



**Department of  
Environmental  
Conservation**

# Update on New York State Species Risk Assessment

**Great Lakes Aquatic Nuisance Species Panel Meeting  
May 14, 2019**

## 6 NYCRR Part 575

New York State's Prohibited  
and Regulated Invasive  
Species Regulations



# Legislative Intent and Authorities

- Reduce risk to NYS's environment, economy, and human health posed by invasive plants and animals
- Environmental Conservation Law 9-1705(h)

Process: “A Regulatory System for Non-native Species Final Report 2010” <http://www.dec.ny.gov/animals/63402.html>



# Four Tier System for Species Assessment for List

- List of prohibited invasive species
- List of regulated invasive species
- List of unregulated species
- Procedure for review of non-native species before their use, distribution or release
- Recommendations for legislation, including penalties for violations



# The Process

- Review Committee
- Assessment Tools
- Review Procedure
- Effects of Listing
- Rulemaking Process



# Initial Review

- Five year assessment of 182 plant species through TNC-Long Island Chapter expert team
- Legal review of assessments



# Initial Review Committee

- **State Agencies** – NYSDEC, DOT, Ag & Markets
- **Federal Agencies** – USDA APHIS, NY Sea Grant
- **NGOs** – Trout Unlimited, The Nature Conservancy, Brooklyn Botanic Garden, State University of
- **Industry Groups** - New York Farm Bureau, Pet Industry Joint Advisory Council, New York State Nursery and Landscape Association, Inc.



# Invasiveness Assessment Tool

## New York State Ranking System for Evaluating Non-Native Plant Species for Invasiveness

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February 7, 2012

### INTRODUCTION

A ranking system designed to assess the invasive nature of non-native plant species was developed by The Nature Conservancy (TNC) in New York and the Brooklyn Botanic Garden (BBG) in 2008. Consequences to the native species and natural ecosystems of New York State are the focus of the ranking system. The system can be used to assess the invasive nature of non-native plant species that are established in natural/minimally managed areas in NYS, and also to assess the potential invasiveness of species that are new arrivals or are not yet present. The system is designed to be repeatable, based on the best available science, clearly explained and fully documented. Use of this system has made more analytic and transparent the process of creating lists of invasive species that may be prohibited from sale. Assessment results and documentation should also be useful in prioritizing control efforts, and developing early detection/rapid response species lists.

The NYS Office of Invasive Species Coordination (OISC) and Invasive Species Council (ISC) incorporated the New York State Invasive Plant Ranking System into their 2010 report, A Regulatory System for Non-native Species (NY ISC 2010). The NYS Department of Environmental Conservation is now developing statewide regulations in coordination with the NYS Department of Agriculture and Markets. In addition, results of this work have informed invasive species legislation in Nassau and Suffolk Counties.

### DEFINITIONS

For the purpose of the New York Invasive Plant Ranking System, an invasive plant species is a species that is: "1) nonnative to the ecosystem under consideration, and 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health." (Federal Executive Order 13112, signed in 1999 and adopted by the New York State Invasive Species Task Force in 2005). Further, for purposes of this Invasive Plant Ranking System, invasive plants are non-native species that have spread into native or minimally managed plant systems in New York. These plants cause economic or environmental harm by developing self-sustaining populations and becoming dominant and/or disruptive to those systems.

As defined here, "species" includes all synonyms, subspecies, varieties, forms, and cultivars of that species unless proven otherwise by a process of scientific evaluation. Non-native genotypes of a species (e.g. *Phragmites australis* ssp. *australis*) may be considered separate from the parent species on a case-by-case basis.

	Section categories	Points
1	Ecological impact (4 Questions)	40
2	Biological characteristic and dispersal ability (7 Questions)	25
3	Ecological amplitude and distribution (6 Questions)	25
4	Difficulty of control (3 Questions)	10
<b>Total</b>		<b>100</b>

Relative Maximum Score	Invasiveness	Regulatory Effect
>80.00	Very High	Prohibited
70.00 – 80.00	High	Prohibited
50.00 – 69.99	Moderate	Regulated
40.00 – 49.99	Low	Unregulated
<40.00	Insignificant	Unregulated



# Socio-economic Assessment Tool

## NEW YORK INVASIVE SPECIES SOCIO-ECONOMIC ASSESSMENT FORM

Scientific name: *Berberis thunbergii*<sup>2</sup> USDA Code: BETH  
 Common names: Japanese barberry  
 Native distribution: Japan (to Arnold Arboretum, 1875)  
 Date assessed: March 8, 2010  
 Assessors: G. Robinson, UAlbany  
 Reviewers: \_\_\_\_\_  
 Date Approved: \_\_\_\_\_ Form version date: 04 February 2010

### Purpose

The purpose of this document is to serve as a “tool” for assessing the societal values of potentially invasive species as part of a New York State regulatory system. Title 17 of New York State Environmental Conservation Law Article 9, New York Invasive Species Council, defines: “Invasive species” means a species that is:

- (a) nonnative to the ecosystem under consideration; and
- (b) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. For the purposes of this paragraph, the harm must significantly outweigh any benefits.

Title 17 further requires the development of a system to regulate the “use, distribution or release” of non-native species. The system must balance potential harm against potential benefits.

The “invasivity” value of any non-native species is based on biological traits. Socio-economic values, on the other hand, are based on based on economic, human health, cultural and other social traits. This *Socio-economic Assessment* was developed as part of a sequential process that would require its use only for those species whose biological invasivity assessments rate Moderate (50+) to Very High.

### Using this Form

This *Assessment* should be completed by a multi-disciplinary team that includes both a species-expert and an economist or someone very familiar with the relevant industry or other uses.

When answering the questions below, please identify:

- 1) each of the various stakeholders, using the Reference Worksheet, for which the species has value.
- 2) the economic, human health and cultural uses, and “non-uses, of the species by each stakeholder; Consider whether non-invasive alternatives are available and whether restricting the use of the subject species would create a market for another, non-invasive species?
- 3) the value<sup>3</sup> assigned to the species, or otherwise realized, by each stakeholder for each use, if available.

<sup>2</sup> *Elaeagnus umbellata* NEW YORK NON-NATIVE PLANT INVASIVENESS RANKING FORM

[http://nyis.info/Resources/IS\\_Risk\\_Assessment.aspx](http://nyis.info/Resources/IS_Risk_Assessment.aspx)

<sup>3</sup> SEE: footnote 2.value

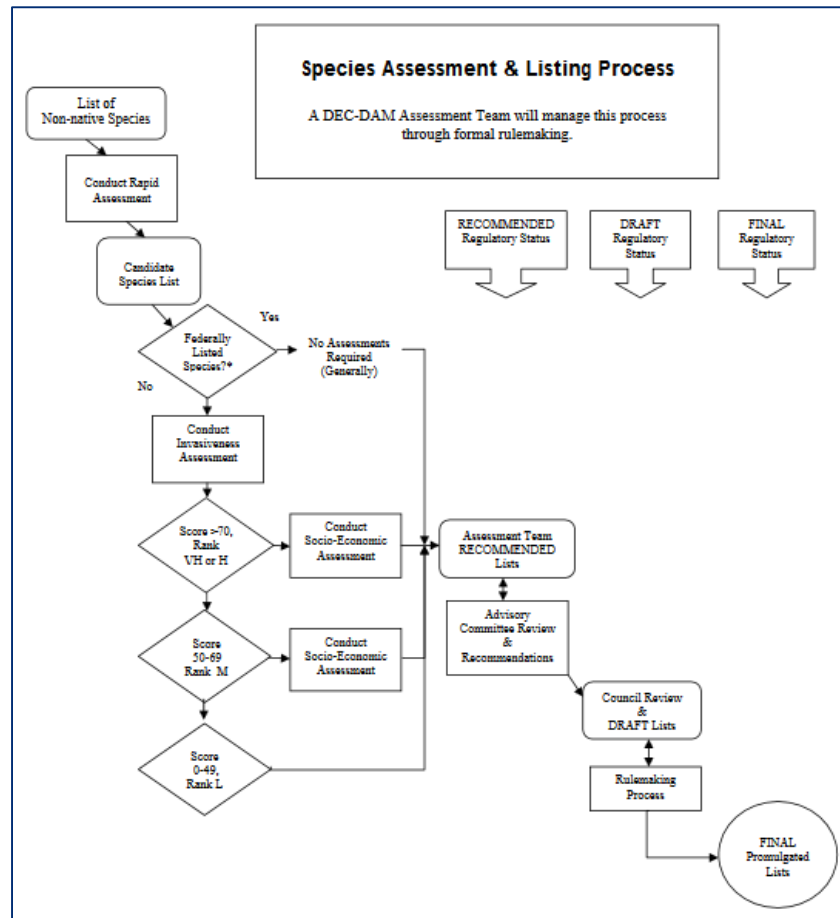
## Socio-Economic Ranking Summary

	Positive Values	Negative Values	Net Score
Economic (Y / N )	50 / 70	- 70 /-70	-20
Human Health (Y / N )	0 / 15	- 10 /-15	- 10
Cultural (Y / N )	10 /15	- 5 /-15	5
Outcome Score	60 / 100	- 85 / -100	-25
Relative Maximum Score †			
Socio-Economic Rank			Insig. Neg.

Relative Maximum Score	Value
>80.00	Very High
70.00 – 80.00	High
50.00 – 69.99	Moderate
40.00 – 49.99	Low
<40.00	Insignificant/Negative

# Review Procedures

- Species Compilation
- Review for Federal Listing
- Invasiveness (Ecological) Assessment
- Socio-economic Assessment
- Submit Recommended Lists
- Regulatory Determination
- Rulemaking



# Rulemaking

- Council promulgates lists through normal State Administrative Procedures Act rulemaking process.
- Comments received during formal public review period are considered by the Council prior to completion of rulemaking.

# The Lists

**Prohibited List-** Species, as set forth in ECL § 9-1705 (5) (h) (i), would be “unlawful to possess, sell, propagate, import, purchase, transport, or introduce except under a permit for disposal, control, research, or education.”

Algae & Cyanobacteria (3)

Plants (69)

Fish (14)

Aquatic Invertebrates (16)

Terrestrial Invertebrates (13)

Vertebrates (6)

Fungi (4)



# The Lists

**Regulated List-** Species would be “legal to possess, sell, buy, propagate, and transport but not be introduced into a free-living state.”

Algae & Cyanobacteria (2)

Plants (6)

Fish (12)

Aquatic Invertebrates (4)

Vertebrates (5)



# The Lists

**Unregulated List** - Species would not be subject to regulation as an invasive species.



# Current Review

Contractors hired to conduct risk assessments

- 2014-2016 Ezra Schwartzberg – animals
- 2014-2016 Matt Peters – plants
- 2018-2019 Randy Westbrooks – plants and animals
  
- Need to assess for contractor bias in scoring using a statistical transformation of data to produce adjusted scores that will highlight species for potential regulation



# Exceptions and Conditions

## Grace Period-

- Rule effective 6 months after finalization

## Permits-

- DEC will issue permits for research, education or other approved activities involving prohibited species
- Regulated species may be released into a free-living state with permit





# Free-living state

- Artificial ponds and water gardens with no outlet to public waters
- Waters entirely within private land not connected to public waters
- Water-use facilities with outflows not providing access to public waters



# Exceptions and Conditions

## Cultivars-

- Primary means of reproduction is not vegetative
- The cultivar is completely sterile
- Cultivar is unable to establish populations



# Labeling and Public Notice

- Labels are required when selling to inform consumers that regulated invasive species are harmful. Must include:
  - “NYS DEC has deemed this plant is an Invasive Species – Harmful to the Environment”
- Information on alternative species
- Instructions for care and tending to prevent spread or introduction
- Written notice must be given to landscaping clients



# Resources

New York State Invasive Species Clearinghouse:

<http://nyis.info/regulated-species/>

NYSDEC Website: <http://www.dec.ny.gov/animals/50121.html>





# Thank you!

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