

The St. Louis Codes of Conduct: Providing a Framework to Prevent Invasions from Horticulture

Sarah Reichard

University of Washington Botanic Gardens

reichard@u.washington.edu



Outline

- How were the Codes of Conduct developed?
- The Findings and Guiding Principles
- Codes for Public Gardens and how they were implemented at UWBG

Codes of Conduct

The St. Louis Declaration

- Nursery professionals
- Botanical gardens and arboreta
- Gardening public
- Landscape architects
- Government



<http://www.centerforplantconservation.org/invasives/>

Steps

- Assembled nearly 100 invited attendees
- Series of lectures
- Discussion of findings and guiding principles
- Horticultural groups met individually
- Presented codes to general assembly
- Considered comments
- Ask trade organizations for endorsement
- Now working on implementation

Findings

- People are the major dispersers of plants and the current magnitude of dispersal is unprecedented

Findings

- People are the major dispersers of plants and the current magnitude of dispersal is unprecedented
- Plant introduction and improvement brings diversity to food, landscapes, and medicine

Findings

- People are the major dispersers of plants and the current magnitude of dispersal is unprecedented
- Plant introduction and improvement brings diversity to food, landscapes, and medicine
- A small proportion of introduced species become invasive and have unwanted impacts

Findings

- People are the major dispersers of plants and the current magnitude of dispersal is unprecedented
- Plant introduction and improvement brings diversity to food, landscapes, and medicine
- A small proportion of introduced species become invasive and have unwanted impacts
- Species invasions can be regional in nature, but the impacts may be far removed from the site of introduction

Guiding Principles

- Plant introduction should be done in a way that minimizes harm

Guiding Principles

- Plant introduction should be done in a way that minimizes harm
- Efforts must be national in scope, but with a regional perspective

Guiding Principles

- Plant introduction should be done in a way that minimizes harm
- Efforts must be national in scope, but with a regional perspective
- Prevention and early detection are important

Guiding Principles

- Plant introduction should be done in a way that minimizes harm
- Efforts must be national in scope, but with a regional perspective
- Prevention and early detection are important
- Professional training and education are essential

Guiding Principles

- Plant introduction should be done in a way that minimizes harm
- Efforts must be national in scope, but with a regional perspective
- Prevention and early detection are important
- Professional training and education are essential
- Solutions must include broad-based teams

Guiding Principles

- Plant introduction should be done in a way that minimizes harm
- Efforts must be national in scope, but with a regional perspective
- Prevention and early detection are important
- Professional training and education are essential
- Solutions must include broad-based teams
- All tools, esp. codes of conduct are important

Codes for Public Gardens

- Conduct an institution-wide review examining all departments and activities that provide opportunities to stem the proliferation of invasive species and inform visitors.



Codes for Public Gardens

- Avoid introducing invasive plants by establishing an invasive plant assessment procedure

Codes for Public Gardens

- Consider removing invasive species from plant collections. If a decision is made to retain an invasive plant, ensure its control and provide strong interpretation to the public explaining the risk and its function in the garden.



Codes for Public Gardens

- Consider removing invasive species from plant collections. If a decision is made to retain an invasive plant, ensure its control and provide strong interpretation to the public explaining the risk and its function in the garden.



Codes for Public Gardens

- Seek to control harmful invasive species in natural areas managed by the garden and assist others in controlling them on their property, when possible.



Restoration Ecology Network



Codes for Public Gardens

- Promote non-invasive alternative plants, help develop non-invasive alternatives through plant selection or breeding.

Codes for Public Gardens

- If your institution participates in seed or plant distribution, including through *Index Seminum*, do not distribute known invasive plants except for bona-fide research purposes, and consider the consequences of distribution outside your biogeographic region. Consider a statement of caution attached to species that appear to be potentially invasive but have not been fully evaluated.

Invasives Statement

The University of Washington Botanic Gardens is concerned about the impact of alien plant introductions on local native plant populations. Those species followed by an asterisk (*) have been reported to naturalize in some regions of the world. It is assumed that institutions or individuals receiving seed will take appropriate steps to evaluate the invasive potential of all plant introductions.

Codes for Public Gardens

- Increase public awareness about invasive plants. Work with the local nursery and seed industries to assist the public in environmentally safe gardening and sales.

Washington Project Partners

- Washington State Nursery and Landscape Assc.



- University of Washington



- The Nature Conservancy



Overview

- Asked five nurseries to not order or reorder 5 species



Overview

- Asked five nurseries to not order or reorder five species
- Developed alternative lists

Alternatives

- Determine desirable attributes
- Identify non-invasive alternatives for each attribute



Buddleja davidii



Solanum crispum 'Glasnevin'



Physocarpus capitatus

Overview

- Asked five nurseries to not order or reorder 5 species
- Developed alternative lists
- Put the lists and photos on a web page for downloading (www.invasivespeciescoalition.org/gardenplants/)
- Asked them to track sales of invaders and alternatives

Results

Buddleja davidii

| '04 Sales | '05 Sales* | '04 Alternatives | '05 Alternatives |
|-----------|------------|------------------|------------------|
| 245 | 68 | 1108 | 1252 |

All data from
pooled results –
individual
nurseries may
not have seen
the same trend



*2005 sales figures are adjusted based on overall nursery sales

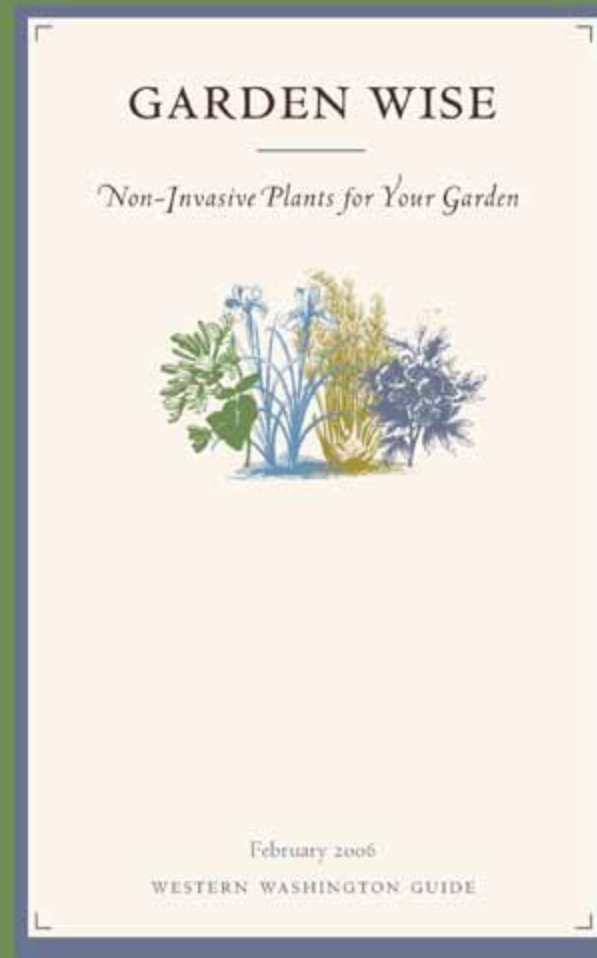
Overview

- Asked five nurseries to not order or reorder 5 species
- Developed alternative lists
- Put the lists and photos on a web page for downloading (www.invasivespeciescoalition.org/gardenplants/)
- Asked them to track sales of invaders and alternatives
- List of questions for nurseries

Questions

1. # times a customers asked for one of the 5 invasive plants. - 100
2. # times you suggested alternatives to one of the 5 invasive plants. - 95
3. # times you succeeded in selling an alternative you suggested - 66
4. # times a customer discussed alternative and purchased invasive plant or indicated an intention to do so. - 23
5. # times a customer had a positive, appreciative attitude to discussion of substitution. - 82
6. # times a customer had a negative attitude to the discussion of substitution. – 10
7. # times a customer discussed alternatives and left without buying anything - 7

Moving Forward



Codes for Public Gardens

- Participate in developing, implementing, or supporting early warning systems for immediate reporting and control.
Participate also in the creation of regional lists of concern.



Codes for Public Gardens

- Botanical gardens should try to become informed about invasiveness of their species in other biogeographic regions

Codes for Public Gardens

- Become partners with other organizations in the management of harmful invasive species.

Codes for Public Gardens

- Follow all laws on importation, exportation, quarantine, and distribution of plant materials across political boundaries, including foreign countries.

Codes of Conduct Nursery Professionals

1. Ensure that invasive potential of new introductions is assessed
2. Work collaboratively to identify current and potential invasives in your region
3. Develop and promote alternatives
4. Phase out existing stock of agreed-upon invasive species
5. Follow all laws across political boundaries
6. Encourage customers to use and garden writers to promote non-invasive plants

Endorsed by ANLA and 19 state and regional nursery and landscape asscs.

Conclusion

- Codes of conduct provide a framework for groups to address the best practices for their discipline
- They also provide opportunities for ecologists to engage them in a positive conversation