

NEW YORK INVASIVE SPECIES SOCIO-ECONOMIC ASSESSMENT FORM

Scientific name: _____
Common names: _____
Native distribution: _____
Date assessed: _____
Assessors: _____
Reviewers: _____
Date Approved: _____

Form version date: 3 January 2013

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 assigned to the species, or otherwise realized, by each stakeholder for each use, if available. Please make responses must be species-specific and relevant to New York State. All information used to answer questions must be clearly documented.

Socio-Economic Ranking Summary

	Positive Values	Negative Values	Net Score
Human Health (Y / N)			
Economic (Y / N)			
Cultural (Y / N)			
Outcome Score			
Relative Maximum Score†			
Socio-Economic Rank			

- For questions answered “unknown” do not include point value in “Total Answered Points Possible.”
- If “Total Answered Points Possible” † is less than 70.00 points, then the overall socio-economic value rank should be listed as “Unknown.”

† Calculated as $100(a/b)$ to two decimal places.

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

Highlight those assessments with:
 Significant Positive Outcome 70/-30
 Significant Negative Outcome 30/-70
 Equal Outcome 50/-50

HUMAN HEALTH VALUE OF THE SPECIES:

Is at least one question answerable? If yes, answer and document as well as possible. If No, proceed to next section.

1. Does/ could this species provide benefits to human health, such as providing medicinal values?

- | | |
|---|-----|
| A. No benefit | 0 |
| B. Low benefit (benefits minor, few people utilize) | 5 |
| C. Moderate benefit (benefits moderate, unlikely to be life saving) | 10 |
| D. High benefit (benefits life saving) | 15 |
| U. Unknown | Unk |

Discussion:

Documentation & Sources of Information:

2. Could/ would escaped or released individuals harm people, or could irresponsible use of the species, or its products, pose a threat to human health or safety, such as physical harm, allergic responses, dermatitis, or poisoning?

- | | |
|--|-----|
| A. No risk | 0 |
| B. Low risk (injuries, harm or annoyance minor, few people exposed) | -5 |
| C. Moderate risk (injuries/ harm moderate, unlikely to be fatal, few people at risk) | -10 |
| D. High risk* (injuries or harm severe or fatal) | -15 |
| U. Unknown | Unk |

* Species that pose a high risk to human health must be either Prohibited or Regulated, regardless of any benefits.

Discussion:

Documentation & Sources of Information:

HUMAN HEALTH SUBSCORE:

ECONOMIC VALUE OF THE SPECIES:

Is at least one question answerable? If yes, answer and document as well as possible. If No, proceed to next section.

3. Does/ would this species provide direct economic benefits (sales and jobs translated into dollars) for a particular industry or industries? Are there indirect economic benefits as a result of the presence of this particular species? For example, are real estate values increased because of the presence of this species? Does the species provide shade in urban settings where other less invasive plants are not suitable? Are restaurant/ lodging revenues generated from tourists coming to an area to hunt/ fish/ view a particular nonnative species? Examples: Food, Forage, Fiber, Fuel, Timber, Landscaping, Nursery, Floral, Livestock, Pets, Bait, Recreation, other.

- | | |
|---|-----|
| A. None | 0 |
| B. Low Benefit (benefits minor and temporary) | 30 |
| C. Moderate Benefit (benefits minor and long lasting <u>or</u> major and temporary) | 50 |
| D. High Benefit (benefits major and long lasting) | 70 |
| U. Unknown | Unk |

Discussion:

Documentation / Sources of Information:

4. Does/ would this species generate direct economic costs related to its use or release? Will responses be required for new and existing infestations in unwanted areas? Does/ could the species cause damage to buildings, vehicles, fences, roads, equipment, ornamental gardens, or agriculture, or be considered a nuisance? Does/ would this species generate indirect economic costs such as, public education, modifying standard practices, repairing damage or changing practices and reducing profits? Are real estate values and/or tourism reduced because of the

presence of this species? Examples: Regulatory administration, Inspections and monitoring, Education and outreach, Containment, Eradication, Repair and maintenance, Restoration, other.

- | | |
|--|-----|
| A. None | 0 |
| B. Low Detriment (impacts minor and temporary) | -30 |
| C. Moderate Detriment (impacts minor and long lasting <u>or</u> major and temporary) | -50 |
| D. High Detriment (impacts major and long lasting) | -70 |
| U. Unknown | Unk |

Discussion:

Documentation / Sources of Information:

ECONOMIC SUBSCORE:

CULTURAL VALUE OF THE SPECIES:

Is at least one question answerable? If yes, answer and document as well as possible. If No, proceed to next section.

5. Does/ would this species serve positive cultural purposes? Examples: Religious, Historic/ heritage, Recreation, Aesthetic, other.

- | | |
|---|-----|
| A. None | 0 |
| B. Low Benefit (important to few people) | 5 |
| C. Moderate Benefit (important to moderate # of people) | 10 |
| D. High Benefit (important to a majority of people) | 15 |
| Unknown | Unk |

Discussion:

Documentation & Sources of Information:

6. Does/ would this species reduce or interfere with cultural activities? For example, are recreational activities constrained or aesthetic values diminished because of the presence of this species?

- | | |
|--|-----|
| A. None | 0 |
| B. Low Detriment (impacts few people) | -5 |
| C. Moderate Detriment (impacts a moderate # of people) | -10 |
| D. High Detriment (impacts a majority of people) | -15 |
| U. Unknown | Unk |

Discussion:

Documentation & Sources of Information:

CULTURAL SUBSCORE:

TOTAL SOCIO-ECONOMIC ASSESSMENT SCORE:

Comments:

Were the questions appropriate for the species under consideration? Yes / No

If not, what are the characteristics involved that make the situation unique? Please provide Q & A that would increase its usefulness.

Reference Worksheet

I s s u e	Stakeholder					
	Growers/ Landscapers	Agriculture	Home owners	Recreationists	Natural Resource Managers	
	Economic					
	Health					
	Cultural					

x presence of interest; +, ++, +++ affected positively; -, --, --- affected negatively