Plant Database; **White Meadowsweet:** Cornell Woody Plant Database; **Nippon or Vanhouette Spirea:** *Ethan M. Dropkin*, Cornell Woody Plant Database; **Red Osier Dogwood:** Cornell Woody Plant Database.

REGULATED SHRUBS SECTION: Winged Euonymus or Burning Bush: *Leslie J. Mehrhoff*, University of Connecticut, Bugwood.org; **Blueberry:** *JoJan* in Wikimedia Commons; **Red or Black Chokeberry:** Cornell Woody Plant Database; **Grey Dogwood:** Cornell Woody Plant Database; **Dwarf Hybrid or Large Fothergilla:** Cornell Woody Plant Database; **Withered Viburnum:** Cornell Woody Plant Database; **Wintercreeper Euonymus:** *James H. Miller*, USDA Forest Service, Bugwood.org; **Bearberry:** Cornell Woody Plant Database; **Sweetfern:** Cornell Woody Plant Database; **Bearberry Cotoneaster:** *Père Igor*, GNU Free Documentation License; **Allegheny Spurge:** Cornell Woody Plant Database; **Wild Blue Phlox:** *FritzFlohreynolds*, Wikimedia Commons.

REGULATED VINES SECTION: Sweet Autumn Clematis: *Leslie J. Mehrhoff*, University of Connecticut, Bugwood.org; **Groundnut:** *JC Raulston Arboretum*; **Virgin's Bower:** *SB Johnny*, GNU Free Documentation License, Version 1.2; **Climbing Hydrangea:** Cornell Woody Plant Database.

REGULATED TREES SECTION: Norway Maple: *Leslie J. Mehrhoff*, University of Connecticut, Bugwood.org; **Freeman Maple:** Cornell Woody Plant Database; **Sugar Maple:** Cornell Woody Plant Database; **London Planetree:** Cornell Woody Plant Database; **Basswood:** Cornell Woody Plant Database; **Eastern Redbud:** Cornell Woody Plant Database; **Crabapple:** *JC Raulston Arboretum*; **Black Locust:** *Rob Routledge*, Sault College, Bugwood.org; **Honeylocust:** Cornell Woody Plant Database; **Hickories:** *Tom Nagy*, Licensed under Creative Commons; **Yellowwood:** Cornell Woody Plant Database; **Kentucky Coffeetree:** *Jason Sharman*, Vitaltree.

REGULATED HERBACEOUS PLANTS SECTION: Chinese (Japanese) Silver Grass or Maiden Grass: *James H. Miller*, USDA Forest Service, Bugwood.org; **Feather Reed Grass:** *John Ruter* University of Georgia Bugwood.org; **Korean Feather Reed Grass:** *JC Raulston Arboretum*; **Bottlebrush Grass:** *Bob Routledge*, Sault College Bugwood.org; **Big Blue Stem:** *Jennifer Anderson*, United States, IA, Scott Co., Davenport, Fairmont Cemetery. 2002; **Indian Grass:** *Jennifer Anderson*, United States, IA, Scott Co., Bettendorf, Pigeon Creek Park. 2002; **Switch Grass:** *James H. Miller*, Ted Bodner Southern Weed Science Society Bugwood.org.

Did you know?

Many of the alternative plants are readily available at local nurseries. You can help make the future of New York greener by growing the “native-friendly” plants suggested in this brochure instead of invasive species.

Invasive plants and animals pose a serious threat to some local economies in NY. Expensive invasive plant control measures need to be taken in order to maintain the value and beauty of woodlands, parks, and farms. In addition, tourism can be negatively impacted when invasives crowd out natives and diminish natural beauty of the outdoors.

Cornell Cooperative Extension Invasive Species Programming (CCE ISP)

- Provides high quality science-based invasive species education
- Helps New Yorkers detect, prevent, and control invasive species
- Helps New Yorkers protect our agricultural and natural resources, human and animal health, and economy from invasive species

**To find out more about invasive species in New York visit
NY Invasive Species Information at: www.nyis.info**



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