

Shining a light on sustainability

Welcome to the annual Outdoor Living issue of Spaces, with a special focus on sustainable landscaping. If that seems like a buzzword to you, well, maybe it is to some extent. But consider how the buzzwords have evolved over the past few decades: Among other terms, "weed patch" has become "native prairie," "bugs" have become "pollinators" and "runoff" has become "rain garden."

Diane Hilscher has witnessed this evolution and has had a hand in shaping it too, since founding Hilscher Design and Ecology of Stillwater in 1991. To kick off our special report on sustainable yards (pages 42-59), she shared some of her perspectives.

Q: Not many landscaping companies include the word "ecology" in their name. Tell me a bit about that.

Besides being a landscape architect, I am a native plant ecologist. I was the first person to get both degrees (landscape architecture and ecology, in 1983) from the University of Wisconsin-Madison, which at the time was a truly cutting edge degree.

Darrel Morrison, a Fellow in the American Society of Landscape Architects, a rare honor, was an important professor and mentor of mine there, and I totally lucked out to have several botanists to work with there too, so my company really is my opportunity to weave in the design with the ecology.

Q: Tell me about your early work.

I worked as a site designer in the National Forest Service in the Boundary Waters, and on a research team at the Effigy Mounds National Monument in Iowa while I was in school; after graduation I worked in Seattle but came back — when you study native

plants you get pretty well rooted.

I started out here at a large design-build firm and did a lot of pretty non-eco stuff — at the time people loved the idea of native woodlands with ferns and trillium but prairies weren't really on the radar. I actually had colleagues call prairies weed patches

One of my big projects here was at the Northwest Airlines headquarters (now Delta), where I planted native prairie under bur oaks. As much as I could on any project, I was filtering in native plants in non-prairie plantings — the attractive ones like dropseed, which is very elegant. I still use non-native plants, but I interweave them. Why? Well, I'm designing for people and want to reflect their favorites. I avoid the invasive ones, and we're learning more and more about those, like burning bush, black locust and buckthorn.

Q: Tell me about the Hilltop House, one of your recent projects.

It's in an area that's very refined — Indian Hills of Edina, which is a traditional neighborhood more than a sustainable one.

The landscape interweaves natives and cultivated plants in an attractive, colorful and reasonably low maintenance design, with prairie savanna blending into taller prairie, blending into woods. The landscape has matured to be able to see the intent of the design, despite native plants being allowed to move around some.

So it really has it all, and we were able to save almost all of the trees.

You can have both traditional and sustainable. I've never had any issues with neighbors complaining in all the years I've been working. You create good edges, use smaller shrubs,

respect their views. It works out. You can mix and match natives and non-natives ... in smaller landscapes especially or right around your house, but you can make choices that support each other.

Q: How have things changed since you started?

First, there is a lot more interest and a lot more knowledge. I hear "lower maintenance" all the time. There are still serious gardeners who really want to get out there, but that's not for everybody. Less lawn, more native plants help keep things manageable — but you have to very carefully select your plants. For example, fewer tall grasses, because they can over-dominate.

The book "Bringing Nature Home: How Native Plants Sustain Wildlife in Our Gardens" (Douglas W. Tallamy) really rocked the plant ecology world. It talks about how much insects require native plants — they can eat them and have a full belly but die because they can't digest them chemically. If the insects die, birds can't feed their young the insects, and then the birds die. If the plants are from somewhere else, they're not in sync with local growth and bloom cycles; the wildlife needs plants with local genotypes or the whole feeding cycle gets thrown off.

The good nurseries are becoming more and more aware of the issues of native insects; don't go to a big-box store to buy plants, go to a specialty



Diane Hilscher

native plant grower to make sure you fit the food web.

Just knowing things like that makes us realize we humans really are part of the whole ecosystem and we can learn to be better stewards.

Q: Any other observations?

Minnesota is much more of a leader in terms of water use and native plant growers than other places. The LEED program for interior building design also includes the requirement for sustainable landscaping — more locally sourced plants, more natives, less lawn and where there is lawn fescues instead of bluegrass. The U of M Extension Service is a great resource for learning about low-input turf. We're seeing this in open lots at schools, parks and businesses, transitioning them into low-maintenance lawn blends, plus tracts of prairie. It makes sense with lower budgets for water and maintenance.

There have been huge changes in site engineering. For example, the focus is now on infiltration and keeping water on site, getting it to clean groundwater through deep-rooted native plants that create the channels. Maplewood Mall is even doing it! Building rain gardens and collecting surface pollutants keeps them out of the lakes, which are some of the most visible signs of a healthy ecosystem.

Whoever coined the term rain garden did a great service to infiltration and wetland plants.

Finally, we're seeing long-term management priced into a project. It's put into the upfront proposal to cover three to five years of maintenance. You can't just put in a native landscape and walk away. You need to have somebody who knows what they're doing watching over it.

Q: What's coming next?

You can still have dramatic landscapes and small swaths of lawn but have biodiversity woven into the design. Not everyone wants to have a prairie, or maybe they don't have room for one. But there's more understanding that biodiversity is important. Every pocket of native plants adds up; together they can make a big difference.

U of M research has shown quantitatively that biodiversity makes prairie resilient to extreme, harsh weather. The more diversity, the more ability to survive and thrive. Mark Seely, University of Minnesota Extension climatologist and meteorologist, has researched how the upper atmosphere has slowed, meaning extremes of cold and heat are extended and drawn out, so plants need to be able to survive these.

Growing in the community in which they evolved, native plants have positive interactions; they are more than the sum of their parts. So this is the huge difference between gardening with plants from all over the globe, or just nestling in some natives, and sustainable, ecological landscapes. ■



The south side of the Hilltop House, with prairie savanna in summer, installed by Prairie Restorations. Closer to the foundation are more cultivated plantings, to make for a thoughtful transition into a wilder area.

RESOURCES

Native plant nurseries within 150 miles of the Twin Cities:

Cedar Hill Natives, sold through Hedberg Nursery and Landscape, Stillwater; 651-748-3159, cedarhillnatives.com

Dragonfly Gardens, Amery/Turtle Lake, Wis.; 715-268-7660, dragonflygardens.net

Feder Prairie Seed, Blue Earth; 507-526-3049; federprairieseed.com

Harmony Wildflowers, St. Louis Park; 612-270-2637, harmonywildflowers.com

Hayland Woods, Milaca; 320-983-6354, erlanson@northlc.com

Kinnickinnic Natives, River Falls, Wis.; 715-425-7605, kinninnatives.com

Landscape Alternatives, Shafer; 651-257-4460, landscapealternatives.com

Leaning Pine Native Plant Nursery, South Range, Wis.; 715-398-5453, philina4@gmail.com

Minnesota Native Landscapes, Otsego/Foley; 763-295-0010, mnnativelandscapes.com

Morning Sky Greenery, Morris; 320-795-6234, morningskygreenery.com

Natural Shore Technologies, Maple Plain; 612-703-7581, naturalshore.com

Naturally Wild, Minneapolis; 612-922-9279, naturallywildflowers.com

Out Back Nursery, Hastings; 651-438-2771, outbacknursery.com

Prairie Moon Nursery & Landscaping, Winona; 866-417-8156, prairiemoon.com

Prairie Restorations, Princeton, 763-389-4342; and Scandia, 651-433-1435, prairieresto.com

Shooting Star Native Seed, Spring Grove; 507-498-3944, shootingstarnativeseed.com

Sunrise Native Plants, Lindstrom; 651-257-4414, sunrisenativeplants.com

Sunshine Gardens, Pine River; 218-947-3154, sunshinegardens.tripod.com

The Vagary, St. Paul Farmers Market on Sundays; 507-263-5369, thevagary.com

Source: Wild Ones Natural Landscapers, Twin Cities Chapter, wildones.org