# All Taxa Invasive Species List New York's Process & Outcomes

- Intent Reduce risk to NYS's environment, economy, and human health posed by invasive species
- New York's Definition Invasive Species are:
- Nonnative to the ecosystem under consideration
- Whose introduction causes or is likely to cause economic or environmental harm or harm to human health.
- Whose harm must significantly outweigh any benefits







### FINAL REPORT

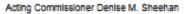
of the

### NEW YORK STATE INVASIVE SPECIES TASK FORCE

Fall 2005



New York State Department of Environmental Conservation





New York State Department of Agriculture and Markets

Commissioner Nathan L. Rudgers

First Recommendation "Establish a permanent leadership structure to coordinate invasive species efforts."

## Outcome

NYS Invasive Species Council & Advisory Committee created through Environmental Conservation Law 9-1705

# NYS Environmental Conservation Law 9-1705 (5)(h) – Roles of the Council

Submit to the legislature and the governor prior to January 1, 2010 a report, produced in consultation with the advisory committee, recommending a four-tier system for nonnative animal and plant species. The system shall contain:

- **1.** A list of prohibited species
- 2. A list of regulated species
- **3.** A list of unregulated species

4. A procedure for the review of a nonnative species before its use, distribution, or release

#### FINAL REPORT

A Regulatory System for Non-Native Species

Prepared by the New York Invasive Species Council

10 June 2010

#### PART I - INTRODUCTION

#### Purpose

This report describes a proposed four-tier regulatory system for preventing the importation and/or release of non-native animal and plant species. This report fulfills the mandate set forth in New York Environmental Conservation Law (ECL) § 9-1705(5)(h), which directs the New York Invasive Species Council (Council) to submit to the Governor and Legislature "a report, produced in consultation with the [invasive species] advisory committee, recommending a fourtier system for non-native animal and plant species." As required by ECL § 9-1705(5)(h), the four-tier system proposed in this report includes (i) a list of prohibited species, which should be unlawful to possess, import, purchase, transport, or introduce except under a permit for disposal, control, research, or education; (ii) a list of regulated species, which should be legal to possess, sell, buy, and transport but not be introduced into a free-living state; (iii) a list of unregulated species which are non-native species that should not be subject to regulation; and (iv) a procedure for the review of a non-native species that is not on the prohibited, regulated, or unregulated lists before the use, distribution or release of such non-native species.

#### Background

ECL § 9-1705 establishes the New York Invasive Species Council. The Council is co-chaired by the Departments of Environmental Conservation and Agriculture and Markets and includes seven other State agencies: Transportation (DOT); Parks, Recreation and Historic Preservation (OPRHP); Education (SED); State (DOS); Thruway Authority (Thruway); Canal Corporation (Canals); and the Adirondack Park Agency (APA). Among other things, the Council is charged with:

"submitting to the legislature and the governor prior to January first, two thousand ten a report, produced in consultation with the advisory committee, recommending a four-tier system for nonnative animal and plant species. The system shall contain:

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

## **Review Committee Representation**

**State Agencies -**



Department of Environmental Conservation

Department of Transportation & Markets

Federal Agencies -



Environmental Groups/Colleges -



Industry Groups -



## Invasiveness Assessment Tool

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

Marilyn J. Jordan<sup>1</sup>, Gerry Moore<sup>2</sup> and Troy W. Weldy<sup>2</sup> <sup>3</sup>The Nature Conservancy, 250 Lawrence Hill Road, Cold Spring Harbor, NY 11724. mjordan@tnc.org <sup>2</sup>Brooklyn Botanic Garden, 1000 Washington Avenue, Brooklyn, NY 11225; now USDA NRCS, 2901 East Lee Street, Suite 2100, Greensboro, NC 27401-4901. Genry Moore@gnb.usda.gov <sup>2</sup>The Nature Conservancy, 195 New Karner Rd., Albany, NY 12205. tweldy@tnc.org

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 nonnative 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 vet 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			
Ecological impact (4	40			
Biological characteristic and dispersal ability (7 Questions) 25				
Ecological amplitude and distribution (6 Questions)				
Difficulty of control (3 Questions)		10		
Total		100		
tive Maximum Score	Invasiveness	Regulatory Effect		
-				

<ul><li>3 Ecological amplitude</li><li>4 Difficulty of control</li></ul>	Questions) 25 10	
Total		100
Relative Maximum Score	Invasiveness	<b>Regulatory Effect</b>
>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:	Fa	rm 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 speciesexpert and an economist or someone very familiar with the relevant industry or other uses. When answering the questions below, please identify:

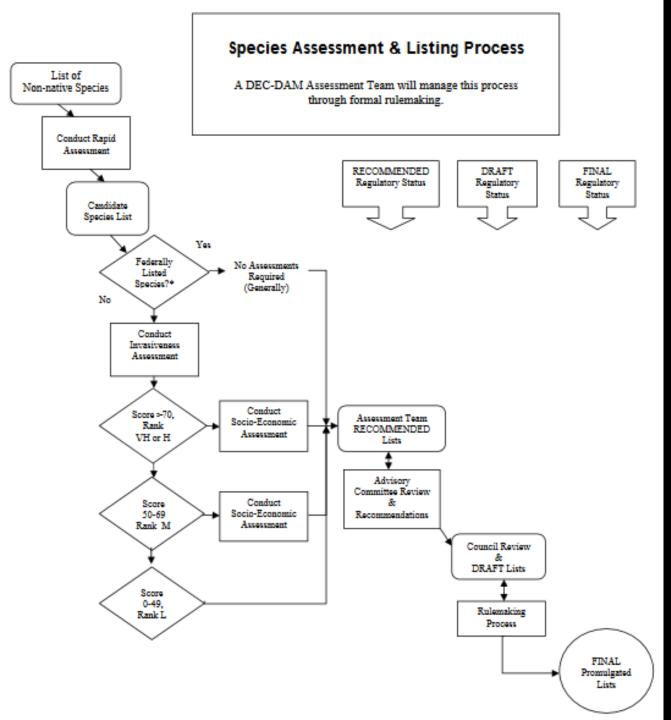
 each of the various stakeholders, using the Reference Worksheet, for which the species has value.

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>2</sup> assigned to the species, or otherwise realized, by each stakeholder for each use, if available.

<sup>2</sup> Elseegnus umbellata NEW YORK NON-NATIVE PLANT INVASIVENESS RANKING FORM http://myis.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	1	Moderate			
40.00 - 49.99		Low			
<40.00		Insignificant/Negative			



## **Review Procedure**

- 1 Species List Compilation
- 2 Federal Review
- 3 Invasiveness Assessment
- 4 Socio-economic Assessment
- 5 Submit Recommended Lists
- 6 Regulatory Determination
- 7 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.

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."

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

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

## Outcomes

- 183 plant assessments conducted by The Nature Conservancy
- 83 animal assessments conducted under contract with Adirondack Research Inc.

### **Prohibited Species**

- Algae & Cyanobacteria (3)
- Plants (69)
- Fish (14)
- Aquatic Invertebrates (16)
- Terrestrial Invertebrates (13)
- Vertebrates (6)
- Fungi (4)

### **Regulated Species**

- Algae & Cyanobacteria (2)
- Plants (6)
- Fish (12)
- Aquatic Invertebrates (4)
- Vertebrates (5)

## **Exceptions & Conditions**

### **Grace Periods**

- Rule effective 6 months after finalization
- One year phase out period for Japanese barberry
- 6 month phase out period for Eurasian Boar

### 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

### Cultivars exempt if upon assessment:

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

## **Regulated Species Exceptions & Conditions**

### **Free-living State Exceptions**

- 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

### Labeling/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 Prohibited and Regulated Invasive** Plants

September 10, 2014















NYS DEPARTMENT OF AGRICULTURE AND MARKETS

### www.nyis.info

### www.dec.ny.gov

### **New York State Prohibited and Regulated Invasive Animals**

September 10, 2014







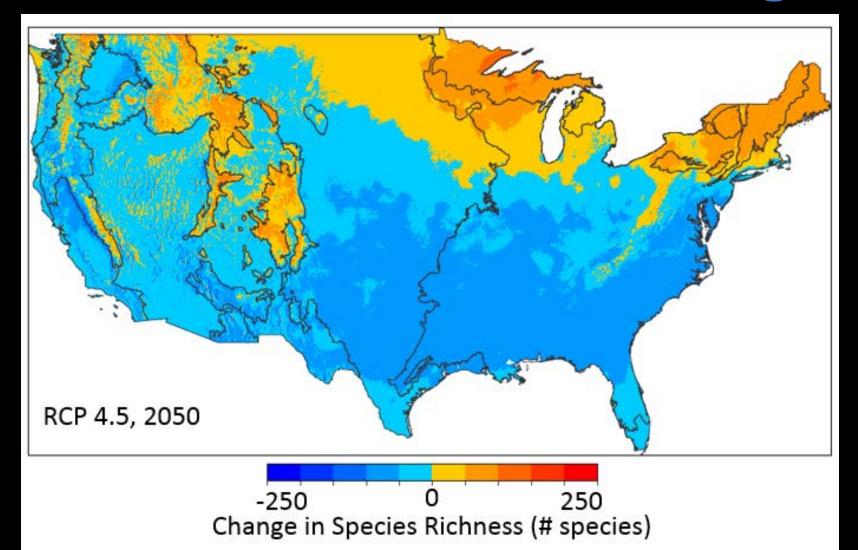






NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# Still To Come – Preemptive Regulation in the Face of Climate Change



## Thank You

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