

Identifying Relationships Between Invasive Species and SGCNs in the Northeast Region

Scott D. Klopfer
Conservation Management Institute
at Virginia Tech
College of Natural Resources and Environment



Alison Fox-University of Florida

USA 111111

SGCN



Lee Merum, California
Dept. of Fish and Game



Pam Fuller, USGS



Which invasives are the most important...

- Those that impact the most SGCN?
- Those that change ecosystem processes?
- Those listed in the majority of the Northeastern states?

The objective of this project was to gather information to begin to answer these questions and to develop lists for the region and each state.



$$\begin{array}{|c|c|c|c|} \hline \text{S} & \text{S} & \text{S} & \\ \hline \text{I} & 2 & 0 & 1 \\ \hline \text{I} & 0 & 3 & 0 \\ \hline \end{array} \times \begin{array}{|c|c|c|} \hline \text{S} & \text{S} & \text{S} \\ \hline \text{I} & 0 & 0 & 1 \\ \hline \text{I} & 1 & 1 & 1 \\ \hline \end{array}$$

$$S1 = \frac{\# \text{ of SGCN impacted}}{\text{Total \# of SGCN}}$$

Rank	Common Name	Scientific Name
1	Eurasian Water-milfoil	<i>Myriophyllum spicatum</i>
2	Giant Reed	<i>Arundo donax</i>
3	Common Water-hyacinth	<i>Eichhornia crassipes</i>
4	Hydrilla	<i>Hydrilla verticillata</i>
5	Common Frogbit	<i>Hydrocharis morsus-ranae</i>
6	Yellow Iris	<i>Iris pseudacorus</i>
7	Broadleaf Water-milfoil	<i>Myriophyllum heterophyllum</i>
8	Brittle Naiad	<i>Najas minor</i>
9	Common Reed	<i>Phragmites australis</i>
10	Alligator-weed	<i>Alternanthera philoxeroides</i>

1. Compiled a list of SGCNs in the Northeast (terrestrials and fish)
2. Compiled a list of invasive species
3. Created matrices to classify interaction between SGCNs and invasive species by habitat
4. Developed ranking criteria
5. Created ranked lists of the most important invasive species based on those criteria

Products

- General habitat classifications for both SGCN and invasive species
- All base data to permit customized analysis
- Lists of the “most important” invasive species by:
 - Region
 - State
 - SGCN Taxonomic group



SGCN Enemy Number One:
Eurasian milfoil