

## 2024 PDDC Plant Disease Talks

### Plant Disease Management by Design

Preventing Plant Disease Problems  
During the Landscape Design Process

Brian D. Hudelson

Department of Plant Pathology

University of Wisconsin-Madison/Extension



### Plant Disease Management by Design Observations

- Potential disease issues abound in landscape settings
- Some issues develop soon after planting; others take years to manifest
- Some issues are preventable
- More sustainable landscapes are possible



### Plant Disease Management by Design What to Consider

- Site Evaluation
- Plant Selection
- Plant Installation
- Post-Installation Care



### Plant Disease Management by Design Site Evaluation

- Check for a history of severe diseases.



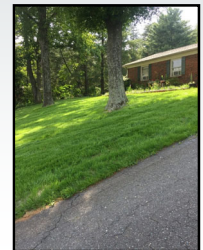
### Plant Disease Management by Design Site Evaluation

- Learn the cropping history of the site.



### Plant Disease Management by Design Site Evaluation

- Check for any topological oddities.



### Plant Disease Management by Design Site Evaluation

- Evaluate soil characteristics.



### Plant Disease Management by Design Site Evaluation

- Check the soil pH.



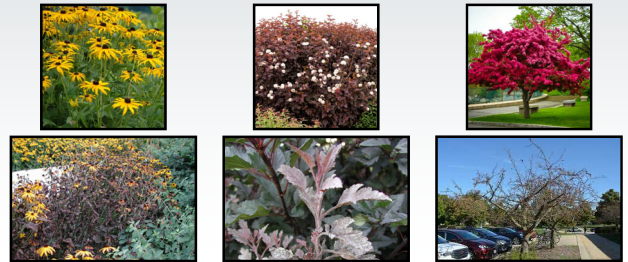
### Plant Disease Management by Design Plant Selection

- Avoid certain plant species.



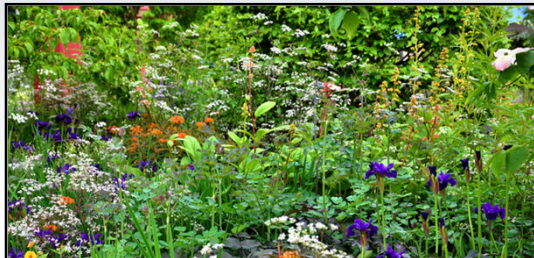
### Plant Disease Management by Design Plant Selection

- Avoid certain plant varieties.



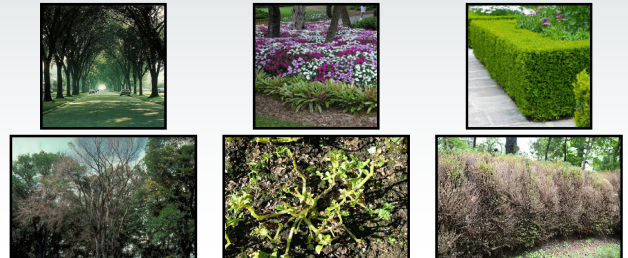
### Plant Disease Management by Design Plant Selection

- Diversify your plant palette.



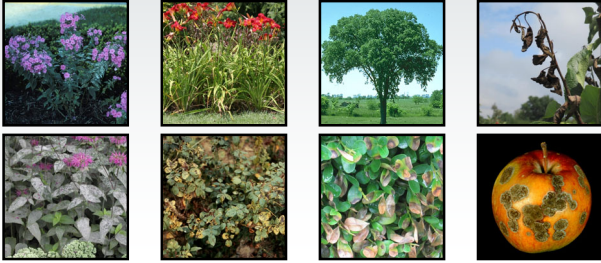
### Plant Disease Management by Design Plant Selection

- DO NOT plant monocultures.



### Plant Disease Management by Design Plant Selection

- Consider using resistant varieties.



### Plant Disease Management by Design Plant Selection

- But, realize that resistance has limits.



### Plant Disease Management by Design Plant Selection

- Diversify resistance wherever possible.



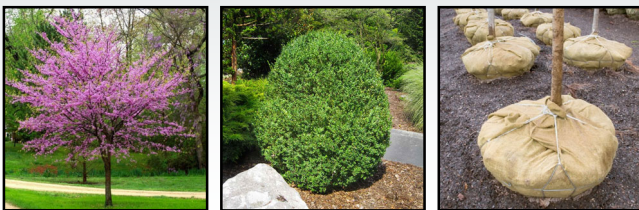
### Plant Disease Management by Design Plant Selection

- Consider plant provenance.



### Plant Disease Management by Design Plant Selection

- Consider buying locally produced plants.



### Plant Disease Management by Design Plant Selection

- Start with pathogen-free plants.



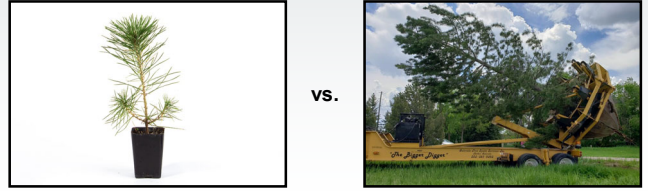
### Plant Disease Management by Design Plant Selection

- Avoid problematic plant pairings.



### Plant Disease Management by Design Plant Selection

- Plant small.



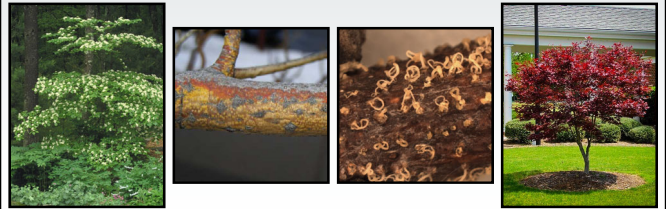
### Plant Disease Management by Design Plant Selection

- Use bare root woody plants if possible.



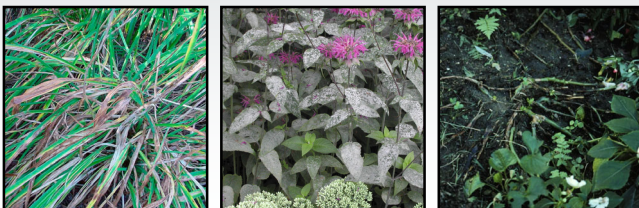
### Plant Disease Management by Design Plant Installation

- Site plants properly.



### Plant Disease Management by Design Plant Installation

- Optimize plant spacing.



### Plant Disease Management by Design Plant Installation

- Modify soil as needed.



### Plant Disease Management by Design Plant Installation

- Prepare plants properly for planting.



### Plant Disease Management by Design Plant Installation

- Mulch properly.



### Plant Disease Management by Design Plant Installation

- Rotate annual bedding plants.



### Plant Disease Management by Design Post-Installation Care

- Water properly.



### Plant Disease Management by Design Post-Installation Care

- Water adequately.



### Plant Disease Management by Design Post-Installation Care

- Prune, thin, and divide as needed.



### Plant Disease Management by Design Post-Installation Care

- Control weeds.



### Plant Disease Management by Design Post-Installation Care

- Have a good yearly clean up plan.



### Plant Disease Management by Design Putting It All Together

- Disease issues can be common and sometimes serious in landscape settings
- Many diseases can be addressed during the design process, yielding more sustainable landscapes
- DO NOT expect perfection
- Design to so that clients enjoy their landscapes (including the diseases)

### Plant Disease Management by Design Where to Go for Help

Plant Disease Diagnostics Clinic  
Department of Plant Pathology  
University of Wisconsin-Madison  
1630 Linden Drive  
Madison, WI 53706-1598  
(608) 262-2863  
pddc@wisc.edu  
<https://pddc.wisc.edu>  
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