Newsletter of the

Forest Preserve

District

of the Kankakee

River Valley

"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"

Autumn Color Why Leaves Do What They Do

Even while we perhaps regret the passing of summer, the stunning richness of the autumn colors brings the sense of fresh energy with cooling temperatures, the bounty of the new harvest and beginning preparations for the holidays to come.

Why is it that the leaves turn so vivid in the fall? It is nature's biochemistry at work. During the intense growing seasons of spring and summer, chlorophyll is dominant in the leaves, its green color hinting that here is where the magic is happening, the transformation of solar photons into energy and tissue.

But chlorophyll is not the only chemistry going on in the leaf. Once autumn weather rolls around, it is no longer warm enough for the plant to produce chlorophyll, the green color fades away, and other compounds become apparent in their distinctive colors.

As the chlorophyll is no longer made, the changes in temperature and amount of daylight hours increase the flavonoids and carotenoids, which are triggered by increased concentrations of sugars. These pigments give the red, yellow and orange colors to the leaves. Other chemical interactions produce purples and magentas. Tannins, as with oak trees, give the leaves their brown colors. Anthocyanins, one of the flavonoids that bring the red, blue, purple and magenta colors, are dependent on soil acidity and require light, so a fall season blessed with sunny days will bring the brightest colors.

The most brilliant autumn color displays are created by a moist growing season, followed by a mild fall season without windstorms to strip the leaves, when the weather brings warm, sunny days and cool nights without frosts.

For more on how leaves respond to the season's change: www.almanac.com/content/fall-foliage-why-do-autumn-leaves-change-color

Nature's peace will flow into you as sunshine flows into trees. The winds will blow their own freshness into you, and the storms their energy, while cares will drop off like autumn leaves. – John Muir

The most beautiful thing we can experience is the mysterious.

– Albert Einstein

Predawn Hours of Late Autumn Bring the Geminids Meteor Showers

The Geminids are one of the year's greatest of the annual meteor showers. Because it is most brilliant and active in the cold pre-dawn hours of December, it is perhaps not as popular for an all-night meteor viewing campout as some of the Spring and Summer meteor showers.

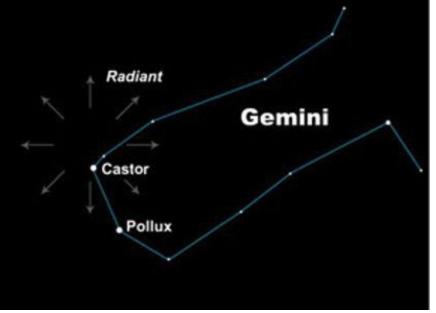
The Geminids are believed to originate from a mysterious

displays. For the best viewing experience, find a rural location away from light pollution, and be sure to dress warmly. Check out the weather, and find out when the moon will rise and set so you can view when moonlight does not obscure the display of shooting stars.



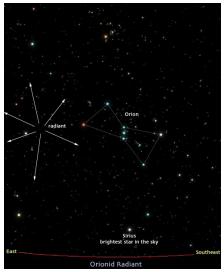
object called 3200 Phaethon, a 3 mile wide asteroid-type body that is sometimes called a rock comet. This space traveler passes between Mercury and the Sun every 1.43 years, where intense heat causes the rocky body to fracture, shedding rubble into its orbital path. Every year, bits of debris from 3200 Phaethon reach Earth's upper atmosphere at velocities of 80,000 miles per hour, vaporizing into fiery streaks across the night sky.

Three other Class I meteor showers – those that are the most easily seen with relatively large numbers of meteors per hour - occur in the Fall; the Orionids, the Leonids and the Ursids. While the Ursids are a medium display averaging 10 meteors per hour, through the night they will occasionally have brief bursts of about 100 per hour. Bring snacks, warm drinks and a comfortable chair and blanket so you can stay out long enough to see the best

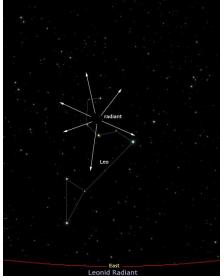


Shower	Best Viewing	Point of Origin	*Date of Maximum	**Number per hour	Associated Comet
Orionids	After midnight	Constellation of Orion	October 21/ 22	20	1P/Halley
October 2 - November 7					
Leonids	Predawn	Constellation Leo	November 17-18	10	Tempel -Tuttle
November 6 - November 30					
Geminids	All night	NE	December 13-14	75+	3200 Phaethon
December 4 – December 16	Best before midnight before the crescent moon rises	Constellation Gemini			
Ursids	After midnight	North	December 17-25	5-10 with occasional bursts of 100	8P/Tuttle
December 17 - December 24		Near the Little Dipper			

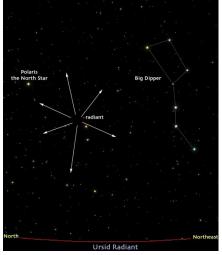
The skymap is dated for 2011, but the view looking east before midnight will be the same in 2014; this year the peak will be ?????



Locations of orionids



Locations of leonids



Locations of ursids

For more information on meteors and meteorites, go to NASA's website and link to the page on meteors and meteorites:

https://solarsystem.nasa.gov/planets/index.cfm

Moonrise and moonset times for your location: http://www.timeanddate.com/moon/usa/chicago

Astronomy picture of the day: http://apod.nasa.gov/apod/archivepix.html

On Trail ... an Autumn Walk at Shannon Bayou



Bee on goldenrod



Bee on flower



Bee on goldenrod



Butterfly



Butterfly



White Oak Acorns

The day before this year's autumn equinox was a perfect time to explore the changes that the season brings to the prairie. This fall season promises to be especially beautiful, with sunny skies and balmy weather that may allow a long season before storms strip the leaves from the trees. A walk at Shannon Bayou in Aroma Park brought a number of small discoveries to delight the eye. The white oak had a bounty of plump acorns, and the curiously wrinkled Cypress tree cones were still in their green stage, nested in a bower of feathery leaves.

The bees, butterflies and other pollinators were very busy, ranging from blossom to blossom as they enjoyed nature's bountiful harvest. Bees were foraging deep into the goldenrod, a caterpillar was busy at the last blossoms of a rough blazing star, and numerous other insects were busy at the season's last blooms.

Many of the native prairie flowers were already past their prime bloom time, but the partridge pea, goldenrod and asters were in full glory. The milkweed's silken parachute was almost silvery in the morning sunlight, against a russet background of little bluegrass and Indian grass. A small oak tree sapling was tucked in the shade of the mother oak, a small but sturdy survivor in the dry sandy soil that is characteristic of much of the open grassland at Shannon Bayou.

See with fresh eyes all the small events in nature - sit awhile in the sunlight and look closely at the small but very busy goings on down at the grassroots and amongst the foliage.



Caterpillar



Milkweed Silk



Cyprus



Little Oak



Rough Blazing Star

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PARTRIDGE PEA Chamaecrista fasciculata



This prairie plant is a member of the bean family that has shown up in abundance this year after a burn at the upland sand prairie at the Aroma Land and Water Preserve. It is often called the sleeping plant or sensitive plant, because its leaves will fold when touched. It is a bright, longblooming flower of the summer prairie, an annual that may grow up to 3.5 feet tall. It has the compound leaves characteristic of legumes, and the microorganisms on the root system nodules produce nitrogen compounds. It loves full sun. average to dry conditions, and poor soil that may be sandy or gravelly, where it has less competition from larger plants.

The nectar attracts bees and butterflies and other pollinators, as well as providing good cover for grassland birds. The "bean pods" are initially green and slightly hairy, turning brown later on. These provide a high protein food that stays in good condition through the winter for grassland birds and upland game birds such as northern bobwhite.

From All Created Things

It may indeed be phantasy, when I Essay to draw from all created things Deep heartfelt, inward joy that closely clings; And trace in leaves and flowers that round me lie Lessons of love and earnest piety. So let it be; and if the wide world rings In mock of this belief, it brings Nor fear, nor grief, nor vain perplexity. So will I build my altar in the fields, And the blue sky my fretted dome shall be,

- GRASS - J. Stark

Deep your roots seek, into Earth's soil you rely Tall you reach for wide spread sky Close you abide to the ground There Earth's children have food and shelter found

Turning burnished gold in autumns glow Then you sleep under glaze of ice and blanket of snow Till planet's long celestial spin Stirs Spring's ancient call again



Little Blue Stem

And the sweet fragrance that the wild flower yields Shall be the incense I will yield to Thee, Thee only God! And thou shalt not despise Even me, the priest of this poor sacrifice. - Samuel Taylor Coleridge



Switch Grass

Many the forms you take Deep and rich the soil you make Bowed before storm's thrashing gale Or skyborne hammer of summer hail

Then spring up again when storm is done To glory in the warming sun Covering soil rich and deep Earth's bounty do you keep



Big Blue Stem

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 ³/₄ 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 ¼ mile of Kankakee River frontage, and the associated floodplain forest. There is ample parking in the parking lot on Hieland Road, and a playground, maintained by the Kankakee River Valley Park District, for children.

In 2008, the District added a 30-acre piece of property adjacent to the Aroma Land and Water Reserve (Aroma LWR). This area has been seeded back to prairie species indicative of the dry sand prairie found within the current preserve. The Forest Preserve mows a loop trail that branches off the existing 1 1/4 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.

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 districts 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

Look at the trees, look at the birds, look at the clouds, look at the stars... and if you have eyes you will be able to see that the whole existence is joyful. Everything is simply happy. Trees are happy for no reason; they are not going to become prime-ministers or presidents and they are not going to become rich and they will never have any bank balance. Look at the flowers - for no reason. It is simply unbelievable how happy flowers are.

~Osho

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Kankakee River Valley Forest Preserve District

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web address: www.krvfpd.org e-mail: forest@krvfpd.org

Return Service Requested



ON TRAIL...

For information about current nature programs at your forest preserve, please call Jean Hurrle at 815-549-9072. You can also find our programs in the outdoor section of the Daily Journal, or check out the programs page on our website: http://www.krvfpd.org.

If you would like to subscribe to this free Newsletter, or to send an article, contact the Nature Center at 815-935-5630

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 lived 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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