#### LIFE LIST: A WOMAN'S QUEST FOR THE WORLD'S MOST AMAZING BIRDS BY OLIVIA GENTILE

This is a fascinating book about the life of Phoebe Snetsinger. The author interviewed her family, friends - especially those in the "birding" world - and more importantly she also had access to Phoebe's memoirs, journals, and notes. Because Phoebe never shared her memoirs with anyone (including her family), these personal thoughts and feelings were only discovered after her untimely death. They are a big part of this book.

What began as a way to deal with a death sentence (one year to live) from a diagnosis of melanoma, became a lifelong obsession and somehow she survived the cancer (19 years). Her birding trips - some in very dangerous regions of the world - are described much like an Indiana Jones novel, but it's true and sometimes very frightening. Her joy at finding a bird she had never seen before is also described beautifully. She kept detailed notes of every bird and only counted those she saw (now American Birding Association allows counting those "heard"

- she did not agree with that change). Once she got to about 5,000 species, she came to believe she just might make 8,000 - a world record - and her schedule of travel increased!

When Phoebe started birding seriously, her children were almost grown, plus her father left her an inheritance that enabled her to travel - sometimes on four or five trips a year - from a couple of weeks to a couple of months at a time.

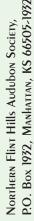
Her last trip was to Madagasgar (her second or third time there). Her last life bird was the Helmet vanga *(Euryceros prevostii)*. She was 68 years old. The ABA verified her record of about 8,400 birds, nearly 85 percent of the species estimated to exist.

This is a good read for both birders and non-birders.



Available at the Manhattan Public Library

Gentile, Olivia, Life List: A Woman's Quest for the World's Most Amazing Birds (Bloomsbury, 2009) ISBN 978-1596911697





# PRAIRIE FALCON

NORTHERN FLINT HILLS AUDUBON SOCIETY NEWSLETTER

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### Inside

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### Upcoming Events:

- Jul 9 Board Meeting 6 p.m. (Tom & MJ Morgan Home)
- Jul 11 Monthly Birding
- AUG NO Newsletter or organized activity
- Sept 7 Board Meeting 6 p.m. (Tom & MJ Morgan Home)
- SEPT ICE CREAM SOCIAL AND BUTTERFLY GARDEN WALK

# SKYLIGHT PLUS

The legislative enactment of at least some limited net metering in Kansas makes pertinent a review of the question: "Whose Sun is it?"

First, though, let's be clear that net metering is a system (driven by the fact that presently electricity is very expensive to store) whereby an individual power consumer with his/her own source can connect with a utility (non-REA under the legislation) which will buy any immediate overage the consumer produces, and stand ready to supply fill-in power when the consumer's source falls short. Generally the utility sells its input at retail, buys the consumer's at wholesale, and the debate over that arrangement I will pass by in order to focus on the lead question above.

Since I understand that REAs are excluded. examples will tend to occur in towns where separately-owned buildings are close together. Suppose then that homeowner A invests in a rooftop solar array and neighbor B decides to erect or plant something that will interfere with that array's reception. The question has a long history. Justinian's codification of Roman law went into great detail over what rights a landowner had or could obtain regarding his viewscape and the light and air that was allowed to reach him. In 1832, England created the Doctrine of Ancient Lights, whereby a landowner, having enjoyed a reception of uninterrupted light and air for twenty vears, thus was entitled to continue doing so. This occurred in the middle of the Industrial Revolution in spite of (or maybe the 20-year requirement was because of) that era's emphasis on development.

Residual questions apparently arose during the reconstruction of London after the Blitz, while in the United States the emphasis historically seems to have been on the side of not impeding development. But with the push for alternative energy, times are changing. Laramie, Wyoming, spurred by a related situation, resolved that a homeowner with a solar array could apply to a board, established for the purpose, for zoning protection for such an array. There is little likelihood of any "takings" problems because even any affected properties would likely retain a great many permitted uses, including that of building a house, as long as it would not impede the array's solar access on December 21st, the date the Sun is lowest in the sky.

Such a board raises the questions of who should be on it, how chosen, with what guidelines, such as how big is a reasonable array. But it seems that with net metering more homeowner A/neighbor B situations could arise, and that communities would do well to set up guidelines while it can be done as part of a general discussion and not as part of and in the midst of a battle between two constituents.

For those with clear access to the night sky the next two months *StarDate* predicts the primary colors will be red and white, the reds coming from Aldebaran (Taurus' eye), Mars, and Scorpius' Antares. The latter will cuddle closer to the pale Moon during the night of July 3<sup>rd</sup>, while Jupiter and the Moon compete for white brightness on the 10<sup>th</sup>.

Bright, white Venus begins appearing between the red of Aldebaran (below it) and Mars in the dawn of the 14<sup>th</sup>, and the Moon joins them from 17<sup>th</sup>-19<sup>th</sup>. Then, Mars and Aldebaran form a russet ballet at dawn the 27<sup>th</sup>, with Antares flirting with the Moon again the 30<sup>th</sup>-31<sup>st</sup>.

In August it's the Moon and Jupiter (in Capricorn) all night again on the 5<sup>th</sup>. Mars and the Moon dance on the 15<sup>th</sup>-16<sup>th</sup> with Aldebaran chaperoning from the balcony to their upper right.

It's whites with Venus and the Moon the  $17^{\text{th}}$ - $18^{\text{th}}$  and a final red and white of Antares dallying with the Moon at sundown the  $27^{\text{th}}$ .

As to golden Saturn, look above the Moon on July 24<sup>th</sup>-25<sup>th</sup>. And the Perseid meteor shower has its affair August 12<sup>th</sup>. Moon full July 7<sup>th</sup> (4a21), new 21<sup>st</sup> (7p55); August full 5<sup>th</sup> (7p55), new 20<sup>th</sup> (5a02)

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#### NIGHT LIGHTS DRU CLARKE

"Have you seen any yet?" someone asked the group, and nearly all of the dozen (except my husband) shook their heads in the negative. Folks our age (baby boomers and up) who now live in developed areas are missing something from their youth: the natural night lights from fireflies or "lightning bugs." I read recently that they are in big trouble for a variety of reasons, among them habitat loss (and fragmentation), various forms of pollution, artificial light, and a lack of suitable food

(as larvae for the adults do not feed). My husband and I are lucky to have a small meadow –two or three acres - we can view from our bedroom window and from mid-May on through the summer it is bright at night with the glow of fireflies. Probably the lack of outdoor lights, going to bed early, avoiding use of pesticides, and leaving the meadow unmowed and untended – our benign negligence - have earned us the privilege of hosting an impressive population of fireflies.

Their light is a true form of bioluminescence, and should not be confused with phosphorescence or fluorescence (inorganic chemical properties) or refraction of light (a physical phenomenon). Luciferin (note the reference to the devil) is catalyzed by luciferase, an enzyme, in combination with oxygen to produce the luminescence. In many organisms (such as the flashlight fish), pockets of bacteria hold the chemical and a flap can be open and shut to cause a 'blinking.' This fish can fake a predator out of its shorts by blinking in one direction, turning the light off, then beating off in a different direction, causing a 'where'd he go?' confusion. Many different organisms bioluminesce, including some worms, a mollusk, nudibranches (marine snails), and lots of deep-sea fishes. In Mexico, the fire beetles, or cucujos, are worn as ornaments and the light from one held close to a newspaper would be sufficient to read by.

Sometimes you encounter bioluminescence when you least expect it. While studying killer whales in Puget Sound's San Juan Islands, we came back from the research vessel late one evening, anchored offshore and rowed to shore in a small rowboat. Each dip of our oars trailed a stream of greenish-blue bioluminescence, caused by agitation of Noctiluca, a kind of phytoplankton. It was an event as exciting as seeing our first bull orca.

Our fireflies on closer inspection are colorful even when not glowing. Yellow, pink, and black predominate, but the ones I used to catch back East had red around a black spot on the pronotum (the top of the first part of the thorax), and their antennae were really long and seemed to wave all the time. Their glow, too, was a greenish one, not as neon yellow at the species here in Kansas. Waving and glowing they signalled: "Hey, y'all, here I am!"

An acquaintance remembered the long-lived bright smear of one on the windshield of her speeding car; her husband fondly reminisces creating a finger ring from the abdomen of one. My friends and I would smash them on our noses and chase each other around the yard, our moods alternating between fright and hilarity. Often we'd catch them in jars with some grass for a 'bed' and keep them until morning, waiting to see when their lights would fade.

Looking back at what we did with them when we caught them seems cruel now, but it may have been a kind of 'rite of passage' in making the world ours in our childhood: our knowledge of them was kindled by our crude 'experiments', our consciousness raised, and indifference extinguished, by what we have learned about them as unique beings. None of us would do these things to them as adults: now we are content to sit on our porches and look out over our meadows (those of us fortunate enough to have them) to watch the night lights.

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## WHY ARE SOME BIRDS SIMPLE SINGERS AND OTHERS VOCAL VIRTUOSOS?

Researchers at the National Evolutionary Synthesis Center (NESCent), the Cornell Lab of Ornithology, and McGill University suspect that inconsistent climates may play a role.

A large-scale study of mockingbirds in diverse habitats reveals that species in more variable climes also sing more complex tunes. "As environments become more variable or unpredictable, song displays become more elaborate," said Carlos Botero, a postdoctoral researcher at NESCent in Durham, NC. NESCent is an NSF-funded collaborative research center operated by Duke University, the University of North Carolina at Chapel Hill, and North Carolina State University.

Local climate patterns are good indicators of how challenging life is in a given location, Botero said. "Survival and reproduction become more complicated when weather patterns are unpredictable because you don't know when food will be available or how long it will be around," he explains. What's more, the consequences of picking a mediocre mate are magnified in harsher climes.

"In really difficult or demanding environments you would expect females to be choosier," he said.

Male mockingbirds sing primarily to impress mates, said Botero. Superior singing skills are a cue that a male is a good catch. "Complexity of song display – how many song types a bird sings, how hard the songs are – is a good predictor of the quality of the individual," said Botero. "Males that sing more complex songs tend to carry fewer parasites, and have offspring that are more likely to survive."

Songbirds aren't born knowing their songs, however: they have to learn them over time. Since birdsong is a learned behavior, Botero and colleagues suspect that song-learning ability may also be a display of learning ability in general. The bird equivalent of sparkling conversation, complex songs may indicate which males have not only brawn, but also brainpower. "Birds that sing better are telling others, at least indirectly: Hey, I'm a good learner," said Botero.

More importantly, singing skills may be a sign that males are clever enough to cope with iffy environments. "Individuals that are more intelligent tend to be better able to compensate for the difficulties of unpredictable climates. For example, if some individuals are able to invent new foraging techniques, then they are going to be better at surviving harsh winters than the poor guys who only know one way to forage," Botero said. "The more intelligent you are, the more resourceful you are, and the more curve balls you're able to handle."

To see if there was a correlation between climate and song, Botero searched sound archives around the world and embarked on a solo tour of the southern hemisphere to record bird songs in the wild. Armed with supersensitive recording equipment, Botero trekked his way through desert, jungle, scree and scrub in search of mockingbirds in song. Botero's recordings – nearly 100 tracks from 29 mockingbird species – will enhance pre-existing sound archives by filling in gaps for species for which high-quality recordings weren't previously available.

Back in the States, Botero used computer programs to convert each sound recording – a medley of whistles, warbles, trills and twitters – into a sonogram, or sound graph. Like a musical score, the complex pattern of lines and streaks in a sonogram enables scientists to see and visually analyze sound.

Botero and colleagues then painstakingly analyzed each snippet of song and compared their patterns to a database of temperature and precipitation records. The researchers found that species subject to more variable and unpredictable climates had more elaborate song displays.

The connection between birdsong and climate is new and somewhat surprising, Botero explains. "We're connecting two dots that were far away before."

For Botero and his colleagues, the next step is to see whether this pattern holds true for other animals. By studying animal communication, Botero ultimately hopes to shed light on how language evolved in humans. "You can't help but wonder what is it about humans that made our vocal communication so incredibly complicated compared to other animals," Botero said.

"It has long been hypothesized that one reason why humans have such exaggerated displays – not just language, but music, art, and even math – is because females have selected for signals of intelligence," explains Botero.

"What we have now is a nice arena – outside of humans – where we can test these ideas and start understanding processes that are fundamentally important for our own species."

The team's findings were published online in the May 21 issue of the journal Current Biology.



#### AUDUBON FEATURED IN NEW IGOOGLE NATURE "THEMES"

Art and wildlife lovers can now customize their web homepage with John James Audubon artwork, thanks to Audubon's participation in a new iGoogle project. The initiative provides iGoogle users with a diverse selection of artwork and images to express their personal style. Go to http://www.google.com/help/ig/naturethemes/ and select Birds of Prey, Backyard Birds, or Songbirds.

#### WATCH PUFFINS

Project Puffin's "Puffin Cam" is now beaming live-streaming video and sounds from Seal Island National Wildlife Refuge, eighteen miles off the coast of Rockland, Maine. The National Audubon Society started Project Puffin 36 years ago; new web technology means that people all around the globe can "visit" these charismatic seabirds. The Puffin Cam www.projectpuffin.org/PuffinCam.html operates from 6 a.m. to 9 p.m.EDT daily. The best times to view are mornings and early afternoons, and again just before dark.

Read "A Passion for Puffins" to learn more about one of this year's Project Puffin interns www.hws.edu/dailyupdate/NewsDetails.aspx?aid=12046

#### MAKE SUMMER A BLAST WITH BIRDSLEUTH!

Looking for new, low-cost activities for your camp, nature center, scouting troop, homeschool, or youth program? I hope you'll consider the BirdSleuth curriculum developed by the Cornell Lab of Ornithology.

The first module, BirdSleuth: Most Wanted Birds, contains fun, easy lessons with activities that teach children how to identify birds and collect observations that can be reported to the Cornell Lab and used in scientific studies. The curriculum comes with everything you need to help children make an important connection with nature—perhaps for the first time.

Each flexible, easy-to-use lesson in BirdSleuth is geared toward upper elementary and middle-school students. Youngsters learn how to identify birds and to really appreciate nature's diversity in their own neighborhoods. Your kids will ask and answer their own questions about birds—true scientific inquiry achieved through engaging activities and a healthy dose of fresh air.

Each module comes with lesson plans, a student journal, a resource DVD, and more. To learn more about BirdSleuth: Most Wanted Birds, or any of the curriculum modules, visit www.BirdSleuth.net

Happy summer birding! Jennifer Fee BirdSleuth director Cornell Lab of Ornithology (607) 254-2403 birdsleuth@cornell.edu



**E-NEWSLETTER:** If you wish to opt out of the "paper" Prairie Falcon newsletter and get it on-line as a pdf - send your name and email address to Jacque Staats - staats@wildblue.net



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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.

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