



Celebration of EARTH DAY
 April 10th & 17th
 Cleanup & Planting at our Sanctuary

Patricia Yeager & Kevin Fay have generously agreed to lead a roadside cleanup of our Michel-Ross Audubon Preserve on Sat., April 10th from 1 to 3 pm. You are all welcome to help. Meet them along the roadside. Proceeding east on Allison Avenue from the end of Seth Childs Rd, turn south onto Stagg Hill Rd and after traveling about a hundred yards, the cleanup will begin on the west side of that road.

On the next Sat., April 17th, from 1 to 3 pm, Tom Morgan will lead the planting of pawpaw seedlings & hazelnut sprouts. All are welcome to help. We will park at the south end of Canyon Drive (off of Allison Avenue). Some of the non-native honeysuckle will be cleared to make way for native plants. If time allows, we may treat ourselves to the sight of blooming pawpaws along one of our city's streets.

April 22nd is Earth Day, the 40th anniversary of the largest organized civil action in our nation. Feel free to visit our Sanctuary!

NORTHERN Flint Hills Audubon Society,
 P.O. Box 1972, MANHATTAN, KS 66505-1972



PRAIRIE FALCON

NORTHERN FLINT HILLS AUDUBON SOCIETY NEWSLETTER

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Upcoming Events:

- APR. 5 - BOARD MEETING 6:00 p.m.
(TOM & MJ MORGAN HOME)
- APR. 10 - SAT. 1-3 p.m. MICHEL ROSS CLEANUP
(SEE ABOVE)
- APR. 17 - 1-3 PAWPAW PLANTING (SEE ABOVE)
- APR. 23 - WAKEFIELD BIRDING FESTIVAL
www.kansasbirdingfestival.org
- APR. 24-25 ANNUAL BIRDATHON
SEE PAGE 3-4 OF THIS ISSUE
- MAY 3 - BOARD MEETING 6:00 p.m.
(TOM & MJ MORGAN HOME)



SKYLIGHT PLUS

PETE COHEN

This month the fires of spring will again be forming long, low lines and moving broadly over the grassy hills, chewing up its winter-cured fuel with orange-

red teeth and smoking exhalations. A treatise on the science of, and human beliefs and attitudes toward, fire would be a long one.

An Italian Count Beltrami, traveling on the first steamboat to reach the Falls of St. Anthony (St. Paul/Minneapolis now) around 1818 recorded seeing many big fires all along the Mississippi, and how he reveled in the excitement of their appearance in the Indian country nights while a traveling companion trembled at their hellish appearance. John Wesley Powell's crew in their daring 1869 exploration down the Green/Colorado river system wrote of frequent wildfires in the distant mountains with matter-of-fact phrasing--perhaps because the fires were quite distant.

Most fires have burned anonymously. From my reading experience even a forest fire that swept through much of northern Maine and into Canada in 1825 has been upstaged in history books by the Erie Canal's completion that year, and people seem generally to refer to the San Francisco quake of 1906 without necessarily including mention of the devastating fire it brought on. The star of the history books seems to be the 1871 Chicago fire, perhaps largely because it can be blamed on Mrs. O'Leary's cow that kicked over a lantern. Read a little deeper and one finds mention of the Peshtigo, Wisconsin, fire the same year and of the Hinckley, Minnesota, fire that broke out 23 years later, even though it was produced by the same preventable cause: the careless abandonment by lumbering companies of their unwanted limbs--slash--that dry weather and lightning set ablaze. A combined 1600 people died, some in wells from which all the oxygen was sucked, with an irony that it was fires contained in iron horses, manned by courageous railroaders, that on quick notice hauled a great many to safety.

There is more irony to be found in a recent book by Timothy Egan. Titled "The Big Burn" (Houghton Mifflin, 2009), it details the Great Fire of 1910 that was literally blown up the geographical chimney of Idaho (spilling over into Montana, Washington, and British Columbia) by winds known as Palouse for the open country just westward. That fire got, it seems, as much press at the time as Haley's comet that was simultaneously flaring overhead. For years Teddy Roosevelt, Gifford Pinchot, John Muir, and others had been battling to establish a Forest Service with lands to steward, against the timbering and mining interests who wanted no interference with their exploitation. Then that great loss of their anticipated resources suggested to them that an equipped government force might have been of great benefit. Thus the conservation movement got a fiery boost, and, ironically, began its zero-tolerance attitude toward wildfires that has been shown not to be the best policy.

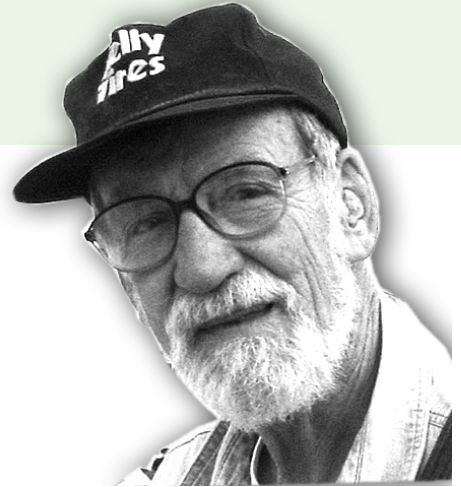
Attitudes and managements of the prairie fires have changed as well, while simultaneously nearly all the sparkles that decorate every clear night sky are essentially made of fire. Yet some of the most interesting appearances this month are not made of fire, but only the reflections there of. A duet of the brazenly bright Venus with the rarely seen Mercury will be available low in the western twilights, with Venus slightly above. On the night of the 15th a crescent Moon will be just above Mercury, and on the 16th it will be a little further above Venus. Real fires can be seen, faintly, in the Pleiades cluster, a kind of epaulet on the shoulder of Taurus the Bull, further yet above Venus, with the Bull's red eye, Aldebaran to the left.

Highly reflective Jupiter will be rising earlier and earlier in the morning sky, while Saturn will be a golden reflection near the real fire of Spica in Virgo for most of the night, following about a couple hours behind the reddish reflection of Mars.

The Lyrid meteor shower is scheduled for the night of the 21st-22nd. The Moon will be new the 14th at 7a29 and full the 28th at 7a18.

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BIRDATHON CLYDE FERGUSON



It's time for our annual major fund-raising event, the NFHAS Birdathon. Last year we raised \$2,309.66. This year's event will be held on April 24-25. 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 by the event year 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.

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 count within the 24-hour period of April 24-25. The pledges do not have to be large; dimes, quarters and dollars add up quickly when many participate. Encourage your sponsors to pledge 15 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 24th. It's OK, for example, to bird from 10:00 a.m. on April 25th until 10:00 a.m. on April 26th. 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 Clyde and he 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 year's subscription of 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

THE PAWPAP & THE ZEBRA SWALLOWTAIL TOM MORGAN



The pawpaw is one of my favorite trees. Its fruit is also my favorite. The pale flesh is smooth & custardy with suggestions of pineapple and vanilla. A substantial proportion of each five to sixteen ounce fruit consists of ten to fourteen seeds. Do not begrudge the *raison-d'être* of the fruit. Its flesh is particularly delectable close to the smooth, dark, mysterious seeds.

The zebra swallowtail butterfly subsists on foliage of the pawpaw and that of no other tree (even though it will accept the leaves of shrubby relatives of the pawpaw). It is and always will be my favorite swallowtail. My memory of it is of its fluttering as it delicately grasps a blossom to imbibe a treat and the butterfly's subsequent flight, as it moves upward with each downward thrust. I've never seen enough of this dancer, and am hungry for the sight of it.

In 1966, I walked into an alfalfa field far enough to escape the dust from our gravel road, and lay down in the alfalfa. A dancer fluttered on a blossom, and I moved my hand. I closed my fingers, feeling the pulsations of the dancer's thorax. It wanted freedom. If I held it now, I would let it go free, watching it move up more by a miracle than by muscular force.

The dancer (*Eurytides marcellus*) is the northernmost species of the tropical kite swallowtails that specialize on hosts in the Annonaceae. The pawpaw (*Asimina triloba*) is the northernmost species of the Annonaceae. It exists in the understory with foot-long leaves that are adapted for transforming weak light into other forms of energy. One transformation is the dancer. It has long narrow wings, adapted for dancing between large, outstretched leaves.

The Annonaceae is primarily pollinated by beetles, and pollination occurs on warm nights in some species. The pawpaw blossom may be pollinated by beetles and flies that are fond of its delicate, yeasty smell. I wonder whether there is often a mismatch between the flowering season (mid-April) and the emergence and flight of the pollinators. Researchers monitored 23,552 flowers near Urbana, IL, and concluded that only 0.5% were pollinated, although the transfer of pollen with a brush could be 17% successful.

The trees of the understory must have a strategy to deal with the danger of falling limbs from the overlords of the woods. Some understory trees are iron-tough. Others, like the pawpaw, try to shrug off storm-tossed debris. The pawpaw has great flexibility, perhaps due to combined

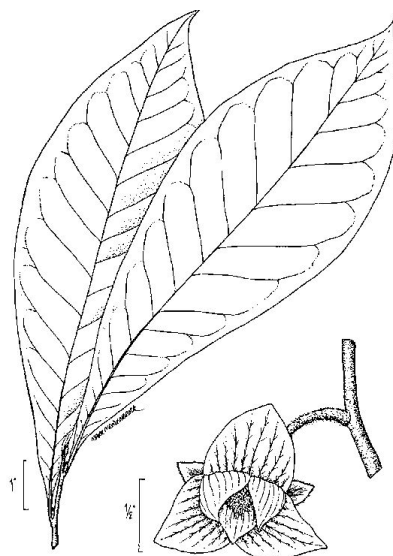
effects of its weak wood and the fibrous strength of its thin bark (which can be used to make cloth). Its flexibility is sometimes not enough. Then there's plan B, ... resprouting.

A patch of pawpaws may be one clone. Botanical research reports sometimes refer to a "parental" stem and younger stems that are "offspring." The parental stem donates resources for an extended period, as evidenced by reduced growth of the offspring if the connection is broken. The parental stem probably supplies sweet photosynthate to its offspring.

The offspring have reduced concentrations of natural insecticide, however, suggesting that the parental stem does not share this resource. This natural insecticide (*annonaceous acetogenins*) is so powerful that even the caterpillars of the zebra swallowtail prefer to feed on less well defended foliage. The acetogenins are valuable though to the swallowtail, defending it, most likely, against intelligent insectivores.

Many birds are drawn to a pawpaw patch not for caterpillars, but for the fruit. Raccoons are more valuable, however, in the long distance dispersal of the pawpaw's lima-bean-sized seeds. The germination percentage remains high after seeds take the trip through a raccoon.

The fruit can be the largest of any native tree. This is advantageous, because the ratio of seed mass to fruit pulp mass increases as fruit mass increases, requiring less investment per seed. The immature fruit receives large amounts of natural insecticide to protect it, but little remains when ripening is completed. Softness of the fruit (and not the darkness of its skin) is the reliable indication of mouth-watering ripening. The green skin of the fruit produces sweet photosynthate, but of course much of the sugar comes from the stem's leaves, and there could be some contribution from a parental source. The fruits are borne on second-year stems. These stems may be part of a community that shares resources, and sometimes the community shares with me. The fruit often occurs in clusters. And just the memory of that, increases flow of saliva. A hint of vanilla, oh, I love the pawpaw patch.



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If you do not want to receive the national magazine, but still want to be involved in our 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, 66502-1932.

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.

Contacts for Your Elected Representatives (anytime) Write, call or email:

Governor Mark Parkinson: 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. or Brownback <Brownback@senate.gov> U.S. Capital Switchboard 202-224-3121.

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