

Nature Trail Guide

Welcomes you to our handicap accessible nature trail, on the east side of the Center. We hope you will come back many times in different seasons, when the natural world will continue to change.

Begin your walk in front of the Center

1. Prairie

25 kinds of grasses and 300 kinds of flowering plants make up the tall grass prairie flora reaching from Minnesota to Texas, Kansas to Indiana. All were adapted to midwest hot summers and cold winters, with wet years and draughts. An area near the Nature Center entrance has been planted to native prairie vegetation starting in 2000. In the forest, trees keep sunlight from the ground in summer and fall, so flowers mostly bloom in spring when enough sunlight energy is available to store in seeds and fruits. Here the year-round prairie sun gives a changing spectrum of blooms from April to November.

Walk through the wall opening by the prairie and past the open shelter

2. Savannah

When Native Americans lived on these hills, the uplands were mostly savannah – scattered trees growing in prairie. During periods of dry years, not many trees could get enough water to grow and thrive. Burr Oak was especially resistant to prairie fires, so they made up most of the lone trees giving shade to elk on scorching days. After European settlers moved in and stopped the fires, other trees whose nuts were buried by squirrels, started an upland forest. To bring back the savannah community here, small shrubs and small trees have been cut and native grasses and flowers were planted in 2002, leaving the larger trees.

Summer sun will let us enjoy the colors of the blooms. Trees growing in open sun have broad branches and lower branches can still get sun. Woodland trees grow narrower, and lower branches die.

Follow the surfaced trail to the right

3. Water habitat & Feeders

A trail to the right leads to a small pond and stream. Materials were donated by the Global Manufacturing division of Pfizer, Inc., and the work was done by volunteers from that company. There are also feeders. What birds or other wildlife do you see attracted here?

4. Upland Forest

This is an oak-hickory forest. Oaks have tough waxy leaves that often hang on the branches for months after they die in autumn. Their nuts are acorns, hanging from distinctive caps. Hickory nuts have an outer husk that splits into five pieces. Walnuts husks do not split, but decompose. Look at the bark of the trees – how may different kinds can you find?

5. Limestone Glade

A glade is an opening in the woods due to a habitat that does not support forest. Thin soil over the limestone dries out, especially on the south and west sides of hills, and the rock limits the depth tree roots can reach down for water. Starting in 2003, we have cut shrubs and small trees to try to help return this area to a glade. Friends of Lakeside Nature Center have also planted seeds and seedling plants of typical glade species. Fallen acorns have also sprouted to young oak seedlings.

6. Winterset Formation: Chert (flint)

On the ground notice the scattered blue-gray

rocks. These are chert or flint, eroded from the Winterset rock formation above the Bethany Falls Limestone. See how the rock breaks in curved smooth facets. The native Americans chipped flakes from this glassy chert with sharp edges left for arrowheads, spear points, knives, and scrapers.

7. Bethany Falls Limestone

Bethany Falls Limestone is the most striking rock in Swope Park. During the Pennsylvanian Period, about 225 million years ago, this area was a shallow inland sea whose depth fluctuated from deeper open ocean (where calcium carbonate ooze settled to form limestone) to shallower muds that became thin layers of gray shale. Bethany Falls has two 10 foot layers from an algae reef separated by a thin shale. Cracks in the limestone let rainwater seep down and turn the shale to mud, and blocks of the rock slowly slide off as boulders “walking” down the steep hillside. It can be broken easily into road building gravel and was mined beneath much of Kansas City. This left caverns which are now used for warehouses, manufacturing, offices and Earthworks Science Education Center. Our rocks strata slopes down to the west, and the last place you will see Bethany Falls on the surface is the Watts Mill waterfall near 103rd and State Line.

8. Fox Hollow

On the left is the valley carved by the Blue River. Ahead water flows to the Blue through Fox Hollow. Located just below the limestone outcropping in front of you is Fox Hollow Trail, a 3.25 mile hiking trail. Along the undisturbed creek woodland plants have more moisture all year, while up here on the drier plateau are remnant prairie glades. In spring the valley is captured with wildflowers. In summer when tree leaves shade the lowland soil, mist plants do not get enough sunlight to bloom and store

extra food in seeds. If you look at the leaves and bark of trees along this trail, and then compare with those growing down below, you will find different kinds of trees in the lowlands where their roots can reach down to water all year. Note especially the Sycamores with their white bark.

Return on the trail to the left

9. Succession on Rock

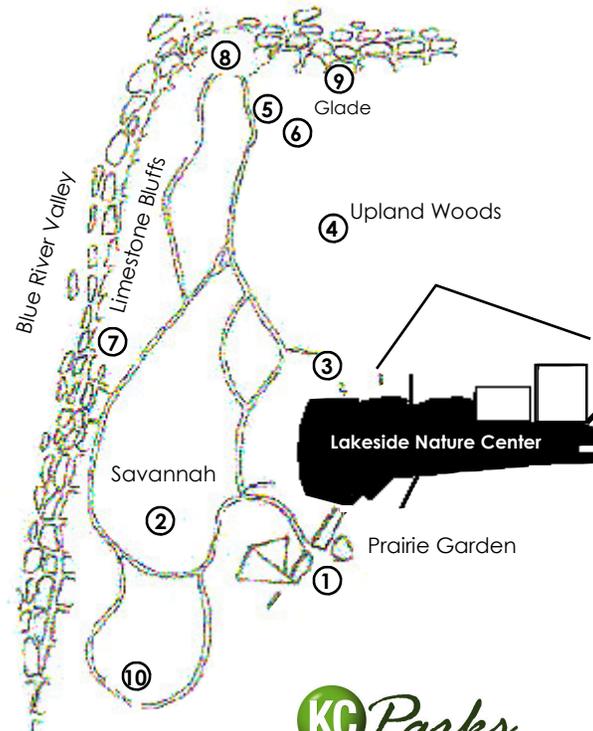
All outdoor surfaces are exposed to spores of bacteria, algae, fungi, mosses and ferns, along with seeds of plants and droppings of animals. This limestone uncovered by erosion is being transformed into a unique changing community of life. Crusty lichens are a symbiotic comparison of fungi that grip the surface and holds water and algae that take in carbon dioxide and sunlight and make food. Together the lichen's fungi and algae can live on bare rock and start the process of ecological succession. Mosses grow in the developing pockets of soil, ferns and columbines sprout, vines grow over the stone, shrub and tree seedlings take root in cracks.

10. Alien Invaders

Shrub honeysuckles were planted decades ago for their attractive red fruits. However, they have become one of the most dangerous threats to our native plants. In spring their oval leaves are the first to emerge, and they stay green longer in the autumn. Thus they block the sun from the forest floor during the entire growing season, shading out our wildflowers and even seedlings of trees. And worse, birds spread their seeds everywhere through droppings. In upland woods, and on the hillsides, this honeysuckle has become the most abundant shrub. The volunteers of Kansas City WildLands have workdays when they join forces to cut the honeysuckle in Swope Park and other parks. Ask in the Nature Center how you can help. The forest needs you!

FOX HOLLOW

Lowland Woods



for more information
Call the Center today.
(816) 513-8960

Join KC WildLands and
The Friends of
Lakeside Nature Center
in preserving this beautiful area.

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This brochure is provided to you courtesy
of Friends of Lakeside Nature Center
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