

**Thank you** to the owners of the host houses on the birding tour: Dave Rintoul, Elizabeth Dodd, Jacque Staats, Dick Oberst, Kent and Patricia Yeager, Doris Burnett. The food for lunch was particularly delicious and provided by Doris Burnett, Carla Bishop, Ruth Douglas-Miller, MJ Morgan, Hoogy Hoogheem, and Jacque Staats.

For those of you who missed the feeder tour and are interested in taking a birding self tour around Manhattan, I suggest this birding tour from HWY 24. A bird field guide, binoculars, a bottle of water, a little time, a little gas in the car and you will have a pleasant time on this route.

**Point of Interest: Pottawatomie Co. State Lake No. 2.** This lake is a fishing and camping lake and is a worthwhile birding spot to explore. A beautiful wildflower meadow is here as well. Start at the intersection of HWY 24 and Green Valley Rd. east of Manhattan. This is the intersection at Ramblers and Dara' Fast Lane. Turn North (left) onto Green Valley Rd. The pavement will end and then shortly you will arrive at a Stop sign. Turn left. You are on Junietta. Look for hawks while you continue along this road to the top of the hill. Slow down and look for a gravel road to your right and a yellow sign with a double arrow on it to your left. Turn here and follow the road to Pottawatomie State Lake No. 2 (better known as Pott. 2). Wooded and meadow walking areas are to the right of the information sign or you can turn left and do some good birding from your car and view the lake.

**Point of interest: Rocky Ford.** Leave Pott 2. When you come to the same road you were on (the double arrow in front of you) turn right and drive slowly along the road now called Blue River Rd.

*(Continued on middle page 4)*

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



## prairie falcon

Northern Flint Hills Audubon Society Newsletter

Vol. 41, No. 7 ~ March 2013

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### Upcoming Events

**Mar 4 - Board Meeting 6 p.m.**

**Home of Tom & MJ Morgan**

**Mar 9 - Saturday Birding 8 a.m.**

**Meet Sojourner Truth Park  
(cancelled if raining)**



## Skylight plus

Pete Cohen

Here we are again in that stretch of time we refer to as the month of March, because the very early Romans named their first span of springtime for their war god, Mars. (The time had come again for their soldiers to go marching forward.) Other peoples named this span for the noticeable lengthening of the days, or for the appearance of the ground from beneath the snow, or for the budding of trees. Whether that reflected more peaceful inclinations, I cannot say.

In any case, it is during this period that we come to the vernal equinox, generally referring to that as a milepost of time, though it is also very much a place in space. It is one of two points on the Earth's orbit where, when the Earth comes to it, the Sun's apparent path across the Earth's surface crosses our Equator, and rises and sets to east and west. (The other point, of course, being 180 degrees on around the orbit to the location of the autumnal equinox).

For us this time around, we will reach the vernal equinox position on the 20<sup>th</sup>, but, despite the term, that doesn't mean we will have equal measures of daylight and dark on that date. According to my almanac we at this latitude will have, because of the Earth's tilt on its axis, 12 hours and nine minutes between sunrise and sunset. While, earlier, on the 16<sup>th</sup> there will be only 11 hours and 58 minutes between those two events, and on the 17<sup>th</sup> there will be 12 hours and two minutes. And those figures could vary slightly, depending on the how the atmosphere refracts the light coming from the Sun, which is actually still below the horizon, or gone down below it, when the image we see appears or departs. No matter, that's the closest we'll get to equality, and with the twilights even on the 16<sup>th</sup> we will be having more daylight than the term equinox suggests.

What is more precise about the equinox, as a site on the Earth's orbit, is that from that point eastward is measured the right ascension (RA) of celestial objects. If one imagines, as some ancients did,

the Earth and Sun existing within a spherical casing whose inner surface displays all that the sky reveals, and then extends the plane of our Equator outward, the circular line where that plane touches the spherical casing will be the celestial equator. Now divide that celestial equator into 360 equal degrees, starting at the point of the vernal equinox as zero and then moving eastward around that celestial equator. (It will gradually bend westward, but you've started eastward.)

Now imagine a line from the top (north pole) of the encasing sphere, down the surface of the casing to meet and pass through the celestial equator at a point where a star is rising. The degree point where that line, a meridian, meets the celestial equator is that star's right ascension, the point at which it will be seen, from the Equator, to ascend. The star's distance above the horizon at any time, measured in degrees, above (+) or below (-) that equator, is its declination (DEC). A person who knows simultaneously the time at his or her location and on the Greenwich meridian, plus the RA and DEC of celestial bodies, is in a position to navigate. One just has to learn how to do it. (Actually the 360 degrees of the celestial equator are divided into 24 15-degree-wide hours, each subdivided into 60 minutes with 60 seconds, so RA is expressed as: --h--min--sec.)

For this month Mars and Venus are absent. Jupiter will be the brightness high up and westward all month. But the exceptional item to watch for will be a comet referred to as C 2011 L4 (PANSTARRS) which my sources agree should come closest to Earth on the 5<sup>th</sup>, about a million miles up in Pisces, whose faint stars should be a quarter to a third of the way above the middle western horizon in the evening. The comet is expected to pass its closest to the Sun on the 10<sup>th</sup> and one source suggests will be at its brightest from the 8<sup>th</sup> to 12<sup>th</sup>. Guesstimates say it could be quite bright, but its brightness will be spread out from head to tail so how visible it will be to unaided eyes remains to be seen, or not, as the case may be.

The Moon will be invisibly new on the 11<sup>th</sup> (technically at 1p51) and notably full the 27<sup>th</sup> (at 4a27).

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## Foraging Dru Clarke



A faint staccato tapping drew me to look out of our bedroom window and toward the trees bordering the creek. The source of the sound was a red-bellied woodpecker that appeared to be glued to the tree trunk. Its posture was decidedly odd: its cheek rested against the bark as if *listening* to it. Then it lifted its head and gave a few tentative taps. It hitched down the trunk to a new spot and again, rested its cheek – the left one – against the bark, tapping after a few seconds. After a few minutes I was distracted and when I returned to observe this unusual behavior, the bird was gone.

Being winter, I found this foraging behavior especially notable, as they eat acorns and other nuts, staples in cold weather, as well as the arthropods they prefer that would be abundant and more available in warmer months. A nice, fat larva would be a treat on a chilly day, as a glass of rich eggnog would be for us.

But, we humans wouldn't want to have to do a lot of foraging in this weather. Rather, we stock up and fill our pantries with canned and dry goods and rely on advance planning for meals. It is a happy event, however, to discover foodstuffs growing wild in the Flint Hills prairie and woodlands.

In the month of the Black Cherry Moon (late July and August), or the first full month after the summer solstice, the chokecherries (*Prunus virginianus*) ripen and were used, as were other berries, by Amerindians to make pemmican, a stable, high calorie food (that is mostly rendered fat and dried meat). The pits (seeds) are toxic, so care should be taken in preparing the cherries for jam or jelly. Riverbank grape (*Vitis riparia*) and wild plum (*Prunus americanus*) can be similarly transformed, but perhaps you might not know that hackberry fruit can be converted into a jam. I discovered this after a youngster asked me if the bluish-black berries could be eaten: I tried a few and found the lean, sticky “meat” to be sweet, then subsequently found a recipe for the jam. (I have yet to try to make it.)

As annoying as it may be when it ‘grabs’ you as you are trying to make your way through woods, greenbrier (*Smilax rotundifolia*) has succulent tips and tendrils that you can use to augment your salads, and it makes a tasty fresh snack when hiking. It is much appreciated by wildlife, both as protective cover and for its berries.

Yucca's roots, stalk and flowers can be eaten as well as pigweed or goosefoot, now considered a weed in

our gardens, and the tubers of groundnut or potato bean, a ubiquitous leguminous vine that was critical to the survival of early colonists when their corn harvest was depleted.

Breadroot scurf pea (prairie turnip or prairie potato, pomme blanche – “white apple” - or pomme de terre – “apple of the earth”) has a rich history of use as well as anecdotes. Clever Lakota women told their children that the prairie turnips, or *Timpusla* in their language, point to each other, so when the little ones were sent to gather them, they would look to see which way the leaves pointed, then head off in that direction to find new plants! Lewis and Clark watched the Lakota prepare it by frying. John Colter, in his flight from the Blackfeet, survived on this plant, as did- more than likely- Hugh Glass after he was mauled by a grizzly and crawled across the plains of South Dakota. The plains grizzly itself, now extinct, dug it with relish, according to Wm. Clark. The plant should be harvested in the months of June and July when the underground tubers are plump, rejuvenated after the plant's early spring growth. After July, the above ground plant dries up and blows away, making it impossible to locate the treasure below.

Jerusalem -the use of this possessive noun likely a corruption of the Italian “girasole” for sunflower- artichoke - some French fellow thought they tasted like that delicious thistle- was cultivated by Amerindians and its tubers can be fixed in a variety of ways. Beware, however, as its starch is inulin (*not* insulin), a complex carbohydrate, that many cannot fully digest and it “stirs and causes a filthy loathsome stinking wind” according to a quote in *Gerard's Herbal* (1621). Maximilian sunflower rhizomes can be used as Jerusalem artichokes but I don't know if they have the same indigestible effect.

Looking forward to the moons ahead, after the moon “when the snows blow like spirits in the wind” and the moon of “frost sparkling in the sun” and “ice breaking in the river”, there is a rich repast to be had by foraging. I know where the wild strawberries and raspberries are, and I can usually find some morels, but I think I'll pass on the Jerusalem artichokes and leave the larvae in the bark crevices to the woodpeckers. Eggnog sounds really good right now.

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# GLOBAL CLIMATE CHANGE

Vital Signs of the Planet



## WHAT DOES THIS MEAN?

▲ September Arctic sea ice is now declining at a rate of 11.5 percent per decade, relative to the 1979 to 2000 average\*. Arctic sea ice reaches its minimum each September. The graph above shows the average monthly Arctic sea ice extent in September from 1979 to 2010, derived from satellite observations. The September 2010 extent was the third lowest in the satellite record.

▶ The time series at right shows the annual Arctic sea ice minimum since 1979, based on satellite observations.

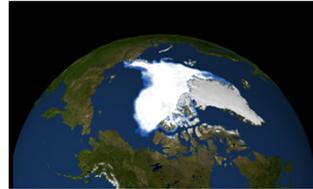
\*National Snow and Ice Data Center

NASA missions that help monitor sea ice:  
Grace • Terra • Operation IceBridge

## TIME SERIES: 1979-2010

Data source: Satellite observations.  
Credit: NASA/Goddard Scientific Visualization Studio

2007



1980 1985 1990 1995 2000 2005 2010

## WHAT DOES THIS MEAN?

▲ This graph illustrates the change in global surface temperature relative to 1951-1980 average temperatures. Global surface temperatures in 2012 were the ninth warmest on record. (Source: NASA/GISS) The gray error bars represent the uncertainty in measurements. This research is broadly consistent with similar constructions prepared by the Climatic Research Unit and the National Atmospheric and Oceanic Administration.

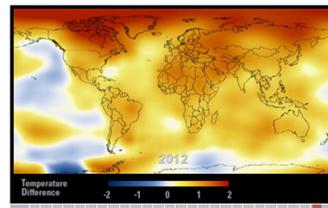
▶ The time series at right shows the five-year average variation of global surface temperatures from 1884 to 2012. Dark blue indicates areas cooler than average. Dark red indicates areas warmer than average.

NASA missions that contribute to surface temperature monitoring: AIRS • MODIS • Jason-2/OSTM

## TIME SERIES: 1884-2012

Data source: NASA/GISS  
Credit: NASA/Goddard Scientific Visualization Studio

2012



1884 1902 1920 1938 1956 1974 1992 2010

NASA:

<http://climate.nasa.gov/>

[http://climate.nasa.gov/key\\_indicators#seaIce](http://climate.nasa.gov/key_indicators#seaIce)

National Geographic:

<http://news.nationalgeographic.com/news/2013/13/130215-severe-storm-climate-change-weather-science/>

ALSO: <http://www.ipcc.ch/>

The Intergovernmental Panel on Climate Change (IPCC) is the leading international body for the assessment of climate change. It was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts. In the same year, the UN General Assembly endorsed the action by WMO and UNEP in jointly establishing the IPCC.

*(Continued from page 1)*

This is a VERY curvy road and requires the slow speeds posted. It is often a good hawk road. Near the end of the road you will see the river out the driver's side window. Look for a historical marker to your right. Park here. You will have an excellent view of the river and the birding is often good at this spot. Continue to the bridge ahead and notice the green FISH sign that indicates that this is a public access point between the dates written on the green sign. Continue to the stop sign. Look left. You will see the entrance to Rocky Ford across the road. Go to Rocky Ford. Rocky Ford is a hot spot for fishermen and waterfowl. Bald eagles fish here as well. When the lake is frozen there is running water here. There are walking trails in both directions from this area. When you leave Rocky Ford and are back at Dyer Rd. turn left onto Dyer Rd. and continue to the stop sign. This will take you to Hwy13. Turn left. There are two parking lots, one on either side of the dam. Park in one of them and explore the paths that lead off the parking lot. Look up. Several species will be flying over. Turn right out of the parking lot and you will be back on Hwy 24 (Tuttle Creek Blvd.)

**Tip:** (from the golden field guide) a Crows can be told from a distant hawk by its frequent steady flapping, seldom glides more than 2 or 3 seconds except in strong updrafts or when descending. *Good birding to you, Patricia*

## SAVE the DATE

The spring **International Migratory Bird Day** count will be held on **Saturday, May 11**. We have several parts of Riley County that were not covered last year, so if anyone wants an area or wants to join an existing group, please e-mail me at [jim.throne@sbcglobal.net](mailto:jim.throne@sbcglobal.net). The expectation is that you count all birds heard or seen in your assigned area, and provide a list to me with some trip information. I then compile the information for the county, and submit the list to eBird.org. Zealots like myself will be birding from dawn to dusk, and will also spend some time owling; but, others spend just part of the day birding. This is a great excuse to spend the day birding, so please consider joining us.

*Jim Throne*



photo by Dave Rintoul

## The Mallard The Duck with the Curly Tail!

Latin: *Anas platyrhynchos*

Average length: M 24.7", F 23"

Average weight: M 2.7 lbs., F 2.4 lb

The Mallard is the most common duck in the United States, probably the duck most people can identify. Almost all domestic ducks come from this species.

Mallards have one of the most extensive breeding ranges of any duck in North America, extending across the northern third of the United States and up to the Bering Sea. The highest mallard densities occur in the Prairie Pothole Region of Saskatchewan, Alberta, Manitoba and North Dakota, with nests placed in upland habitat near wetlands on the ground, or in tree holes or nest boxes. Female mallards lay an average of 9 eggs.

Mallards are “dabbling ducks”—they feed in the water by tipping forward and grazing on underwater plants. They almost never dive. They can be very tame ducks especially in city ponds, and often group together with other Mallards and other species of dabbling ducks.

### On-line

Most of us won't ever see any of the “Birds-of Paradise” in the wild, but you can “see” them in this remarkable project. The videos are spectacular.

Go to <http://birdsofparadiseproject.org/>

The Cornell Lab of Ornithology

### Birds-of-Paradise Project

Introduction The Birds The Human Endeavor Evolution in Isolation About the Project

#### Birds-of-Paradise Project

The birds-of-paradise are among the most beautiful creatures on earth—and an extraordinary example of evolutionary adaptation. On this site you can find what few have witnessed in the wild: the displays of color, sound, and motion that make these birds so remarkable. Then you can delve deeper, examining the principles that guided their evolution and the epic adventure it took to bring you all 39 species.



Introduction



The Birds

Adaptations for Attraction



The Human Endeavor

The Effort Behind the Images



Evolution in Isolation

The Science Behind the Beauty



About the Project

### How did you start birding?

Galilee Rd. Olsburg, KS 66520

Please send me your story! [cinraney@k-state.edu](mailto:cinraney@k-state.edu) or 15850



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Subscription Information: If you do not want to receive the national magazine, but still want to be involved in NFHAS local activities, you may subscribe to the Prairie Falcon newsletter for \$15/yr. Make checks payable to the Northern Flint Hills Audubon Society, and mail to: Treasurer, NFHAS, P.O. Box 1932, Manhattan, KS, 66505-1932

RARE BIRD HOTLINE: For information on Kansas Birds, subscribe to the Kansas Bird Listserv. Send this message <subscribe KSBIRD-L> to <[list\\_serve@ksu.edu](mailto:list_serve@ksu.edu)> and join in the discussions.

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