

"All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. The land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively, the land... a land ethic changes the role of Homo Sapien from conqueror of the land community to plain member and citizen of it... it implies respect for his fellow members, and so also respect for the community as such."

— Aldo Leopold, "Sand County Almanac"

Forest Preserve Fun

The Kankakee County Soil and Water Conservation District has teamed up with the Kankakee River Valley Forest Preserve District to provide naturalist programs at forest preserve sites. The Aroma Land and Water Reserve located on Hieland Road about one mile south of Route 17 has hosted several programs including a spring and summer prairie wildflower walk and a butterfly walk. This 140 acre site is home to the clustered poppy mallow which blooms in a lovely sand prairie remnant along the trail that winds through the site. Across the trail from the remnant lies a recent addition to the site that is in the process of being restored to prairie. Recently, additional wooded trails were added near the front of the property. Aroma Land and Water Reserve is my favorite Forest Preserve site. Join us for a guided program or go exploring on your own, but definitely get out and enjoy this lovely site.

Other programs this past summer included a talk on the uses of Illinois native species in home landscapes. The talks were given at the Shannon Bayou Environmental Education Center in Aroma Park, and a prairie restoration and invasive species walk was at the Gar Creek Trail in Kankakee. Fall programs on seed collecting and geocaching were done in October. Get outside and enjoy your natural areas!

Michelle Pearion,

Resource Conservationist, Kankakee County Soil and Water Conservation District Program Director, Kankakee River Valley Forest Preserve District



Bees, Bumblebees



I can remember summers as a child in my suburban neighborhood when the lightening bugs seemed thick as stars in the sky. They are still here in summer, but very much fewer. Many species of highly beneficial insect pollinators have been on the planet for much longer than humans, and yet today they are threatened. How can we help but feel the need to do something to help the small creatures that inhabit our gardens and flowerbed?

Popular awareness of the plight of butterflies has resulted in butterfly gardens in yards, schools and public gardens. And yet, there is increasing awareness that it isn't just butterflies that are threatened. Every backyard beekeeper I know has lost some, sometimes all, of their hives in the past few years. U.S. beekeepers have lost 29.6 percent of their honeybee colonies every year since 2006. The rate of decline appears to be accelerating; a nationwide survey found that beekeepers across the United States lost more than 40 percent of their honeybee colonies from April 2014 to April 2015. While there is research being done to discover the cause, at this time there is not a clear explanation for the decline of the honeybee. The disease has been named as colony collapse disorder (CCD), where bees become disoriented, leaving their hives, never to return. In addition, even though there has not been extensive research, it has become apparent that native pollinators are also disappearing at an alarming rate.

The cause may be pesticides, viruses, mites, fungi, and antibiotics. In addition, as with many species, loss of habitat and fewer food sources are also very likely factors in the decline of pollinator populations and colony collapse disorder.

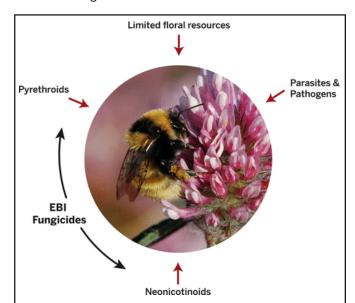
The decline of butterfly populations has been in the news for years; hive collapse disorder has become a huge concern that has reached to popular press, in part due to the impact on food production. However, the decline in populations of valued insects is not restricted to butterflies and honeybees.

Our native bumblebees are a favorite summer garden resident that have been around for a very long time; fossils of bumblebees have been found from 30 million years ago. Today they are one of the native species of insects that are threatened worldwide. Bumblebees evolved in cold habitat and are primarily found in northern latitudes, with 46 species in North America. Research is indicating that climate change may also be a stressor that is contributing to the loss of

From the research paper Bee Declines Driven By Combined Stress From Parasites, Pesticides, and Lack of Flowers in Science Magazine:

these important pollinators.

"Responses to climate change have been observed across many species. There is a general trend for species to shift their ranges poleward or up in elevation. Not all species, however, can make such shifts, and these species might experience more rapid declines. Kerr et al. looked at data on bumblebees across North America and Europe over the past 110 years. Bumblebees have not shifted northward and are experiencing shrinking distributions in the southern ends of their range. Such failures to shift may be because of their origins in a cooler climate, and suggest an elevated susceptibility to rapid climate change."



Multiple interacting stressors drive bee declines. Both wild and managed bees are subject to a number of important and interacting stressors. For example, exposure to some fungicides can greatly increase the toxicity of insecticides, whereas exposure to insecticides reduces resistance to diseases. Dietary stresses are likely to reduce the ability of bees to cope with both toxins and pathogens.

Image Credit: Science Magazine

Even though a single concerned citizen may feel that one person can make little headway in helping our native insects, given the array of stressors in the environment, it is important to be aware that the combined effort of many makes a huge difference. The total of urban residential area is huge, and combined efforts in residential yards bring results that are greater than the sum of the parts. Making sustainable urban habitat provides significant food and shelter for many species, especially those plants, insects and birds that are willing to live in close contact with humans. There are some resources listed at the end of this article; in addition many good books and webpages provide a wealth of information on planting for wildlife and providing nectar producing flowers that pollinators love. Small steps are good; even a corner of an urban yard can begin the learning process. There are local and online sources for heritage and native plants, and good advice for which ones suit your growing zone and which ones to select in order to attract wildlife - including the small creepy-crawlies and tiny winged ones.

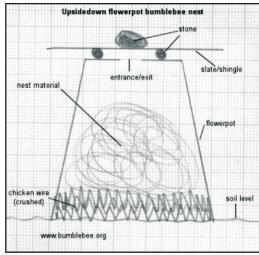
It is very important to use no pesticides; not only do these kill beneficial insects, these neurotoxins are ingested by birds that eat the insects. Pesticides eventually find their way into our soil and water, wildlife, pets and humans.

Planting for bumblebees should provide flowers near nesting spaces; it is estimated that a queen of our largest bumblebee, *Bombus terrestris*, may visit over 6,000 flowers a day, and flights need to be short so she can soon return in order to keep her eggs warm.

To help provide nesting areas in the urban yard for beneficial insects such as bumble-bees, don't be too tidy. A small pile of twigs and leaves may look like rubbish to the fastidious gardener, but might provide a home for a bumblebee colony. Bumblebees will nest down a small tunnel in an old mouse or vole

nest, in the dry base of a grass tussock or hedge bottom, and in bird boxes that haven't been cleaned out. Make sure there are no ant nests nearby, as they are predators that will rob the nest. Bumblebees may prefer north facing sites, perhaps due to the cooler temperatures in hot summer weather – they evolved from a cold climate environment. A nest box may simply be an upturned flowerpot with a roof slate and some nesting material such as content of a mouse nest, or clipped dry grasses or dry moss.

When planting for pollinators such as bumblebees, select heritage or native species, as many cultivars do not produce nectar. Garden plants that have been subject to modification to produce 'double' flowers that obscure or replace pollen-and nectar-bearing structures (e.g. Petunias, Begonias, and Hybrid Tea roses), are known to offer little or no pollinator reward. For the different species of bumblebees spring to autumn, plant flowers of different corolla lengths in order to provide both



long and short-tongued bumblebees with nectar.

Early flowers. When queen bumblebees emerge in the spring, flowers such as spring flowering heathers, crocuses, primroses, aubrietia, comfrey, lungwort, pieris, rhododendron, bugle, cornflower, broom, poppies and flowering currants and vetches and peas are very useful. They will also gather pollen from hazels and willow catkins and early flowering fruit trees.

Summer flowers. In general most cottage garden type of flowers are useful to bumblebees such as Indian balsam, Phacalia, viper's bugloss, foxglove, snapdragons, geraniums, aquilegia, lupins, campanulas, as well as



brambles, raspberry, strawberry and other soft fruits, and many herbs such as the different varieties of thyme, marjoram, sage, and borage. Old-fashioned roses provide a good source of pollen.

Late flowers. Lavenders and salvias are useful later in the year, actually most of the herbs used by cooks are used by bumblebees. Honeysuckle is also very valuable as it provides a rich supply of nectar.

Sources:

Bee Declines Driven By Combined Stress From Parasites, Pesticides, and Lack of Flowers: Originally published in Science Express on 26 February 2015, doi: 10.1126/science.1255957 Science 27 March 2015: vol. 347 no. 6229

Abstract (Full text available with subscription) available at: http://www.sciencemag.org/content/347/6229/1255957.abstract?rss=1

Bumblebee.org: http://www.bumblebee.org/index.html

Decline of bees and other pollinators could worsen global malnutrition (Science Magazine): http://news.sciencemag.org/biology/2014/10/decline-bees-and-other-pollinators-could-worsen-global-malnutrition

Bumblebee Conservation Trust: http://bumblebeeconservation.org/get-involved/gardening-for-bees

Healthy Pets with Dr. Karen Becker: http://healthypets.mercola.com/sites/healthypets/archive/2015/09/29/queen-bees.aspx

Angler Association Fishing Derby Winner



Jeff Drummer is the Northern Illinois Angler Association Fishing Derby winner from the KRVFPD. In the photo, from left to right, are Jeff Dummer, Amy Ciaccio-Jarvis presenting \$500 gift certificate (from the KRVFPD), and from the NIAA Richard Norton and Ken Munjoy.

"Ah, Nature? The very look of the woods is heroted and silmulating. This affermoon in a very thick grove where Henry Thoreau showed me the bush of mountain laurel, the first I have seen in Concord, the stems of pine and hemlock and oak almost gleamed like steel upon the excited eye."

— Raiph Waldo Emerson, "Journals", November 20, 1840"

On Trail at the Forest Preserve

For information on times and dates for current programs at your forest preserve, call Michelle Pearion at (815) 937-8940 ext. 101. Our programs include moonlight hikes, wildflower and native prairie walks, and learning about our local natural history. You can also find our programs advertised in the Outdoor section of The Daily Journal, or check out "programs" on our website: http://www.krvfpd.org

	2016 KRVFPD	PROGRAMS
April 30	APRIL 20 Birding Tour	916 Gar Creek Prairie
May 7	Wildflower Walk	16 Aroma Land & Water Reserve, Hieland Road
June 4 June 11 June 25	Wildflower Walk Pollinator Buzz Session Butterfly Bonanza	Aroma Land & Water Reserve, Hieland Road To Be Determined Aroma Land & Water Reserve, Hieland Road
July 16	JULY 20 Summer Prairie Walk	16 Aroma Land & Water Reserve, Hieland Road
August 13	AUGUST 2 Invasive Species	2016 To Be Determined
September 24	SEPTEMBER National Public Lands Day Event	
October 8 October 22	OCTOBER : Mighty Oaks Bat Walk	2016 To Be Deternined To Be Determined



Winter solitude - in a world of one color
The sound of wind

By Matsuo Basho

By Matsuo Basho

FOREST PRESERVE SITES

Shannon Bayou Environmental Education Center and Administrative Office

This 46-acre preserve is located at 3301 Waldron Road in Aroma Park, along the Kankakee River. The Center provides space for programs about natural history, ecology and preservation of open space in the Kankakee River Valley. The walking trail area features plantings of many native trees and plants, including native tallgrass prairie species, a butterfly garden of native plants. The site includes ¾ mile asphalt and fine gravel walking trail, a picnic shelter, and picnic tables.

3301 Waldron Road Aroma Park, IL 60910 41°04'47.61N 87°48'44.31"W

Aroma Land and Water Preserve

One of the best sites in the area for woodland wildflowers, this 140 acre site is located on Hieland Road, 1.4 miles south of Highway 17 East. A 1.2 mile walking trail winds through several different types of natural areas, including high quality forest, prairie, and wetland ecosystems. It also has nearly ½ mile of Kankakee River frontage, and the associated floodplain forest.

The Forest Preserve mows a loop trail that branches off the existing 1 ¼ mile trail that meanders through the main body of the Aroma LWR. In the summer of 2011, 49.5 acres of mixed pine and hardwood forest was added.

Approximately 40 percent of the Aroma Preserve is a wetland and lies within the flood plain of the Kankakee River. In the spring, the wet oak forest gives a spectacular wildflower display while the wetland and sand prairie are the most colorful in the summer. There is ample parking in the parking lot on Hieland Road, and a playground, maintained by the Kankakee River Valley Park District, for children.

1578 South Hieland Road St. Anne, IL 60964 41°06'02.90"N 87°45'24.08"W

Gar Creek Trail and Prairie Restoration

Approximately 85 acres, this site is located about one-half mile east of Route 45 on River Road adjacent to Kankakee Community College. The 16-acre restored tall grass prairie was planted in 1992. A 2.5 mile trail, suitable for hiking, bicycling, and cross country skiing, is a cooperative project with the Kankakee Valley Park District. The trail begins at the prairie, winds along Gar Creek, through oak woodland, and down to the banks of the Kankakee River.

At river's edge, the trail connects with the Kankakee Riverfront Trail Project, which will start at the Aqua Illinois property at Hawkins and Water Streets, go through Shapiro Developmental Center, Kankakee River Valley Forest Preserve, Kankakee Community College, and connect with River Road Park and Splash Valley, of the Kankakee Valley Park District.

501 River Road Kankakee, IL 60901 41°05'30.84"N 87°51'32.78"W

Waldron Arboretum

Located 1.1 miles south of I-57, this site was once a landscape nursery. On this 90 acre site there is a fine gravel hiking trail suitable for bicycling and cross country skiing. The trail winds through 30 acres of woods, including a small prairie restoration area.

In the winter of 2008, the District acquired an additional 60 acre parcel which had been primarily in agriculture. Future development plans are pending based on the district's needs and funds available through federal and state grants.

2755 Waldron Road Aroma Park, IL 60910 41°05'36.28"N 87°49'26.51"W

Strasma Grove

Nestled in a neighborhood in Kankakee, this site is 2 acres of mature native trees.

Duane Boulevard Kankakee, Illinois 60901 41°06'28.33"N 87°50'43.56"W

Limestone Reforestation Site

This site is a 30 acre preserve and reforestation site, with mixed trees and grasses.

County Road 3750 West Kankakee, Illinois 60901 41°08'38.96"N 87°56'51.08"W

Zeedyk Meadows

This is our newest Forest Preserve site, consisting of four acres of trees and grasses.

Warren Street St. Anne, Illinois 60964 41° 06' 24.92"N 87° 44' 35.77"W

Snake Creek Preserve

5800 Darline Dr. St. Anne, IL 60964 41 °10' 97.52"N 87 ° 75' 63.08"W



Kankakee River Valley Forest Preserve District

3301 Waldron Road • P.O. Box 13 Aroma Park, Illinois 60910 815-935-5630

Web address: www.krvfpd.org Email: forest@krvfpd.org

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Permit #135 Kankakee, IL

ON TRAIL...

at the Forest Preserve

For information on times and dates for current programs at your forest preserve, call Jean Hurrle at 815-549-9072. Our programs include moonlight hikes, wildflower and native prairie walks, and local natural history. You can also find our programs advertised in the Outdoor section of The Daily Journal, or check out "programs" on our website: http://www.krvfpd.org

But when I consider that the nobler animals have been exterminated here - the cougar, panther, lynx, wolverine, wolf, bear, moose, deer, the beaver, the turkey, etc., etc. - I cannot but feel as if I live in a tamed, and as it were, emasculated country... I listen to a concert in which so many parts are wanting... for instance, thinking that I have here the entire poem, and then, to my chagrin, I hear that it is but an imperfect copy that I possess and have read, that my ancestors have torn out many of the first leaves and grandest passages.

- Henry David Thoreau, Journal, 1856

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