



Turning a New Leaf Conference
Shepherdstown, West Virginia
November 16, 2013

Track C: Flora and Fauna: Applying Ecology to Design

Session C.2 Maintaining Curb Appeal with Native Plants. Douglas Tallamy, Chair, Department of Wildlife and Ecology, University of Delaware, Newark

Plants matter. “Support a diverse food web” is central message as bulk of native plant communities have been replaced by novel ecosystems. It’s not simply a design questions; it’s about what designs must accomplish to save biodiversity.

What does the design have to accomplish? “The nation behaves well if it treats its natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.” – Theodore Roosevelt. We have not treated biodiversity as an important asset.

We could preserve native plant communities when we develop. Why do we eliminate plants and create artificial situations? Simple landscapes are neat and safe. Complex landscapes are scary! We also love order because order helps us to make sense of life. Put neat and order together, get typical landscape – short lawn, few plants.

To help us rationalize these feelings we have created urban legends about native plants. Messy, not attractive, can’t be formal, will be destroyed by insects, attract vermin, are not as pretty, will be scorned by neighbors, too expensive.

We have been taught native plants are not for landscaping. We have come to see plants only as decorations so we have made horticulturists the stewards of our landscapes. They are artists and their medium is the garden. Analogy: as if landscapes were houses created by wallpaper.

Ecologists are scientists and their goal is to understand function. Conservationists want to preserve function. There is no debate about whether we need to improve eco-function in our landscapes; need to produce eco-services where we live.

Can beautiful landscapes be functional? And can we learn to find beauty in function? YES!

Do native landscapes have to be messy and wild? What if just stop mowing the lawn? We will get a tall European plant. It’s not just letting things get overgrown, not the absence of landscaping (mowing lawn short is absence of landscaping). We must landscape for life: more native species; more plants.

LANDSCAPING FOR CURB APPEAL

“Curb appeal” is the mechanism for the yard to sell the house for the real estate agent -- see house from street; manicured. But it has nonliving plant communities, so essentially a dead landscape.

Increase the amount of plants in residential landscapes by:



Turning a New Leaf Conference
Shepherdstown, West Virginia
November 16, 2013

- Reducing the lawn
- Creating landscape layers;
- Planting densely;
- Favoring plants communities that work together over specimen plants.

Create natural communities.

REDUCE THE LAWN!

- Biggest challenge as it is one of the biggest status symbols in this county. Big lawn signals wealth.
- Reducing lawn in the back yard should be easy. Lawn will no longer be the default landscape. Turf grass as path through heavily planted landscape. Reduce your lawn to manicured paths to guide us through a planted landscape. This could become the new backyard paradigm.
- Plant under trees, create large beds around the specimen trees and add in plants in communities. Preserve leaf litter, not mown right up to tree. Soil not compacted. Source of fertilization, sources of moisture, fosters mycorrhizal activity.
- Use lawn as a 'beauty strip' next to planted forested landscape
- Using plants to build outdoor rooms also reduces lawn. Define rooms outside as you do inside.
- Woody plants define the outdoor rooms. Built with structural plants (trees and shrubs). Design the shape of the room first (area in lawn) then build walls with woody plants and the floor with ground covers. Private, cozy, inviting!
- Woody plants (walls of outdoor rooms) support more animals than herbaceous plants. See Tallamy's list created of all plant genera that occur in Mid Atlantic naturally and invasives, and what Lepidoptera species they support. Oaks number 1, many that support 0.
- Derecho took down specimen trees. Trees in forest have interlocked roots. 2 big trees 3 feet apart. Not as big as specimen trees but work together, roots interlock and don't blow over.
- Ground covers – think about it. In a 'mast' year (heavy acorn production) there will be a ground cover of white oaks, waiting for parent tree to fall over; then 1 or 2 will make a dash for the sun.
- Reduce lawn in front yard
 - Use plants to frame the view to and from the house.



Turning a New Leaf Conference
Shepherdstown, West Virginia
November 16, 2013

- Use structural plants, frame the view focused on the part of the house you want to project.
 - Frame the view from inside the house also by framing the view outside the windows.
 - Okay to have plants close to the house, and then can view the wildlife that comes to visit
- Minimize specimen plantings. There is a place for that but it should not be the only option. It's a classic decoration versus a community of trees planted to work together

CREATE LAYERED LANDSCAPES

- Control how energy flows in your landscape with trees – wind, heat, etc.
- Natural ecosystems are as heterogeneous
- Yet we treat our landscapes as if they were only two dimensional: house, lawn
- Creating plantings that have vertical heterogeneity restores the niches that have been missing from our managed ecosystems.
- Live in the desert if you don't want plants. Here, grow eastern communities.
- Eliminate lawn on slopes; e.g., grass right down to the water so as not to block the view. Myth that ditch can't be vegetated as it will block water flow.
- Transition zone between water and land is great place for biodiverse plantings. Geese won't use pond-side unless short grass.
- Solution – create a meadow between the windows and the pond to preserve view but reduce runoff into the water.

PLANT DENSELY

- If you plant densely, there will be no bare ground. Change aesthetic value, mulch is not the goal of flower gardens.
- Be creative about how to get plants in the landscape. Examples: crossvine growing up the eaves of the house. Put on a bare fence. *Campsis radicans* trained to grow up the tin roof. Pipevine planted on an arch.
- Add dense screens that create living walls. Plants contribute to the feeling of limitless space by screening out fences. – James Van Sweden

WHICH PLANTS DO I CHOOSE?

Idea presented of planting modules as a starting point, using certain species for certain areas (see handout on Proceedings page)

- Canopy
- Understory
- Shrubs



Turning a New Leaf Conference
Shepherdstown, West Virginia
November 16, 2013

ANSWERS TO COMMON QUESTIONS

- Are native plants too expensive? Well-meaning groups use native plants as fundraisers, with high prices to make money. People get impression they are expensive but with economies of scale, they could cost the same as non-native. Grow from seed, it's free.
- Can native plants be used formally? Examples provided to show yes: *Campsis radicans* espaliered at Longwood Gardens. Fancy gardens in Europe use formally, native American plants as they are non-native there. Oldfields/ Lilly Mansion in Indianapolis – eastern red cedars pruned to formal shapes. Centennial Gardens “Garden of Versailles” in Denver uses rocky mountain juniper laid out like most formal garden in the world.
- Do native landscapes attract vermin? Rats are pests of human places – do well on our leftovers, live in our sewers. Vermin are snakes, according to southerners, but human harm from snakes is relatively rare.
- Will insects make your native plants ugly? Not if you build a balanced food web in your yard. Natural enemies eat the herbivores – beetles, spiders, birds, etc. Study -- measured in non-native vs native plants damage, sucking and chewing found no difference between native and nonnative due to natural enemies. Native herbivores do not do fatal damage; e.g., spicebush swallowtail larvae only needs 3 leaves.
- Are native plants higher maintenance? Easy to sit on a mower, so in some senses it is easy to maintain a couple of acres of lawn than planted. But once planted, maintenance does become an issue.

CONCLUSION

- “Landscaping for life” is like traditional landscaping with two exceptions:
 - ✓ Favor productive plants
 - ✓ Use more plants
- We can use our yards to help save nature. Native plants can be attractive and do attractive things. They can be used formally, are not more prone to insect damage.
- “A lot of people think that conservation means you have to diminish your lifestyle” -- Allen Hershkowitz. Tallamy couldn't disagree more.
- Nobody feels diminished by close interactions with nature and you won't either.

This presentation included many excellent slides of specific plants and the birds and insects they support.

Dtallamy@udel.edu