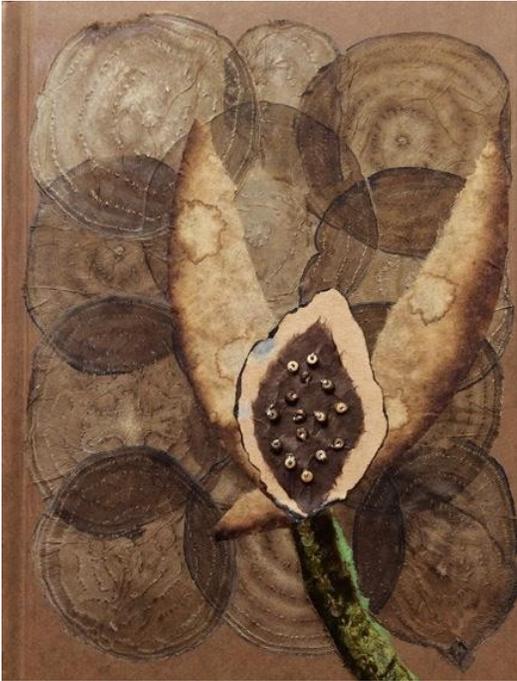




## Naturalist Notes



### Winter 1

The north wind blows and then dies down,  
A quiet, cold settles in, amplifying the sound  
Of the remaining birds and the chilly squirrel  
That's barking loud – it sounds like a quarrel.

Winter is coming, and there is less and less green,  
Summer had so much it now seems obscene,  
Today the prairie grass has turned brown,  
And the liberated seeds fall to the ground.

No leaves on the hardwoods or the crepe myrtle,  
No sign of amphibians, no snake, no turtle,  
All hiding away from the oncoming cold  
Finding a burrow where their stories are told.

Just think of the tales told by the frog,  
About how it escaped the snake in the bog,  
How it was a tadpole in someone's pond,  
How it and the human have an Earth-Church  
bond.

Winter's part of the Earth's rotation,  
A time to anticipate spring's elation,  
It's also a reminder of our limitations,  
And of Earth Church's varied manifestations.

Winter's the time of introspection,  
Winter's the time (of) deep reflection,  
Winter's the time of a new perspective,  
Winter's when we live with November's election.

I welcome the winter that is now on its way,  
I'll see winter residents that are here to stay,  
I'll visit Earth Church and do a Christmas count,  
I'll enjoy the manna, I'll drink from the fount.

For Earth Church has patterns, rhyme and reason,  
There's no doubt there's purpose to change of season,  
The seeds that are now dropping to the ground  
Will sprout in the spring as life newly found.

So welcome to Earth Church,  
Pull yourself up a pew,  
Pray that winter delivers  
A new perspective for you.

James Blackburn  
Virus Vigil Day 228  
Illustration by Isabelle Chapman

## Chapter Dues are Due

Annual Gulf Coast Master Naturalist Chapter dues for calendar year 2021 are \$20.00 and are due by January 1, 2021. If you know of a member that does not use their email or who may not see this message, please share this with them.

Since we are not having face to face meetings for the foreseeable future, our 'pay at the meeting' option will not be available. Because of COVID-19 safety precautions, we *strongly encourage* you to pay your dues online following the directions below.

-- ONLINE: On our website, <https://txmn.org/gulfcoast/current-members/>, click the "Pay Your Dues - Donate" button and follow the prompts. After clicking the button, you will have an option to pay by credit card or your Paypal account. You do NOT need to have a Paypal account to pay with a credit card. Dues processed online will be \$21.00, which covers our processing fee.

If you need to submit a check (No Cash, please): send to the address below. **Please note that if you pay by check, there may be a delay before it is received or deposited**, as we are minimizing Post Office visits. -- BY MAIL: GCMN, P.O. BOX 273087, Houston, TX 77277.

Please let us know if you have any questions. Thank you.

Sheryl Mills

Treasurer

[sheryl.mills@txgcmn.org](mailto:sheryl.mills@txgcmn.org)



<https://www.cnn.com/2020/12/16/uk/air-pollution-death-ella-kissi-debrah-uk-gbr-intl/index.html>

### Air Pollution a Cause of Death – First in History

Ella Kissi-Debrah, a 9 year old living in southeast London, suffered from severe asthma. She died in 2013 after cardiac arrest. This week, her medical cause of death was listed as acute respiratory failure, severe asthma, and air pollution exposure. Nitrogen dioxide and particulate matter levels near her home exceeded World Health Organization guidelines. Her mother hopes that governments around the world will take air pollution more seriously and pass legislation to clean the air.

## Sky of the Month

This is the last of the Sky of the Month columns. After spending 2019 taking pictures of the sky as many days as I remembered, I've introduced you to many of the cloud types, using Gavin Pretor-Pinney's books (The Cloudspotter's Guide and A Cloud A Day) for information and inspiration.

"We seek to remind people that clouds are expressions of the atmosphere's moods, and can be read like those of a person's countenance."  
(from the Cloud Appreciation Society's Manifesto)

This almost uniform sky is a stratus nebulosus, a calm though often depressing cloud that rarely produces rain. The leaves silhouetted against the sky keep this picture interesting. It was taken December 31<sup>st</sup>, 2019.



Q: What did the 8-legged spider say to the 6 legged insect?

A: I don't eat my relatives and you look yummy!



1 d; 2 c; 3 d; 4 b



**Organism of the Month**

**Sinewed Bushy Lichen (*Ramalina americana*)**

Lichens are generally small and ubiquitous. They are composed of a fungal and one or more photosynthetic partners, either green algae or cyanobacteria. Lichens have a cortex, the outer tougher layer, and a medulla, the inner, sponge-like layer. They attach to substrate, live oak tree bark being a favorite.

Lichens have three different growth habits. Foliose lichen has a distinct upper and lower surface. Fruticose lichen are either pendant (think Old Man’s Beard) or cuplike (see picture at right). Crustose are low growing and mostly flat. Many rocks have multiple colors of crustose lichen.

Since organisms from different kingdoms make up lichen, reproduction is complex. The fungus produces fruiting bodies, but those don’t contain the algal partner. If the new lichen does not find an algal partner, it dies. Vegetative reproduction, where one piece grows into a new lichen, is also possible.



Lichen on small live oak branch  
credit Irmi Willcockson

In addition to substrate, lichen require water, air, and nutrients. Lichens are an indicator of air quality. The USDA Forest Service has been collecting lichen data since 1970, with a nationwide emphasis since 1993. Lichen distribution is also affected by climate change.

Source: USDA



## Know Your Spiders?

Answers on pg 3, more information on each spider next page. Answers may be used once, more than once, or not at all.

1



- a. Hackelmesh Weaver
- b. Black Widow
- c. Yellow Garden Spider
- d. Southern House Spider

2



Quiz and pictures by Virginia Livingston

3



4



**Black Widow:** This little lady set up house in an old, yellow bucket stored in a country shed. She prefers solitude and will let you know with a venomous bite should you disturb her. The red hour glass pattern on her abdomen is her warning to intruders to leave her alone to devour more true insects.

*Latrodectus*

<https://texasinsects.tamu.edu/southern-black-widow-spider/client=safari&rls=en&q=black+widow+spider+texas&ie=UTF-8&oe=UTF-8>  
<https://www.nationalgeographic.com/animals/invertebrates/group/black-widow-spiders/>

**Yellow Garden Spider.** This outdoor arachnid was busily tending its web on an exterior wall of a metal-sided shed, partially shaded by an old oak tree. Great place to snare those flying insects for dinner! The Z-shaped strip down the center of its web is a “signature” of this orb weaver. Its venom is used to kill its prey, but only produces a bee sting feel to humans.

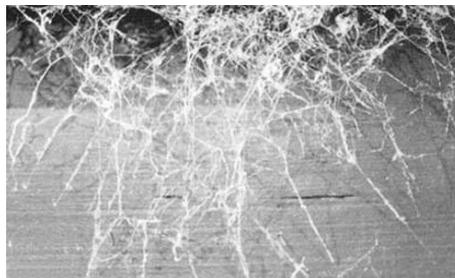
*Argiope aurantia*

[https://en.wikipedia.org/wiki/Argiope\\_aurantia](https://en.wikipedia.org/wiki/Argiope_aurantia)  
<https://www.nwf.org/Educational-Resources/Wildlife-Guide/Invertebrates/Yellow-Garden-Spider>  
[https://tulsaworld.com/community/skiatook/news/orb-spiders-are-nothing-to-dislike/article\\_1c872aea-eb7c-56a9-](https://tulsaworld.com/community/skiatook/news/orb-spiders-are-nothing-to-dislike/article_1c872aea-eb7c-56a9-)

**Southern House Spider:** This roach eater is welcome in my house anytime! However, this female preferred our workshop for her nest and hatchlings. It is helpful to know that her mate is often confused with the brown recluse, but lacks the fiddle shape marking of the recluse. BTW, they can't see very well, so you may go unnoticed.

[http://entnemdept.ufl.edu/creatures/urban/spiders/southern\\_house\\_spider.htm](http://entnemdept.ufl.edu/creatures/urban/spiders/southern_house_spider.htm)  
<http://counties.agrilife.org/nacogdoches/files/2011/03/spiders.pdf>  
[http://entnemdept.ufl.edu/creatures/urban/spiders/southern\\_house\\_spider.htm](http://entnemdept.ufl.edu/creatures/urban/spiders/southern_house_spider.htm)  
<https://spiderid.com/discussion/>  
<https://sir-p-audax.tumblr.com/post/113599115611/spiders-in-your-home>

Hatchlings and web below



## Holiday with the Cranes!



Glenn Olsen, used by permission

Have you seen a Sandhill Crane? It is a large, slate gray bird (7½ pounds and 34 to 48 inches tall) with a long neck and long legs. With white cheeks, its crimson skin above the eye is striking. The crane uses its dark bill to probe marsh and grass-lands. The bird has a bulky body and its short tail is covered by drooping feathers that resemble a “bustle.” One often sees cinnamon brown on its feathers that comes from feeding in a nutrient-rich (iron) area.

Sandhill Cranes are omnivores and voracious eaters, consuming cattail roots, seeds, tubers, worms, snakes, tadpoles, frogs, gooseberries and small crabs. Eating corn can damage crops. They are found in open bogs, marshes, short grasses and upland grassland habitat.

Their breeding territory is located in northern U.S., Canada and Alaska. Many of the cranes fly to their nesting grounds, stopping along the ribbon-like Platte River in Nebraska (dark green on migration map). This is a great spring place to observe thousands of Sandhill Cranes.

Male Sandhill Cranes attract their mates via intricate dances. Once they attract a female, they dance together. Sandhill Cranes mate for life.

They build their nests from dried plants and add greens to it during nesting season. There is usually a clutch of two eggs and chicks hatch well developed, covered with down, and with open eyes. One chick usually survives to fledge. Juveniles do not have the pale cheeks or red on their heads.

Sandhill Cranes form large flocks for migration and wintering. They migrate to wintering grounds in southern U.S. and northern Mexico. When flying, the cranes keep their necks stretched forward and their feet trailing behind. Their wingspan is 6 feet.

Juveniles stay with their parents throughout winter and separate from them during the next spring.



Glenn Olsen, used by permission

Sandhill Cranes begin to arrive in Texas in late October, staying until March or mid-April. There are 6 subspecies of Sandhill Cranes. 90% of the birds that winter in our area are Lesser Sandhill Cranes, the smallest of U.S. cranes.

Be sure to listen for the cranes calling with their trumpeting sound. You can hear them from at least 2.5 miles away. Find their call on *All About Birds*:

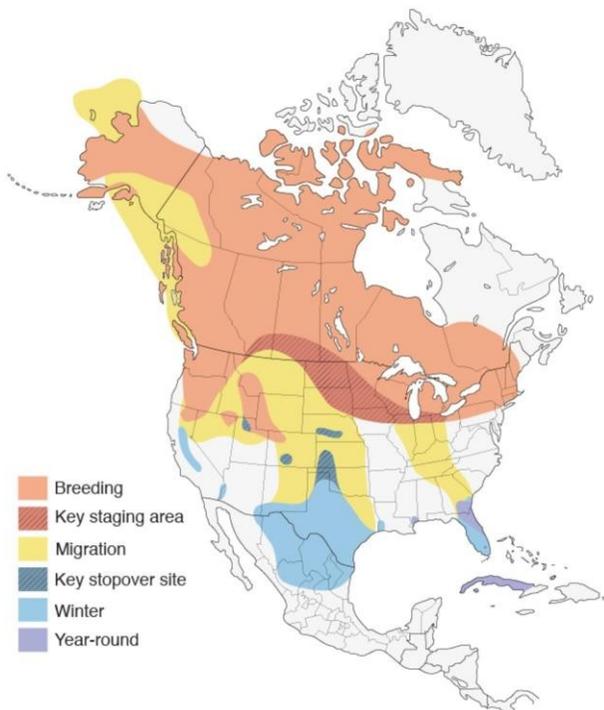
[https://www.allaboutbirds.org/guide/Sandhill\\_Crane/id](https://www.allaboutbirds.org/guide/Sandhill_Crane/id)

The best months to see the cranes in Texas are from December to early March. Galveston Island hosts Sandhill Cranes, and the Galveston Island Nature Tourism Council (GINTC) posts a map of “hotspots” where they can be found here: [info@gintc.org](mailto:info@gintc.org)

Best times of day to find the cranes are early morning, when they are leaving their roosts, and early evening, when they return. Good spots on Galveston Island are Tin Cup’s and the Galveston Island State Parks (on the bay side). GINTC sponsors the annual **Holiday with the Cranes**. This year the event was virtual, and Glenn Olsen was our knowledgeable presenter. I learned much of what I have shared in this article from Glenn.

Wharton County and Rockport are also good places to see Sandhill Cranes. Katy Prairie hosts a large number of the cranes during winter. I hope that you will spend part of your holiday with the cranes!

Sue Steinhardt



Sources: All About Birds (Cornell Lab of Ornithology; google, Glenn Olsen’s lecture “Holiday with the Cranes”

All About Birds

## The Evolution of Beauty: How Darwin's Forgotten Theory of Mate Choice Shapes the Animal World—and Us

Richard O. Prum, 2017, Doubleday  
Harris County Public Library eBook

Richard Prum tells us, in the introduction to this fascinating book, that his interest in birds began when he was 10 years old. This led him to 40 years of birding and, after college, 30 years of studying “avian evolution.”

Reflecting on his birding experiences and research discoveries, he found that much of it pointed to what he calls the evolution of beauty, that is, the development of the sexual ornaments upon which most birds base their social and sexual preferences. He stresses, however, that this evolutionary development cannot be fully understood through the traditional lens of natural selection.

The book's first chapter—*Darwin's Really Dangerous Idea*—discusses Darwin's other evolutionary engine, sexual selection, which does provide a means for understanding the development and use of birds' sexual ornaments. This chapter may not be to every reader's taste, but it provides a well-argued justification for Prum's use of sexual selection as an analytic tool.

The rest of this book will appeal to most naturalists, recounting as it does the observations and experiments that are the basis for Prum's approach. Interestingly, one of the main implications is that female choice is primary, with Prairie Chicken leks and Bower Bird behavior providing well known examples. However, as with most things in nature, there are exceptions. Ducks and geese, for example, do not copulate cloacally and thus are not subject to the same social and sexual preferences as most other birds are.

Prum ends the book with some suggestions about the implications of sexual selection for Homo sapiens. I found the book well written and easily accessible to the lay scientist.

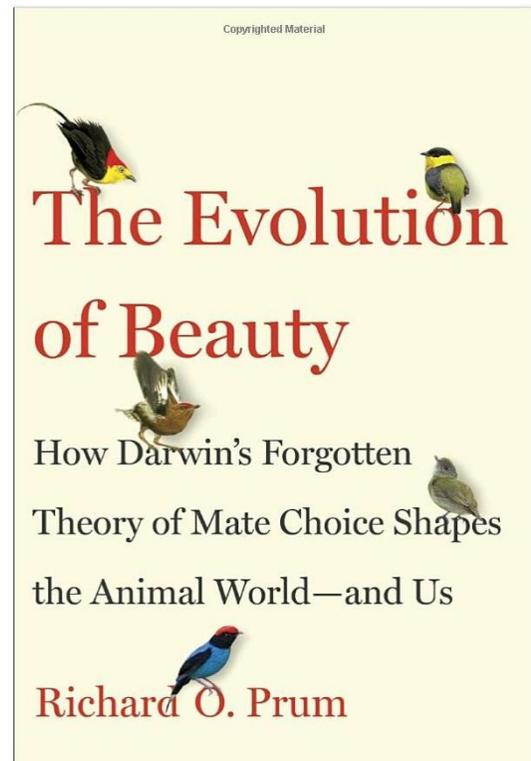


Image credit David Strong

David Strong