

Sunday, March 19 - 2:30 Manhattan Public Library

Kansas Healthy Yards
Gregg Eyestone

Sunday, March 19th at 2:30 pm
Manhattan Public Library **Auditorium**

Lunch with Gregg at 12:30 at
El Patron, 429 Poyntz Ave.



Gregg Eyestone grew up in Manhattan, Kansas and through family and 4-H developed an interest in plants. Upon graduation from Kansas State University, he practiced horticulture working in the Kansas City area, at Horticultural Services in Manhattan, and in Emporia as the Lyon County, K-State Research and Extension Horticulture Agent.

In 2000, he returned to Manhattan with his wife and 3 kids working at the Gardens at Kansas State University and Riley County, K-State Research and Extension. For the past 18 years, he has been the Horticulture Agent in Riley County.

He lives and gardens on 2.5 acres west of Manhattan.



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

- Mar. 7 - Board meeting - 5:30 Manhattan Public Library
- Mar. 11 - Sat. morning birding
8:00 am Depart from Sojourner Truth Park
- Mar. 19 - Gregg Eyestone, 2:30 Auditorium, Manhattan Public Library, (12:30 dinner with Gregg)**
- Apr. 4 - Board meeting - 5:30 Public Library
- Apr. 8 - Sat. morning birding
8:00 am Depart from Sojourner Truth Park
- Apr. 22-23 - Birdathon



Skylight plus

Pete Cohen

One reason that coal became a king is its fervor for burning, producing, so the internet tells me, over 600 times the Btus of wood, its biomass distant cousin, multi million years removed. However, being based on

sedentary plants, it does not provide the oomph to be derived from oil, based on the remains of animals, largely plankton, that contained the energy needed for some motion. At the start of the 20th century various countries made the difficult decision of converting their navies from being fueled by coal, of which they had domestic supplies, to oil, for which they then had only foreign sources. The trade-off gave their ships more speed, fewer crew needed, and enabled much easier refueling at sea. In 1910 President Taft authorized creation the U.S.'s first petroleum reserve. While coal, being cheaper, became heavily used for land-based heat production.

For years homes and other buildings commonly had coal cellars with ground level openings through which delivery trucks sent the dark clumps clattering. In winters Sue's dad had to go down in the middle of nights and shovel refreshments into the furnace. I rode in trains into which some black smoke from the coal-fired locomotives somehow filtered. In the early 1950s, in downtown Laramie, located right beside the Union Pacific's mainline, it was not uncommon to go into a pharmacy to have an eye relieved of a cinder. And there are coal's awful emissions, the land spoilation from mining it, and the way so many people have levered it or become dependent upon it for money.

It's still needed to provide heat for generating a large percentage of our electricity, but increasingly, it seems, it doesn't have to be used for burning. Originating from Laramie, the University of Wyoming's announcement begins by saying they are not putting forth an updated version of the tale of the Three Little Pigs, though they are referring to what they describe as an innovative brick house, using bricks made of coal-based materials, said to be cheaper and lighter than conventional clay bricks. It's not a very roomy house; from pictures it looks just about high enough for a tall person to enter upright. It stands beside a twin made of conventional clay bricks, and the two will be evaluated regarding "the mechanical integrity, thermal resistance, fire resistance, toxicity and electromagnetic radiation tolerance — with comparative durability, noise resistance, moisture absorption and weathering."

The state of Wyoming has a special interest in this, currently relying heavily on income from coal, and its university's Center for Carbon Capture and Conversion aims at discovering and advancing new uses for coal. In addition to char bricks, "researchers at UW have developed a multitude of coal-derived building materials including mortar, plaster, flooring materials, roofing materials, insulation materials and structural units to supplement

concrete, timber and steel." Involved is a chemical process called pyrolysis, which I find described as heating the coal to high temperature in the absence of oxygen, and compared to grilling, and I'll not try to elucidate that any further.

Wyoming is not the only player in the game. An entity that can be Googled as "CoalChar", located in Beckley, West Virginia, advertises itself as providing modified coal to provide better soil fertilization, better pollution remediation, better construction materials, and in the process providing jobs for an industry that is losing them. One burden upon all of the above is that the coal still has to be mined, and the unwanted emissions from that activity continues, while reducing cement production would be a reduction in emissions.

Meanwhile the U.S. Dept. of Energy has given the University of West Virginia a lead in efforts to extract from wastes in mines that have been commercially played out, rare earths (REEs)—a menu of special elements—that are essential for having modern technologies. Success in that, I'm told, would reduce toxic seepage, remove a large dependence on Chinese sources, and obviate the need for some new very toxic mining, wherever. At the University of Ohio, in another city named Athens, this one located in the Appalachian coal country, work is also being done to remove and convert such wastes, for one thing, into graphite, important for making battery posts. Additionally, according to the Columbus (Ohio) Dispatch for August 14th, 2022, aided by a \$5M federal grant, people at the U. Of Ohio are finding ways to change the wastes into a variety of materials, and even hope to have paneling that replaces that made of wood, for a lesser price, at retailers by next year.

Because producing heat is required in the re-processing of coal it's noted that such can be supplied by solar arrangements. This augers better than relying on fossil sources, yet I keep being reminded that "renewable" devices still require non-renewable components and other compromises, and that while there seems notable progress going forth, the wisdom that "there's no free lunch" remains in force. At the same time there seems a lot to stay tuned for.

March starts off with Venus and Jupiter performing as bright kissing cousins in the early evening of the 1st. Their chumminess is brief as Venus continues to appear ever higher through the month while Jupiter sets ever earlier. Venus later has a passing acquaintance with a sickle Moon the 23rd and 24th, the planet being first above then below. In the early evening of the 28th, a first quarter Moon will be above a dimming and setting Mars. Mars will have visited El Nath, the top-most star of Taurus' horns, on the 13th.

The Moon will locate Gemini's star, Pollux the 2nd, Leo's Regulus then Virgo's Spica in the evenings of the 5th and 9th respectively; Scorpius' Antares at the dawns of the 13th and 14th, the Pleiades cluster on Taurus' shoulder at the nightfall of the 25th, then back near El Nath with Mars a little more distant the 27th. It will be new the 21st—the dark of the Moon—and "StarDate" suggests this could be a good time of the evening of a spring month to catch a view of the zodiacal light, a "ghostly pyramid" glowing above the setting Sun, being light reflected from spatial dust left by comets, produced by asteroid collisions, and coming directly off of Mars. (During autumn new Moons, pre-sunrise becomes the best times).

The Moon will be exactly new at 12p23 the 21st, having been full 6a40 the 7th. The spring equinox occurs at 4p24 CDT the 20th.

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Tish Simpson, Dru Clarke



Odyssey of the Eggs

Dru Clarke



Twenty-two lay in neat rows, glued firmly in place. All ovoid, some rounder, some pointier than others, speckled or mottled or cream colored overall, eggs of wetland birds. They were on permanent display in the case, testimony to the vagaries of nature. They were from nests at Cheyenne Bottoms, one of the most vital wetlands found on the central flyway, nests destroyed during a flood event in the '70's. Joe Kramer, then in high school, was sent by Marvin Schwilling, wildlife guardian at the Bottoms, to collect what would have been the next generation of these birds, abruptly terminated by the water they would have depended upon had they lived.

Joe went on to Kansas State University and, as a senior in wildlife biology gifted John Zimmerman, ornithology professor of some renown, known to many of us for his replies to "burning bird questions," with the collection. (John also wrote the seminal book on the birds of Cheyenne Bottoms.) In downsizing artifacts and other personal items upon retirement, John gave the display case to me, then a teacher of Ecology at Manhattan High School. (I also led a Stream Team for a decade and taught a course on the ocean, attempting to make connections between freshwater and salt.) John had also let me borrow study skins of birds to develop a lab for my students to become familiar with the unique adaptations of birds associated with water, from pelagic to littoral to shore, to freshwater habitats. I remember the reverence the students showed the birds as they handled them gently, sometime stroking their feathers. (They especially were fond of the puffin.)

When I retired, the eggs retired too, to a shelf in our granary where other sentimental things were stored. Recently I rediscovered the eggs while looking for something else. Dusty and speckled with fly frass, we brought it into the house to clean it up and find a new home for it where it would be appreciated. Originally in touch with Alice Boyle at KSU as a potential residence for them, I happened to attend a talk by Chuck Otte on what happens to the data from the Christmas Bird Count. I told him about these eggs and he suggested that I get in touch with Cheyenne Bottoms Wetlands Education Center. Vanessa Avara, a falconer who worked once as a wildlife rehab

person at Milford Nature Center, strongly supported that idea, so I called them the next week. The rest is history.

Cindy Jeffrey, editor of the *Prairie Falcon*, the newsletter of the Northern Flint Hills Audubon Society, Tish Simpson, a good friend I taught with at MHS, and I trekked to the Bottoms the same week. We were enthusiastically greeted by staff who accepted the eggs and marveled at their good condition. Curtis Wolf, director, contacted Joe Kramer, who became a wildlife officer with Kansas State Parks and Wildlife (and Tourism), who confirmed the story and was surprised to hear of the odyssey of the eggs he collected over 50 years ago.



Christopher Hunt, Dru Clarke, Curtis Wolf, Dayona Nett

Each egg is distinctive in size and coloration. Surprisingly huge, and almost round, were those of the ruddy duck and the mallard. Shorebirds' eggs, like the stilt and tern, were mottled, camouflaged to become invisible in grassy nests. It struck us as we marveled at the diversity of species represented by these how vital this wetland is to migratory birds and as a permanent habitat for other species. A video shown in the theatre of the Wetlands Center explores those species' dependence on the water as well as giving a geological/historical perspective of its existence.

John Zimmerman must be smiling down on us from his perch, glad of the return of the eggs to their original place in the universe. John's totem bird was the turkey vulture. While there were no vulture eggs in this collection, it probably would not matter to him. The odyssey of the eggs is complete.

THANK YOU!

Dr. Zolnerowich, Professor Entomology
Kiffnie Holt, Insect Zoo Director.

A wonderful and informative morning!



INSECTS ARE FASCINATING
AND ESSENTIAL FOR LIFE!



2023 Annual Birdathon

SAVE THE DATES : 24 hour birding - April
22nd or 23rd

Way back in 1985, Cecil Best and Clyde Ferguson on a whim during a late April poor fishing outing hatched a plan to search for as many bird species in a 24-hour period as possible. Then send it to their friends and urge them to donate an amount for each specie to the Northern Flint Hills Audubon Society. It worked!

Fast forward to 2023 and I will be managing the 38th annual Birdathon. Cecil pulled me in and I became friends with Clyde and ever since about 1990 I have been hooked and now it's an annual must for me. Thankfully, many others have joined with me over the years. A group of birders will join me on my chase around to different habitat areas. But you, as just one birder, can go out and count the number of species you see within a 24-hour period of your choice sometime during April 22nd and 23rd this year.



Jim Koelliker

More information and sponsor form will be in the April Prairie Falcon and on our website nfhas.org.

Blue Jay

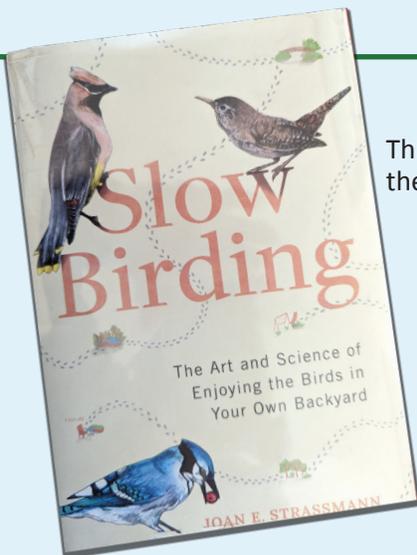
Cyanocitta cristata



Photo by Frank Nicoletti -Macaulay Library at the Cornell Lab of Ornithology

The pigment in Blue Jay feathers is melanin, which is brown. The blue color is caused by scattering light through modified cells on the surface of the feather barbs

The oldest known wild, banded Blue Jay was at least 26 years, 11 months old when it was found dead after being caught in fishing gear. It had been banded in the Newfoundland/Labrador/St. Pierre et Miquelon area in 1989 and was found there in 2016.



This book is one of the door prizes!

“Mighty Oaks from Little Blue Jays Grow”

Blue Jays are the most American of birds, occurring in every state, though they are rare west of the Rockies. (Yet not one state has named a Blue Jay as its state bird.) They occur only in southern Canada, and there have been a few observations on the northern border of Mexico.

They police the skies, warning of Cooper’s Hawks or Barred Owls or cats. Blue Jays are the sixth bird most googled and are among the birds most often seen and reported in eBird.

What they eat and want to eat is a major part of the story of how they changed the environment, and with it our climate.” Pg, 24 in “Slow Birding”

Another way of looking at a map of their range is to look at a map of oak trees.

It starts with an acorn. Acorns plop down from oak trees. They rely on birds and to a lesser extent mammals like squirrels to take them to places where they can grow. Locations perhaps miles away from the parent tree.

Blue Jays (and scrub jays in the west) bury the acorns for later. They don’t always remember where all of them are, and therefore, a new oak tree might grow. This explains how oak trees are found higher up a slope than the parent tree. And how the vast bare land left by retreating glaciers of the last ice age eventually became populated with oaks. (We don’t know how the extinct Passenger Pigeon might have contributed; Canadian professor Bob Montgomerie thinks they might be as responsible as the Blue Jays for moving the oak forests north. Passenger Pigeons did not cache acorns like the Blue Jay, so their movement would have to have been quite different.)

Joan Strassmann explains this and more in her book *Slow Birding, The Art and Science of Enjoying the Birds in Your Own Backyard*. She cites early maps (1884 by Charles Sprague Sargent showing the distribution of oaks and a map of Blue Jay distribution), research by early ecologists (1936 - Joseph Grinnell) and more recent studies (i.e. Susan Darley-Hill and Carter Johnson at Virginia Tech University) to name a few.

Each chapter is about a different bird – American Robin, House Wren, Dark-eyed Junco, etc. (16 in all). Birds that most people might see in their backyard, neighborhood, parks, – not traveling around to find – but ones that intersect their daily lives. The information or story of each will enrich the experience of seeing birds in a “slow” way.



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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.

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When you join National Audubon Society you automatically become a member of NFHAS.

NFHAS Subscription Information: If you do not want join the National Audubon Society, but still want to be involved in NFHAS local activities, **you may subscribe to the Prairie Falcon newsletter for \$20/yr.**

Make checks payable to the Northern Flint Hills Audubon Society and mail to: **Treasurer, NFHAS, P.O. Box 1932, Manhattan, KS, 66505-1932**

WE NEED YOU! PLEASE consider joining our NFHAS Board.

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