ILLINOIS INVASIVE PLANT SPECIES COUNCIL Strategic Plan

Structure of the Illinois Invasive Plant Species Council

The Illinois Invasive Plant Species Council (IIPSC) is comprised of two bodies, a "Board" and an "Advisory Committee" and reports to the Aquatic and Terrestrial Nuisance Species Task Force (ATNSTF). The Council has a Chair and a sixteen member Board with voting privileges. The Board is made up of key stakeholders on invasive plant issues with 8 representatives from the commercial or nursery industry and 8 representatives from the natural resources field concerned with habitat restoration efforts. The Board addresses and votes on various issues and activities related to the strategic plan. The Council Chair will only vote when there is a tie among the Board members. The Council Chair presents the Board's decisions to the ATNSFT for their approval and will indicate when there was a tie vote on a particular issue. It is anticipated that the decisions made by the Board will be recorded in minutes and subsequently posted on the IIPSC website after it's been developed.

The Advisory Committee is a non-voting body comprised of experts in invasion biology, land managers, green industry representatives, non-profit organizations, and regional, state and federal agency representatives. The role of the Advisory Committee is to provide advice to the Board on various issues outlined in the IIPSC strategic plan and feedback on the decisions made by the Board.

In order for the IIPSC to function successfully, the Council members will need to actively participate and take leadership roles in achieving the goals, objectives, strategies, and tasks that support the IIPSC's mission. The Board and Advisory Committee will meet periodically at various locations within Illinois.

Definition of "Invasive Plants"

The IIPSC will use the following definition for "invasive plants" [modified from Executive Order 13112, Feb. 3, 1999 from the National Invasive Species Council, Federal Register: Feb 8, 1999 (Volume 64, Number 25)]

"with respect to a particular ecosystem, any species that is not native to that ecosystem, including its seeds, spores, or other biological material capable of propagating that species AND whose introduction does or is likely to cause economic or environmental harm."

IIPSC's Mission:

Minimize the adverse economic and ecological effects that invasive plants pose to the state of Illinois.

The IIPSC will focus on addressing strategies to meet the following four goals of invasive species management to achieve the mission.

Goals

- 1. <u>Prevent</u> harmful intentional and unintentional introductions of invasive plants into *Illinois*
- 2. **Detect** and identify plants that have recently become invasive in Illinois
- 3. **Respond** rapidly to new invasive plants that have been detected in Illinois
- 4. <u>Manage</u> established and spreading invasive plants (eradicate, contain, control) and restore areas affected by their impacts in Illinois

Illinois is in a prime area of the country to be impacted by invasive and exotic species because of its connection to the Great Lakes, Illinois River, Mississippi River, and a road and rail transportation hub. Exotic invasives are reported to cause over \$137 billion of environmental damages and economic losses every year in the United States. They are considered to be a severe and insidious form of environmental pollution. The prevention goal above is first on the list because prevention and early intervention are the most effective and cost efficient approaches to address the economic and ecological impacts of exotic invasive species.

In order to achieve the goals above, there are "essential elements" that are vital to the successful functioning of the IIPSC, such as having adequate funding to accomplish the goals and objectives outlined in this plan, leadership and participation among Council members, cooperation among partners, and coordination of their efforts. The "essential elements" are described first because of their importance in attaining the goals in this plan, followed by sections on invasive plant management. The following objectives, strategies and tasks are critical to accomplishing the goals outlined above. Individual objectives, strategies, and tasks simultaneously address multiple goals.

This plan has been modified from "Idaho's Action Plan for Invasive Species" (January 2005). We would like to acknowledge Idaho's efforts and willingness to allow us to adapt their plan to address Illinois' invasive plant issues.

¹Pimental, D., Lach L., Zuniga R., and Morrison, D. 2000. <u>Environmental and economic costs of non-indigenous species in the United States</u>. BioScience 50(1):53-65.

²McKnight, B.N. 1993. <u>Biological Pollution: The control and impact of invasive exotic species</u>. Proceedings of a Symposium held at Indiana University-Purdue University at Indianapolis Oct. 25&26, 1991.261 pp.

Plan Sections:

Essential Elements:

- 1. Assuring Adequate Funding
- 2. Leadership, Cooperation and Coordination

Invasive Plant Management:

- 3. Early Intervention Prevention, Early Detection, & Rapid Response
- 4. Containment, Control and Restoration
- 5. Reaching Important Audiences through Education
- 6. Develop and Implement an Effective Training Program
- 7. Broadening Knowledge through Research, Technology Transfer, and Data Management
- 8. Creating an Adequate, Effective Legal Structure

Essential Elements:

1. Assuring Adequate Funding:

Objective 1

Identify funding needs and potential sources of funds to meet those needs for achieving invasive plant management in Illinois.

Strategy 1.1

Pursue appropriations from the General Assembly to address the serious issue of invasive plants in Illinois.

Task 1.1.1: Submit new initiative for invasive plants funding.

Task 1.1.2: Review the feasibility of developing an invasive species fund. Consult with Council members, experts and those knowledgeable with developing funds to evaluate options for acquiring revenue to aid in addressing the issue of invasive plants in Illinois.

Strategy 1.2

Identify and prioritize funding needs. Funding needs may include and are not limited to the following:

Research

- o On risk assessment, ecology and management methods Management
 - o To detect, eradicate, contain & control invasive plants
 - o To restore ecologically important areas
 - o To enforce the regulatory structure that manages the threats of invasive plants in Illinois

Education and Outreach

- o To train people to detect invasive plants in a given habitat
- o To prepare and distribute educational materials
- o To train educators
- o To create and maintain an IIPSC web site

Strategy 1.3

Identify all funding sources that might be available for invasive plant management and position Illinois to take advantage of them.

Task 1.3.1: By the end of 2007, have in place an array of funding sources and a strategy for securing them so that invasive plant programs in Illinois are adequately funded.

Task 1.3.2: Restore funds for invasive plant research, education and control.

Strategy 1.4

Create a "cross cut" budget in order to account for invasive plant expenditures in Illinois that includes funds to address invasive plants from all sources and identifies the contributions of all state agencies.

Task 1.4.1: By the end of 2008, be able to more closely estimate expenditures of funds for invasive plants management in Illinois and list their sources.

2. Leadership, Cooperation, and Coordination:

Objective 2

Develop and implement a state approved plan that will lead to the effective coordination of invasive plant programs and efforts in Illinois.

Strategy 2.1

Identify the organizational structure needed within the state to successfully implement the invasive species goals and objectives, including identifying the roles, responsibilities, and lines of authority of state and federal agencies and other key partners.

Task 2.1.1 Enhance the effectiveness of the IIPSC by developing an organizational structure for the Council that will best focus activities toward meeting the plan's goals and objectives. Designate willing Council members to fill the roles needed to attain the goals in this plan.

Strategy 2.2

Identify staffing needs to adequately fill the roles identified in Strategy 2.1, including but not limited to establishing a full time invasive plant species coordinator. The coordinator will be responsible to oversee and coordinate state government programs and act as a liaison with federal agencies and the private sector that address invasives issues.

Strategy 2.3

Prioritize and implement the plan's goals, objectives, strategies, and tasks. Assign willing Council members who will be responsible to lead and participate in efforts toward meeting the plan's goals, objectives, strategies, and tasks. Council members leading particular efforts of the plan should provide the Council with a progress report.

Strategy 2.4

Periodically review and refine the plan as needed to achieve the goals and mission of the IIPSC.

Task 2.4.1: Seek advice from the Council to periodically review and refine the strategic plan, the risk assessment of invasive plant species, and funding opportunities.

Task 2.4.2: Seek consultation with invasive species councils in other states, the federal invasive species council, and others working on invasive plant issues to find new ways that could facilitate addressing invasive plant issues in Illinois.

Strategy 2.5

Investigate the procedure to gain legislative authority for the creation of the IIPSC so that it becomes an official body of state government.

Invasive Plant Management:

3. Early Intervention – Prevention, Early Detection, and Rapid Response:

Objective 3

Establish an effective early intervention program that includes prevention, early detection, and rapid responses to invasive plants in Illinois.

Strategy 3.1

Develop strategies that can help prevent the introduction of invasive plants into Illinois and seek ways to implement those strategies.

Task 3.1.1: Identify the sources through which invasive plants enter Illinois.

Task 3.1.2: Estimate the economic and ecological cost and impact that invasive plant introductions could have in Illinois to illustrate the importance and cost effectiveness of prevention strategies.

Strategy 3.2

Manage invasion pathways.

- **Task 3.2.1**: Identify pathways through which invasive plants enter Illinois.
- **Task 3.2.2**: Identify those who could effectively monitor invasion pathways and be able to detect situations that might allow invasive plants to enter Illinois. Provide adequate personnel, training, tools, and authority to reduce the introduction of invasive plants in Illinois. Also, extend training efforts to include businesses that import nursery stock into Illinois.
- **Task 3.2.3**: Increase surveillance of invasion pathways.

Strategy 3.3

Develop a list of invasive plants that should trigger rapid responses and the actions needed to address those plants.

- **Task 3.3.1:** Prepare and adopt a risk assessment tool for invasive plants that are in Illinois and invasive plants that have a possibility of introduction into the state.
- **Task 3.3.2**: Develop a list of invasive plants and prepare rapid response plans. Rapid response plans will include responses commensurate with the plant's risks and will be used to support rapid response implementation.
- **Task 3.3.3:** Revise the invasive plant list periodically.

Strategy 3.4

Develop a statewide system for early detection of invasive plants.

- **Task 3.4.1:** Develop a network of skilled people to detect, report, and verify invasive plants. A training program and an efficient reporting mechanism will be needed. Utilize opportunities in the Training and Education Section.
- **Task 3.4.2**: Develop a system that quickly notifies the appropriate rapid response person(s) of the detected invasive plant name and detailed location.

Task 3.4.3: Evaluate the success of the early warning/rapid response pilot project in the Chicago region and determine how this project can be modified and expanded to cover the state.

Strategy 3.5

Develop an effective Rapid Response System.

- **Task 3.5.1**: Evaluate the Rapid Response System developed by the Aquatic Nuisance Species program and the revised Comprehensive Management Plan for Aquatic Nuisance Species (when completed) to help with the development of the IIPSC rapid response plans.
- **Task 3.5.2**: Use the rapid response plans to facilitate a quick assessment of the risks of the invasive plant at the location and implement the actions needed.
- **Task 3.5.3**: Provide the rapid response person(s) with the ability to address the invasive plant issue, including and not limited to adequate personnel, tools, and the authority to carry out the actions needed. Utilize opportunities in the containment, control, and restoration, broadening knowledge, and the legal structure sections. Utilize opportunities in the Broadening Knowledge section.

Strategy 3.6

Review existing programs around the world that implement a performance bonding program and assess its feasibility in Illinois.

Strategy 3.7

Evaluate species that are going to be introduced into Illinois or proposed to be used in Illinois for biofuel use as to their potential to become invasive. [Added March 8, 2007]

- **Task 3.7.1**: Prepare and adopt a risk assessment for plants that are going to be grown in Illinois or proposed to be grown in Illinois for biofuel use.
- **Task 3.7.2**: Develop and implement strategies to prevent the use of biofuel plants with a risk of being invasive in Illinois.

Strategy 3.8

Adopt and implement a process that evaluates new plants in the nursery trade as to their risk of being invasive in Illinois. [Added March 8, 2007]

Task 3.8.1: Develop and implement strategies to prevent invasive horticultural plants from becoming established in Illinois.

4. Containment, Control and Restoration

Objective 4

Facilitate efforts to contain and control populations of established invasive plants that threaten ecologically important areas and restore ecosystems to a healthy state.

Strategy 4.1

Set priorities for control work by risk assessments and by selecting ecologically important areas of the state.

Task 4.1.1: By Spring 2007, select ecologically important areas of the state for direct control efforts.

Task 4.1.2: Evaluate information from the risk assessments to determine if there are select plants that warrant state-wide or region-wide control strategies. Develop and support strategies accordingly.

Strategy 4.2

Support direct control efforts and restoration in selected ecologically important areas.

Task 4.2.1: Identify existing and additional personnel needed to accomplish effective direct control and restoration efforts and assist in securing funding to achieve those efforts.

Strategy 4.3

Where needed, develop programmatic NEPA analyses and decisions to speed control and eradication efforts for federal projects and on federal lands.

Task 4.3.1: Review whether it would be useful for federal agencies to complete NEPA analyses in advance for the species and locations most likely to be infested to minimize the time between detection and action for federal partners.

Task 4.3.2: Complete any programmatic NEPA analyses for federal lands, operations and high risk species where there is agreement that "advance" NEPA clearances would speed control or eradication efforts.

Strategy 4.4

Encourage control efforts in areas outside of the ecologically important areas such as roadsides, agriculture, and invasion pathways.

5. Reaching Important Audiences through Education:

Objective 5

Reach important audiences through education on the risks posed by invasive plants.

Strategy 5.1

Identify specific key audiences and create targeted communications tools to reach them.

- **Task 5.1.1**: Quantify the detrimental impact of invasive plants, including identifying and assessing the cost and impact of invasive plants to agriculture, landscaping, and conservation in Illinois.
- **Task 5.1.2**: Prepare a list of noninvasive alternative plants that could be provided to the public.
- **Task 5.1.3**: Identify present programs and outreach efforts that are addressing the invasive species issue.
- **Task 5.1.4**: Identify those key audiences, including the General Assembly, that can be most influential in addressing invasive plant species policy and by the end of 2007 develop a full array of specific communication tools to reach each of them.
- **Task 5.1.5**: Develop a communication strategy that would include educational material targeting the key audiences of the public, natural land managers, commercial plant sellers, and landscapers on the techniques, dangers and costs of eradicating, containing, and controlling invasive plants.
- **Task 5.1.6**: Implement communication strategy by 2008.

6. Develop and Implement an Effective Training Program:

Objective 6

Develop and implement an effective training program that supports this plan's strategies and tasks.

Strategy 6.1

Cross-train agency and industry personnel to recognize and report possible invasions.

Task 6.1.1: Train those who could effectively monitor invasion pathways and be able to detect situations that might allow invasive plants to enter Illinois. Complete a curriculum for such training by 2008. This training curriculum will be an important first step to the prevention, early detection, and rapid response section.

Strategy 6.2

Provide land managers and private landowners with training in plant identification and Best Management Practices (BMPs) to control invasive plants.

Task 6.2.1: Develop training curricula and training opportunities.

Strategy 6.3

Use the expertise of the Extension Service to help support the actions outlined in the "education and training" provisions of this plan.

7. Broadening Knowledge through Research, Technology Transfer, and Data Management:

Objective 7

Broaden knowledge through research, technology transfer, and data management.

Strategy 7.1

Identify existing research programs on invasive plants and research gaps and set priorities for further research needs.

Task 7.1.1: Encourage academic research toward those species and issues that either pose the highest risks or have already exacted a high economic or environmental price. The Council should do a regular collaborative review of ongoing or proposed research.

Strategy 7.2

Investigate the ecology and management of invasive plants through research. This may include taxonomy (e.g. identification and biogeography), ecology (e.g. autecology, demography and community interactions with invasive plants), and optimal management methods (e.g. mechanical, chemical and biological control, integrated management, and buffer zones around key threatened habitats).

Strategy 7.3

Create and regularly update a statewide database and map that illustrates known and new or spreading invasions to track invasive plants in Illinois.

Strategy 7.4

Develop and maintain an IIPSC website that serves as a clearinghouse for invasive plant efforts in Illinois and supports implementation of the goals of this plan. Information on the website may include the invasive plant list, plant identification, risk assessment, ecology, and optimal management methods; early detection reporting mechanism and rapid response plans; research data; education and outreach tools; funding resources; a state-wide database and map for tracking invasive plants; and past and present control efforts.

Task 7.4.1: Catalog past and present control efforts for invasive plants (e.g. kudzu and autumn olive). Discuss strategies used for control and their effectiveness.

8. Creating an Adequate, Effective Legal Structure:

Objective 8

Create an adequate, reasonable, and effective regulatory structure to manage the threats of invasive plants in Illinois.

Strategy 8.1

Create an adequate, reasonable, and effective legal structure that addresses the problem of invasive plants.

Task 8.1.1: Review Illinois' current invasive plant laws and change as necessary.

Strategy 8.2

Work to change legislation to ensure that the agencies that interact with invasive plants and invasion pathways have the authority to effectively deal with them.

Task 8.2.1: Work with the Governor's Office and the appropriate agencies to coordinate authorities so that all agencies that regulate transportation, commerce or natural resource management have adequate abilities to control high risk situations and shipments. This will require some changes in state law that should be completed by the end of the 2007 legislative session.

Strategy 8.3

Work on legislation that would ensure that all appropriate agencies have emergency powers so that they can immediately address hazardous situations that might allow the introduction and spread of invasive species.

Task 8.3.1: Review and update the emergency powers by the end of the 2007 legislative session.

Strategy 8.4

Create a regulatory structure that would be based on species risks.

Task 8.4.1: Be able to expend resources on those species where the risks of invasion, spread and damages are the highest. By the end of 2007, have a scientifically based process for rapid assessment of risks for a wide variety of invasive plants as a platform for a regulatory system based on those risks.

Task 8.4.2 Evaluate if a legal framework for different categories of risk would be effective in Illinois.

Strategy 8.5

Consider enactment of a comprehensive invasive plant species law.

Task 8.5.1: The foregoing measures will all require some type of legislative action. In addition, creation of a statewide invasive species coordinator might best be accomplished through legislation. Such a package should be developed for the 2007 legislative session.

Strategy 8.6

Encourage proactive self-regulation of activities that could introduce and spread invasive plants (e.g. green industry, recreational activities, etc.).