



LESSONS OF THE LAND

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PART I: KRISTA'S 'AHA' MOMENT

Nearly 20 years ago, I discovered that wildflowers – the native plants found in prairies, roadsides and parks – were not the same as the cultivated, “improved” species of plants for sale at hardware stores and garden centers. Though I enjoyed the bright colors and flower shapes of these packaged plants, I was drawn to the challenge of gardening with native plants. After some online research, I was delighted to discover there was a thriving community of others who were interested in native plants, as well – members of the Kansas Native Plant Society (KNPS). I joined as a member in 2002 and started attending the organization’s wildflower walks, forays, strolls, and the Annual Wildflower Weekend event held throughout the state. I was hooked by the generosity and camaraderie among fellow members. As someone who enjoys time in the great outdoors, walking and talking in undisturbed natural settings with people who have a great deal of knowledge about native plants – and the insects, birds and animals that rely on these places as a home – has provided me with many days of time well spent.

While on a road trip through Newton years ago, I happened to pass by the Kauffman Museum and was stunned by the sight of the reconstructed prairie garden created by Dwight Platt in the 1980s. The grasses and forbs appeared as a riot of prairie vegetation; a fantasy painting of flower color and leaf shape and line of grass stem, all come to life on the museum grounds. That first view of a garden composed of native plants made a lasting impression on me.

Fast forward to 2014 when a KNPS connection suggested I make contact with a sixth grade science teacher in my hometown of Mulvane. I had Vicky Hilger’s email address written on a scrap of paper for months before emailing her to ask if she and her class were interested in native plants, thinking that on behalf of KNPS, I might pass along some identifi-

cation guides. After finally initiating contact, I wished I hadn’t of waited so long. In Hilger, I quickly discovered a fellow friend of nature and was thrilled by her enthusiasm for bringing science and nature to her students. (And as luck would have it, she, too, had seen Dwight Platt’s prairie garden and was equally awed by the experience).

A visit to Hilger’s classroom is like entering a mini nature center. Upon seeing it for myself, I knew had to get Vicky in contact with some of the other great like-minded nature folks I had come into contact with over the years – like Brad Guhr of the Dyck Arboretum, Chip Taylor of Monarch Watch, Nat Barton with Prairie Pride Plants and the many Pheasants Forever members that host programs designed to engage young people with nature. I passed all their contact information on to Hilger and she told me about her idea to create a native plant garden in the courtyard at her school. And that’s just what she did.

PART II: VICKY'S GAME PLAN

My whole idea with the native area was to connect students with the natural world around them, while building skills that could be used in the class curriculum. Kids have a natural curiosity and enthusiasm, so my job is to facilitate that. Plus, the more kids can invest themselves in something, the greater their connection.

Before I accepted my job as a 6th grade science teacher in Mulvane, I went to check out the school – mostly to see the student/teacher dynamics – but also to see the classroom. As I walked in, I saw that windows took up most of one wall. They looked out onto a large lawn, rimmed by a few trees. There was nothing else out there and that called to me. I envisioned the native gardens at Kauffman Museum and then flashed back to the overgrown lawn. All those windows, all those kids, and all the possibilities.



Students take butterfly larvae and let them pupate in the classroom before releasing them as adults.



a garden and using it with their classes, providing detailed lesson plans and activities.

Next, came Monarch Watch, out of Lawrence. They donated common milkweed for a second garden for pollinators at the school. And of course, support in many ways came from Mulvane's school administrators, teachers and staff, as well as community members.

We had the National Junior Honor Society students help build the garden foundation with Pheasants Forever, and we researched native flowers and grasses in class, making grids to show when each species blooms, what color they'll be and how tall they typically grow. With this information, students made educated decisions as to where each species should be planted, and the garden was on it's way.

We bought plants through Dyck Arboretum, and Guhr delivered them, and led our "Planting Day." Students dug holes and put in each plant, while others hung bird feeders and put in a water feature to encourage wildlife.

The first spring, classes recorded data on which new plants survived the winter, figuring out the percentages of success for each species, and reported back to Guhr.

Monitoring plants for pollinators laying eggs and hatching larvae also began. Once monarch and swallowtail larvae were discovered, we began collecting some, letting them pupate in the classroom, and then releasing the adults back into our gardens when they emerged.

Woodhouse toads also made an appearance, laying long lines of eggs in the pond, which we collected and raised to tadpoles in our aquarium. And these are just a few of the things the outdoor sanctuary provides.

Each year, students collect seeds in the fall and put them in moist, cold storage during winter. They plant them and then meticulously record the germination rate in spring. The plants that succeed make their way to the school garden, filling in empty spaces and expanding new areas.

Long-term projects exist with feeders that are filled in the fall to determine ruby throated hummingbird numbers and migration dates. The data is then logged online with Audubon at Home so we can contribute to the National Audubon Society's database.

An annual winter bird survey also allows us to practice identifying native bird species, as well as collect field data over an extended period of time.

My decision had been made – I would take the job. But what of the bare lawn? I was inexperienced with planning large gardens, and ignorant of most native prairie plants, but there's one thing I did know: when you're passionate about learning and doing something positive, people who are capable and willing to help usually show up.

I started with Dr. Thomas Eddy's summer classes on native prairie plants through Emporia State University. The class also led to a contact with the Kansas Native Plant Society, Krista Dahlinger, who happened to live in Mulvane. She volunteered to jump on board with me and led the way in planning, seed collection and plant donation. She also provided vital information and a wealth of necessary contacts. Dahlinger introduced me to the Wichita Chapter of Pheasants Forever who agreed to fund our first year, as well as a volunteer work-day to put in the garden foundation.

Through Dahlinger, my education continued with Earthpartnership for Schools at Dyck Arboretum in Hesston. There, Guhr instructed teachers in planning



Mulvane Middle School students, with the help of a passionate teacher and many supportive organizations, have transformed a dull grassy area at their school into a garden paradise pictured above.

When there are lulls, flowers – and usually a tiny insect or two – are brought in and small parts are examined under a dissecting microscope.

These few select projects of ours are proof that there is always something to learn from the nature. Different ideas for using our garden are always coming up, and we incorporate new ones each year. Our small native gardens will never rival those at Kauffmann, but that's okay because they are more than enough to enrich our growth.

Learning to collect and record data – to measure and count and convert those numbers into ratios and percentages – is an important part of science. To be able to turn data into graphs and charts, which actually show meaningful patterns is necessary for logical thought. Developing journaling and writing skills, as well as predicting and drawing conclusions, is key to becoming successful students and critical thinkers. I am so happy with the gardens for helping our students to do those things. But I love the gar-

dens for another reason, too.

Almost every day I get to listen to what species of birds were in someone's backyard, and how tall the native grass is in the ditch by their house. Students ask permission to bring in their phone between classes to show me pictures of the caterpillar on their grandmother's purple cone flowers and the mourning dove that has been sitting on their fence in the mornings. Pressed flowers from fields come to me in young hands; insects come in jars with carefully poked holes; dead butterflies are peeled from the front of parents' cars and brought in for identification. The kids are connected with their natural world around them, and that connection fuels their interest to learn more, experience more, and be more.

Be sure to visit ksoutdoors.com and ksnps.org to look for places, events and information you can use to get outdoors and into a nature experience. ♡