



Native Plant School



Visitor Information

Saturday, Sept. 7, 2019

FIELD TRIP TO DYCK ARBORETUM OF THE PLAINS at HESSTON COLLEGE

The mission of this 13 acre arboretum in Hesston KS is akin to ours. Their educational vision is to “introduce people to the native landscapes of Kansas, promote ecological diversity, encourage citizen science, and re-connect people to nature.” Twice a year they have a Native Plant Sale. This field trip is scheduled to coincide with the FALL PLANT SALE. We will take time to BIRD THE ARBORETUM while we are there and we may stop a time or two along the way should any migrants catch our eye.

How to join the trip:

1. Call (785-776-9593) or e-mail pyeagerbirder@gmail.com so that I can put you on the list and not leave you behind.
2. Meet at the south side of the parking lot at Houston and 6th at 8:30 a.m. We will carpool from this lot and return by 6:00 p.m.

What to bring: 1. Binoculars 2. Money for lunch 3. Money for plants should you want to buy any. 4. Water for yourself.

Sunday, Sept. 8, I will be planting the plants I bought for the Alsop Bird Sanctuary from 9 am-11 am (one hour earlier if very hot). I would appreciate your help all or any part of that time period.

Northern Flint Hills Audubon Society,
P.O. Box 1932, Manhattan, KS 66505-1932



prairie falcon

Northern Flint Hills Audubon Society Newsletter

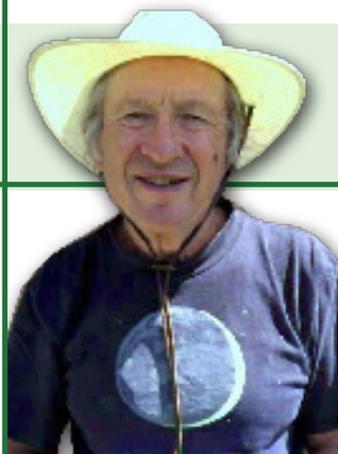
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Upcoming Events

- Sept 3 **TUESDAY 6:00** Board Meeting
Friends Rm. Manhattan Public Library
- Sept 7 Trip to Dyck Arboretum (see above)
- Sept 8 Planting at Alsop 8-11 a.m.
- Sept 14 Sat. morning birding 8:00 a.m.
Sojourner Truth Park
- Oct 4-6 71st Meeting of the Kansas Ornithological Society
- Oct 8 **TUESDAY 6:00** Board Meeting
Friends Rm. Manhattan Public Library
- Oct 12 Sat. morning birding 8:00 a.m.
Sojourner Truth Park



Skylight plus

Pete Cohen

Another September arrives, with it another time of changing seasons as summer pivots into autumn with the theoretical fulcrum being the autumnal equinox, when the Sun rises and sets due east and west, giving equal amounts of light and dark, and providing special problems for certain commuters who must drive to and fro to work on roads deliberately plotted to run due east and west. It's the time, historically, when freshly cooled arctic air slides down into the still summery south, setting off those eruptions known as the equinoctial storms. However, with a warming arctic it will be interesting to see if that effect is delayed or diminished or altered in any way.

Also, for our entertainment will be the harvest moon, showing up this year on the 13th. Actually, the event generally involves three moons glowing largely through three sequential nights, one the night before, and one the night after, the main one. The rising times for the companion moons are only about a half hour different than the center full moon which always rises at sunset, so with clear skies through those nights lots of certain kinds activities can be performed from dusk to dawn without the aid of "artificial" light

It's been said here before, but likely it can't hurt to re-state that if the Moon dragged a line across the ground as it traveled its orbit around the Earth, that line would be about at about a 5° angle different from a line dragged by the sun as it appears to pass overhead. It works out that in our autumn the Moon's orbital path runs nearly parallel to our horizon, thus making possible those extended appearances several nights in a row. Six months removed and that path is vertical to our horizon. The full moon then rises steeply and domes overhead, about an hour and a half later than the moon before, and about that much earlier than its next night's appearance. Apparently, this is of not much use at seeding time, so I've not heard of an equal tradition of a "planter's moon".

One might also notice at this time, that as the summer constellations drop down in the west and fall's cast comes up in the east, that all the stars first appear a little further along on their passage each night than the they did the night before. That's because you can have a solar day, measured by how long the Earth takes to rotate once relative to the Sun, and also have a side-

real day, measured by that rotation relative to the stars, that are all much, much, much further away.

For example, in going from the Flint Hills to Denver you will see the mountains before you see Denver even though they are further away, because they are much higher. Similarly, as the Earth rotates, individual stars, which are all much, much, much higher/further away than the Sun, will come back into a person's view (completing a sidereal day) before the Earth rotates enough to come back into daylight (completing a solar day). Combined with the Earth's movement on its orbit, our sidereal day is about four minutes shorter than a solar day, and thus the stars gradually and continuously shift across the sky.

The nighttime drift overhead this month will begin with the Big Dipper's handle at rather a NW/SE angle as Regulus, the bright star of Leo, sinks below the western horizon, to be followed apace by Spica shining in Virgo. Nearby above her Arcturus in Boötes will be next to go. Reddish Antares in Scorpius will linger awhile along the southern horizon with the eastward tilted loop of Ophiuchus traveling above him, and above them the backward 'C' of the Northern Crown will be staying ahead of Hercules, he of the almost cubed body and spidery limbs.

Close behind them the Milky Way will begin splitting the sky N-S by mid evening. Blue Vega in Lyra will be just in front and below Deneb, the taillight of Cygnus the Swan flying in mid-stream, with Altair in Aquila the Eagle a bit south along the stream's eastern edge. These stars of the Summer Triangle will be yielding the sky to the autumn crew.

Up will come the four widely spaced stars that seem to define a large black diamond. Gradually the "diamond" will level off and become the Great Square of Pegasus, soaring with folded wings and upside-down, his head and fore-legs to be imagined among the mist of stars preceding him. He'll be followed by Andromeda, attached to the Square's trailing high star, and she by Perseus, a bright cluster in the Milky Way. Below them drift dimly, W to E, Capricorn the Goat, Aquarius the Water-bearer, Cetus the Whale below Pisces the Fish, and a brighter Aries the Ram below Andromeda.

Briefly mentioned to leave room to note that the Moon will move from right to left of Jupiter the 5th and 6th, and the same for Saturn the 7th and 8th, and briefly form a triangle with shy Mercury and sparking Venus in the evening twilight the 29th.

It is full the 13th at 11p33 and new the 28th at 1p26. The fall equinox occurs at 2a50 the 23rd.

© 2019 Peter Zachary Cohen

Creek Walking

Dru Clark
e



A love of water is not easily gratified in the Great Plains, especially if you have experienced Big Water: the ocean, the Great Lakes, large and meandering rivers. But here in the Northern Flint Hills, if you look hard enough, you can find narrow, winding creeks and their attributes to satisfy.

Not too far from home is a sweet creek, once a stop on the Louisville-Juniata cutoff, that is accessible from a low water crossing, enabling one to access it and not trespass on anyone's private holdings (although our neighbors know we 'patrol' the area). On the cliff top of the south bank, there used to stand an old limestone structure, more a 'room' than living quarters. It may have served as a way station for travelers on this trail, but it is gone now, demolished to make room for more grazing land.



My equilibrium is not what it used to be, so the rubble and uneven depths of this creek challenge me to balance carefully with each step. The channel changes with each storm event: not perceptibly to the occasional visitor, but to one who frequents it almost daily, a shallow spot one day may have been scoured like a pot the next. Gravel bars, like islands, curve like paisley shapes, mounded in the middle, and gently sloping to match the stream flow. More rubble deposits than true pure gravel, these bars are composed of boulders, mostly limestone, but occasionally a glacial erratic or, more recently, slabs of mudstone that look like slate but melt when touched, turning back into their original makeup of silt.



Eons of change can be seen in the creek, its channel, its banks. Abundant are the worked pieces of chert or flint, evidence that a human hand had held and shaped them by the conchoidal (shell-shaped) scars left by carefully chipping an edge. Sharp enough to cut paper, some are black, caramel, and butter colored. One nodule the size of a child's fist was perfectly round save for one side where a disc was missing.



A two-foot-long boulder of Sioux quartzite glowed with a rosy hue: dropped over 12,000 years ago at the terminus of a glacier, it rests today a long way from its origin. The banks tell a tale of past inundations, with bands of hand-sized rubble marking torrents hundreds, or even thousands, of years ago, interrupted by thick layers of fine silty soil, laid down in more gentle flows. Today, a riparian (stream-associated) forest of oak, hickory, ash, sycamore, locust and hackberry borders the creek, hosting a variety of woodland birds. Red-headed woodpeckers nest in the hollows of the dead trees. A pewee quietly calls. The great blue heron's scat is spattered on the low water crossing. Where were they millennia ago, when this was a different environment?



The water was milky today as it rained last night, but green frogs, crayfish, a snapping turtle, and water striders frequent the quieter pools. Strands of filamentous algae 'green up' the bottom and sometimes form hairy mounds, resembling slimy sloth pelts, on jutting rocks after a storm. And, today I found the most encouraging artifact, a one inch long freshwater mussel shell! Streams and creeks that form proper habitat for these mussels are uncommon, so its presence is intriguing. The valve (shell) still retained its periostracum, the tobacco-colored outer layer that serves to protect the limey shell from acids, so this little mussel's death must have been recent. Freshwater mussels require a fish host to complete their life cycles, so its host must live in the creek as well. Once the identity of the shell is determined we can check its normal range. * If this find was beyond that range, the creek may be recruiting it into its channel!

Photos by Dru Clarke

When I was a kid, I walked a creek that ran at the foot of the hill where our summer place was. A slab of rock jutted out over a bend and I used to kneel on it and watch the water riffle by. That was a long time ago, but I still love creeks and all they hold.



*The shell is from a pond-horn mussel, found in pooled headwaters of small streams. It can go dormant during dry conditions and survive exposure to air, conserving water by plugging its siphons with mucus. It is one of a few species that can be found in southwest Kansas. Its range is over two thirds of the state.

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SAVE THE DATE



71st Meeting of the Kansas Ornithological Society
October 4-6, 2019
Wichita, Kansas
<http://ksbirds.org/>

VISIONS
OF THE FLINT HILLS

An annual art benefit for Friends of the Konza Prairie

Buttonwood Art Space | October 4 - November 21, 2019

OPENING RECEPTION: OCTOBER 4, 2019
VIP Reception: 5-6pm Public: 6-9pm

Juror: Terry Evans, Photographer
Honorary Chair: Susan Adams,
Flint Hills Discovery Center

Buttonwood Art Space 3013 Main Street, Kansas City, MO 64108
© David Cooper www.ButtonwoodArtSpace.com

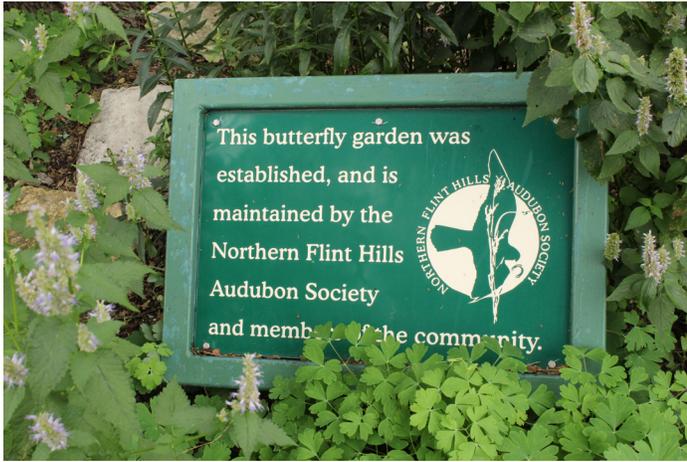
Second Annual Celebration of Cranes Nov. 1-3

Save the date this autumn and come enjoy the amazing assemblage of cranes and other birds that gather at the Quivira National Wildlife Refuge during the fall migration. Join **Audubon of Kansas** for van tours, nature walks, expert speakers and other activities for all ages throughout the weekend. More information to come. <https://www.audubonofkansas.org/>

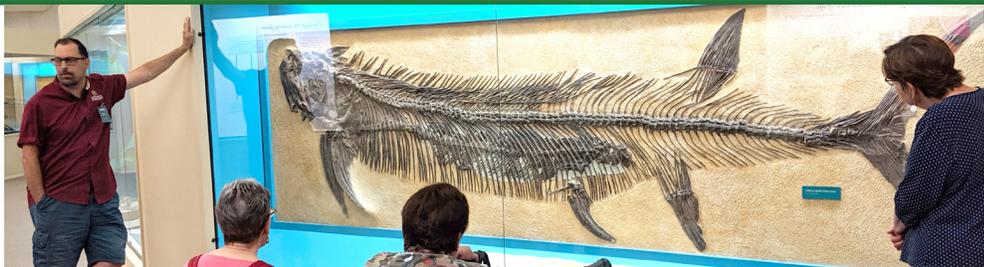


Photo courtesy of Nick Stroot

Butterfly Garden at Sojourner Truth Park is glorius and full of butterflies!



Thank you, Jacque Staats, for all the loving care you have given the Garden, and thank you for these photos.



The trip to the Sternberg Museum in Hays was a huge success!

Our guide, Ian Trevethan, explained so much in laymen's terms that we all came away in awe of this place.





Northern Flint Hills
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The purpose of the Northern Flint Hills Audubon Society is to teach people to enjoy and respect birds and their habitats. NFHAS advocates preservation of prairie ecosystems and urban green spaces thus saving the lives of birds and enriching the lives of people.

Also available online at nfhas.org

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WE NEED YOU!

PLEASE consider joining our NFHAS Board.

Contact Patricia Yeager if interested, and watch our website and newsletter for time and day of meeting.

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