

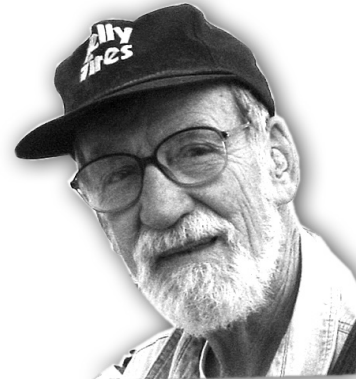
It's time for our annual major fund-raising event, the

NFHAS Birdathon

April 30 - May 1, 2016

If you love the outdoors, spring weather and enjoy nature, join us in our quest to count as many bird species as possible in one 24-hour period. Funds raised will again be used to help with several local projects in Manhattan.

A portion of the funds will go towards the Northeast Community Park (Northview), the butterfly garden at Sojourner Truth Park, and educational activities at Michel-Ross Preserve. In the past, we (you, our sponsors) have donated Birdathon funds to the Washington Marlatt Park, the Rowe Sanctuary on the Platte River in Nebraska, and our El Salvador sister chapter. Many of our ongoing projects and activities, such as wildlife preservation, publication of the Prairie Falcon, and bringing in special speakers for our monthly program meeting are also partly funded with Birdathon funds. **MORE INFORMATION ON PAGES 6-7.**



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



prairie falcon

Northern Flint Hills Audubon Society Newsletter

Vol. 44, No.8 ~ April 2016

Inside

pg. 2- Skylight Plus

Pete Cohen

pg. 3 - A Newfound Respect
for the "Apasum"

Dru Clarke

Pg. 4 - Events of Interest

pg. 5 - NE Park & Butterfly Garden
UPDATE

Jacque Staats

pg. 5 - Alsop Update

Patricia Yeager

Upcoming Events

Apr 11 - Board Meeting 6 p.m.

Home of Tom & MJ Morgan

Apr 9 - Audubon of Kansas Conference

Lawrence Holiday Inn see pg. 4

Apr 9 - Saturday Morning Birding

8 a.m., Sojourner Park

Apr 9 - Clean-up Stagg Hill - 1:00 p.m.

Apr 14 -Author Julian Hoffman, 7 p.m., pg. 4

Apr 19 - LAST CHANCE "brick" for Alsop walk

Apr 30 - MAY1 - BRIDATHON see pgs. 6-7



Skylight plus

Pete Cohen

The Earth will stop rotating before typos are eliminated, so apologies for giving the start of daylight savings so far in advance in the last issue.

Now back to our climate concerns. First to note that the term “greenhouse effect” is a bit of a misnomer. Particles in the atmosphere do not reflect heat from below directly back down; they absorb and then radiate it in all directions. Were they not doing as they do, the special Economist report referred to earlier, tells me the temperature at the Equator would be 14°F (-10° C). So the task of restraining the warming trend going on in our atmosphere is a question of balanced management.

That report goes on to say that while much effort is going toward reducing the overheating caused by human-caused emissions, other efforts are being directed at increasing oceanic absorption of CO₂. However CO₂ combines with water to form carbonic acid, which is a negative for the seas’ ecology. So one of difficulties with that approach, as the report adds, is that to neutralize a gigaton (1 billion tones) of carbon emissions (about 10% of the total) would require 6.5 gigaton of limestone, an anti-acid base, hauled and dumped from 4500 factories. In another approach a tremendous amount of land would have to be devoted to growing absorbing plants, which could require certain decisions because while dense forest leaves are good absorbers, grasslands are paler and more reflective. (The effect on employment rates hasn’t been mentioned.)

Other efforts are directed toward intercepting the Sun’s input. On that, one can take instruction from Indonesia’s Mount Tambora whose 1815 eruption produced “the year without a summer” in 1816, using mostly sulfur. Fleets of airplanes, or artillery barrages, might spread a proper amount of sulfur periodically, for each application would last only from one to four years and fall as acid rain, though it is believed not to be nearly in the harmful amounts produced by land-based industries. According to a Wikipedia website estimate, one kilogram of well-placed sulfur in the stratosphere would roughly offset the warming effect of several hundred thousand kilograms of carbon dioxide. Such would be immediately effective, and much cheaper than

the proposed reliance on limestone or agriculture. How renewably recoverable the sulfur, or limestone, might be I haven’t found stated.

Similarly, oceanic ships, I read, stir up salt particles that become aerosols that water vapor can cling to, producing marine stratocumulus clouds that are great reflectors. The number of ships required to do enough stirring would be interesting to know, and would provide another insight into the enormity of the processes so far required to deal with emissions after they’re emitted.

And cooling without reducing carbon (which, unlike sulfur, can remain aloft a long time) leads into myriad technical considerations as to how various natural processes of the Earth’s would respond to such tinkering. And just some cooling, considered alone, could affect global convection, making, say, dry areas drier. Then moral evaluations and legal ramifications begin.

Geo-engineering of these kinds, and others, offer tantalizing prospects for applications, and for unintended consequences. Meanwhile responses aimed at accommodating to the prospect of a warming climate are being acted upon. Next time for that. For April, normally shy Mercury becomes, for the first couple weeks, comparatively exhibitionist, showing up in the western dusk light, particularly noticeable to the lower right of a waxing sickle Moon the early evening of the 8th. Then reddish Mars will begin rising a little before midnight and brightening while traveling above Scorpius’ reddish Antares (whose name means “anti-Mars”) like competing twins, or mirror images. Jupiter continues to be the gleaming white pinhead through the night, with no worries about being out-shone by Venus who will be absent.

The Moon starts off the night of the 10th by cozying up to of Taurus’ Aldebaran (blocking out the star if seen from further east), then favoring Leo’s Regulus the 16th, and Jupiter the 17th, with Virgo’s Spica getting her turn the 20th. Then before dawn on the 25th the Moon, Mars, and Saturn get together in Ophiuchus, the large tilted beehive-shaped outline of stars just above Scorpius and Antares. There they’ll be a temporary triangular trio, for in the next dawn they’ll be lined out single file.

The Lyrid meteor shower, due to be best the night of the 21st, will be blurred by the Moon reaching full at 12a24 on the 22nd. It will be new at 6a24 the 7th.

© 2016 Peter Zachary Cohen

A Newfound Respect for the "Apasum"

Dru Clarke



Possum Hollow is a frequent destination for our walks with the dogs. Named for the passel of possums who would scavenge there after Saturday night picnics, it is a lovely spot, with a dilapidated stone wall, a famed backdrop for graduation photos, and faded green outhouse. Tucked in next to our road's namesake creek, the hollow is wooded with chinquapin oaks and the more water-loving sycamores where said possums spend their days in arboreal dens or in underground ones appropriated from burrowing animals.

Archie, our terrier, often disappears into the woods, then rejoins us on the road home, today proudly carrying a black and white bundle of fur in his mouth. Not, thankfully, a skunk, but a young possum who had gone into the 'faint' that helps them survive. The dog obediently dropped it, due in part to my shouting at him and in part, I think, to the musky odor emitting from the (not) 'dead' creature. We continued on down the road and after about five minutes I saw it get to its stubby legs and waddle off, looking over its shoulder at us until it was out of sight.

First named 'opossum' by John Smith at Jamestown, after an Algonquian word "apasum" (one of many spellings) meaning "white animal," the possum – an acceptable colloquial term widely used in many regions – is the only true marsupial in North America. It is thought to have descended, and remained relatively unchanged, from mammals that evolved during the Jurassic, the era associated with dinosaurs. The Latin genus name, *Didelphis*, means "double-wombed," the female possessing two uteri; and, ironically, the male has a bifurcate, or forked, penis, and produces paired spermatozoa (the better to swim with)! They are unique in many other ways, having fifty teeth; a hind clawless "thumb" (really a toe) called a hallux, which allows it to grasp like a hand; an arrangement of front tori or footpads that allow the digits to open to 180 degrees, facilitating grasping as well; an unusual 'ledge' at the back of the lower jaw (perhaps to serve as additional support for chewing muscles); an abundance of awn hairs, intermediate between guard and down hairs, which aid in waterproofing; and the shortest uterine gestation – 12 days – of any mammal. The long development of the embryos – after emerging from a specially created birth canal and not from each uterus, and managing a speedy five-minute climb into the pouch – occurs for about three months, firmly attached to a swollen teat for the duration. (The unique delivery canal disappears after birth occurs.) I once found a mother possum who had been hit by a car who had a litter of pinky-sized young in her pouch. I had always pictured a pouch as a horizontal pocket that opened from above, but hers was a vertical infolding of furry and fat, fleshy muscle midline on her belly. I've read that mother possums can voluntarily open and close the pouch, adjusting the ambient temperature inside. (Water possums can close it so tightly that it becomes a watertight chamber.)

Possums' nearly naked and scaly tails have been fodder for many stories, and while they are prehensile, the possum cannot use its tail to hang upside down: the

animal is too heavy for the tail to support its weight. But, they can carry bundles of grass and can be used to aid in climbing and steadying oneself on a branch. (The young can use their tails to suspend themselves for a short time.)

White or gray phase possums are found more in the north, while dark phase coats with a higher frequency of black hairs are more common in the south. We seem to be seeing more dark phase now and wonder if this is linked to our climate changing. Possums don't hibernate but may den up for several days when the temperature really drops: cold winter temperatures and high altitudes have limited their range to the eastern U.S., although a stable population exists today in California, established after escaping from pens where they were raised for food and fur.

Possums are omnivores and are particularly fond of slugs and snails, but eat almost anything available; hence, they are performing a vital sanitation duty. One who frequented a compost pile was nicknamed "Truman Compostey." (I love that.) Leo Schell won't take garbage to his compost pile at night for fear of getting a violent hissing at.

It was a pleasure to find that they eat ticks, the bane of our hot and humid summers. On frosty mornings I see a tail drag to and from our front porch etched in the icy crystals where a possum has come out to forage at night. Its den is either under the porch or, as there is an ancient cedar tree to climb to access the roof, in the crawl space above the east bedroom. I often hear a weight being dragged overhead – a bit unnerving in the middle of the night.

Experiments have shown that possums are immune to pit viper venom (they've isolated a lethal toxin neutralizing factor, a small protein), and they are resistant to ricin, the poison in castor beans, and botulinum toxin. They rarely exhibit rabies. We, as horse owners, are understandably leery of possums as they, unwittingly, are the reservoir host for *Sarcocystis neurona*, a protozoan parasite that causes a central nervous system disease in equines. It is transmitted in the feces of the possum, so assiduous care in feeding and watering is essential.

Who knew that this ancient but commonplace creature, the "apasum," was so fascinating and, I think, deserving of a newfound respect. May his and her clan thrive.



reprinted from National Geographic Society

© Dru Clarke January 2016



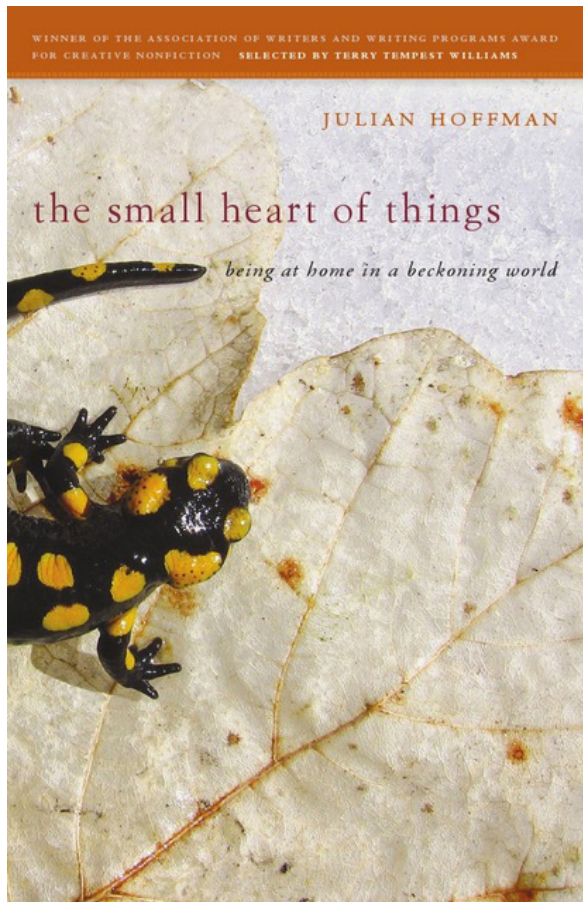
Everyone who comes will leave fortified with lots of information on how you can make a difference in your yards, gardens and farms. **Registration starts at 8:00 a.m.** and the first program will be at 9:15 AM, featuring Ann Birney doing a historical performance of Rachel Carson.

We will be viewing the film "When the Well Runs Dry" by Stephen Lerner with commentary by Tom Averill and Matthew Sanderson. Our lunch-time speaker, from the Xerces Society, will talk about "Pollinators in the Balance."

There will be speakers who will share their experiences doing habitat restoration at various levels; another reporting on research on native bees; Sil and Ed Pembleton talking about "Helping Your Child to Wonder."

There will be a session on the status of Prairie Dogs and Black-footed Ferrets, we'll hear from Matt Bergles who wrote "Larry Saves the Prairie," a tribute to Larry Haverfield's dedication to ensuring the reintroduction of ferrets would survive the onslaught of poisoning.

We'll take a break for music and a silent auction, then wrap up with dinner and the final keynote by Dr. Leonard Krishtalka, Director of the KU Biodiversity Institute. For more details, go to: <http://www.audubonofkansas.org/about/silent-spring-conference-2016/>



Author Julian Hoffman (who will be in residence on Konza Prairie for a week in April, as part of Konza Biological Station's Long-term Ecological Reflection program) will give a public reading of his writing on **Thursday, April 14, at 7:00 pm** in the Kansas State Student Union Little Theatre. All are welcome to this event.

Hoffman was born in Canada and lived and worked in London for several years before moving to the Prespa Lakes of Greece, the first transboundary park in the Balkans region. There he works monitoring bird species that are vulnerable to the development of wind farms in the area, and as a nature writer exploring diverse ecosystems. He is in Kansas and Iowa this spring, investigating tallgrass prairies.

"Murmurs at Every Turn: On place, perception, and the landscape of home" is the title of his reading on Thursday, April 14 at 7:00 pm in the Kansas State Union Little Theatre. Copies of his book will be for sale.

http://www.ugapress.org/index.php/books/the_small_heart_of_things/

North East Park & Butterfly Garden

Jacque Staats

The **Northeast Park Prairie** was burned by the MFD and Riley County Volunteer Firefighters in March. With the timely rains last year the grass was over 6 feet tall so it had a huge fuel load, thus a very effective burn. Thanks to Kevin Fay and Ron Parks' help a couple of years ago, there are almost no invasive hybrid flowering pears in the prairie area. There are some invasive pears and cedars in the wooded area and we are hoping to get out and cut them in the next couple of weeks. As per the discussion with the NFHAS Board and their wish to encourage forb growth, we'll be mowing the prairie for a few years and then burning again. The city will contract with a local farmer to harvest the prairie hay with 2/3 of the hay going to the farmer and 1/3 to the city which uses it at the zoo.

Most of the brushy cover from **Sojourner Truth Butterfly Garden** has been removed. Last year a concerted effort was made to "off" the wild grape, which was becoming rampant, and it's looking like it was pretty effective. The butterfly bush (Buddleia), which we thought had succumbed to the heat and drought a couple of years ago, has come back from the base. Since it is struggling, it was not pruned this year. Last year fennel, parsley and dill, members of the carrot family and especially attractive to Black Swallowtail and Painted Lady larva, were added under the Elm tree. The nettles in the south end of the garden continue to attract the Red Admiral Butterfly, Eastern Comma and Question Mark. The Pipevine and Milkweed are flourishing, the only larval food source for the Pipevine Swallowtail and Monarchs, respectively. There is still some cleaning up to do and we'll infill with native plants when the weather permits and, as every year, there continues to be annual weeds and grass that need to be removed.

Jacque Staats

Alsop Bird Sanctuary Update

Patricia Yeager

Organically killing off undesirable species and hauling in enough soil to get drainage problems under control has been a long, on-going process, but now we are ready to do the walkway this summer! The list of names to be engraved on pathway bricks will go to the engravers on **April 19th. This is the last call.**

If you would like your name to be included or want to honor someone else (for example: John Smith KSU grad. 2015) we are asking for a \$100.00 donation to help fund the project. That being said, if you would like to be included and are a member of NFHAS, a \$50.00 donation will be accepted.

Please use the enclosed form and send payment to:

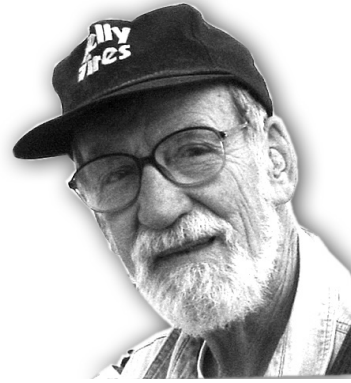
**Northern Flint Hills Audubon
Carla Bishop, Treas.,
P.O. Box 1932,
Manhattan, KS 66505.**

If you have served on the board or coordinated a project anytime in Northern Flint Hills Audubon's history we want to honor you with your name and once held position carved in a brick at no charge to you. Our records are fairly good but spotty in some years. If you want to be sure that you are included, please call Patricia @785-776-9593 or pyeagerbirder@gmail.com. Also, if you prefer your name not be carved into a pathway brick, contact me.

Some spring planting will occur along the edge of the property. Most of the native grass and bushes planting is now scheduled to happen this fall.

2016 BIRDATHON

Clyde Ferguson



April 30 - May 1, 2016

HOW DO YOU DO IT?

It's simple. Collect pledges from your friends, contacts, or enemies to pay so much for each bird species that you can count within the 24-hour period of April 30-May 1. The pledges do not have to be large; dimes, quarters and dollars add up quickly when many participate. Encourage your sponsors to pledge 20 or 25 cents per species spotted and you'll be surprised how much money you can raise with five or ten sponsors. If your sponsors want to pledge a set amount, that works great also.

We encourage you to make this a family outing. Go out and bird for 24 hours beginning sometime on April 30th. It's OK, for example, to bird from 10:00 a.m. on April 27th until 10:00 a.m. on April 28th. Report your findings to your sponsor and collect your pledges (often the difficult part). Send the money, names and addresses to Clyde Ferguson, 2140 College Hts. Rd., Manhattan, KS 66502. You just might surprise yourself with how many species you can identify. If you do not want to go out alone, or don't feel you can ID birds well enough, call me (Clyde) and I will put you with a group.

If you cannot join in the fun of going out yourself, you can still collect names and pledges and one of the members who will be going out can be your "designated counter." We call this a super-sponsor (not that any of our sponsors aren't super in our eyes). If you have a friend that is going out to count, ask him or her to be your eyes.

If you do not know anyone going out, contact Clyde Ferguson (539-4856), or any NFHAS board member (see the back page of your newsletter for contact information), or just send a note to: Birdathon NFHAS, PO Box 1932, Manhattan KS 66505, and we will find someone to count for you. We'll provide a list of the species counted and you can collect the pledges based on that list. On average, we see between 90 and 110 species on a good trip.

Don't forget you can be a sponsor yourself. Make your pledge to a friend or relative who is going to be a counter or super-sponsor. If none of our counters or super-sponsors contacts you, send a note or this form with your pledge and we will add you to our list of sponsors. If you prefer, send a lump sum donation c/o of the Birdathon to the address above. We're easy, we accept donations in almost any form.

Those donating \$15 or more may receive a one years' subscription to the Prairie Falcon (if requested on the form). Our normal subscription price is \$15 and the purpose of the Birdathon is to raise additional funds. Your donations and the donations of your sponsors are a tax deductible contribution.

Please join us if you can and if you can't, please help us support the preservation of nature.
Clyde Ferguson, Birdathon Chair



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

Non-profit Organization
U.S. Postage Paid
Permit No. 662
Manhattan, KS 66502

Return Service Requested

Published monthly (except August) by the Northern Flint Hills Audubon Society, a chapter of the National Audubon Society.
Edited by Cindy Jeffrey, 15850 Galilee Rd., Olsburg, KS 66520. (cinraney@ksu.edu)
Also available on-line at www.ksu.edu/audubon/falcon.html

Membership Information: Introductory memberships - \$20/yr., then basic, renewal membership is \$35/yr. When you join the National Audubon Society, you automatically become a member of the Northern Flint Hills Audubon Society. You will receive the bimonthly Audubon magazine in addition to the Prairie Falcon newsletter. New membership applications should be sent to National Audubon Society, PO Box 422250, Palm Coast, FL 32142-2250. Make checks payable to the National Audubon Society and include the code C4ZJ040Z. Questions about membership? Call 1-800-274-4201 or email the National Audubon Society join@audubon.org. Website is www.audubon.org.

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 Listserve. Send this message <subscribe KSBIRD-L> to <list_serve@ksu.edu> and join in the discussions.

NFHAS Board

President: Patricia Yeager - pyeagerbirder@gmail.com 776-9593
Vice Pres. MJ Morgan - tom.morgan@juno.com
Secretary:
Treasurer: Carla Bishop - carla.kay.bishop@gmail.com

COMMITTEE Chairs:

Membership: Jacque Staats 537-3664
Programs: Kevin Fay
Conservation:
Butterfly Garden:
Alsop Property: Patricia Yeager - pyeagerbirder@gmail.com 776-9593
Education:
Land Preservation:
Bird Seed Sales:
Newsletter: Cindy Jeffrey cinraney@ksu.edu 565-3326
Fieldtrips: Patricia Yeager, Kevin Fay 776-9593
At-large: Tom Morgan

Contacts for Your Elected Representatives (anytime) Write, call or email: Governor Sam Brownback: 2nd Floor, State Capital Bldg., Topeka , KS 66612. KS Senator or Representative: State Capital Bldg., Topeka, KS 66612. Ph# (during session only) Senate - 785-296-7300. House - 785-296-7500. U.S. Senator Roberts <Roberts@senate.gov> U.S. Senate, Washington DC 20510. Jerry Moran U.S. Capital Switchboard 202-224-3121.