Although COVID-19 has caused the cancellation of all Sierra Club events through June 14, we feel Earth Day 2020 demands a more hopeful note — a reminder of earth's wonder all around us.

Included below is a reflection by former manager of the James River Park System Ralph White on spring in the park, reprinted from a 2014 FOJG newsletter. Several of our members, who have kept it over the years for its insight and eloquence, have suggested it as the perfect piece for this effort.

Meditations and Musings on Spring

by Ralph R. White

The goal of any species is to reproduce itself. Philosophical musings aside, the purpose for life is parenthood and the precursor to that is sex. And you'll see that all around you now that we've reached the tipping point for energy input the halfway point, the spring equinox. The proverbial engine has been idling for months — there's not been much sunny fuel. And now the throttle of passion has been mashed halfway to the floor.

The chorus of bird calls that wakes you at dawn even though you'd like to sleep another hour is an auditory manifestation of this increase in energy more sunlight. The pineal gland is stimulated, hormones are released, and sex glands swell. So does aggression. "Get outta my face; this is my crib and my feeding area" and "Baby, baby look at me. I got color, I got sound, so you know I got everything you need." Bird calls are all about passion and violence. You may think you live in a staid, suburban home setting, but at this time of year you've transitioned to a tenement setting and everyone is screaming and throwing dishes.

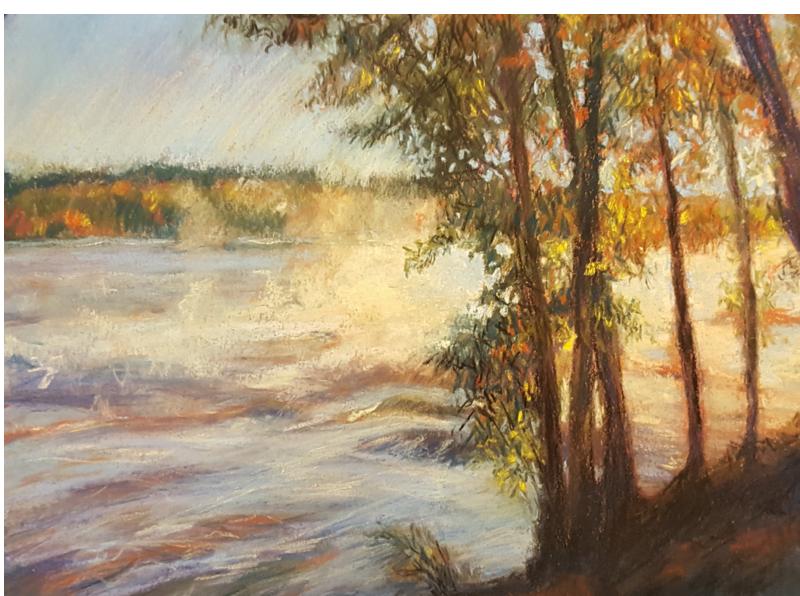
In the world of plants it's the same thing, except with colors. Sex organs spring up out of the ground almost regardless of the temperature. The spring ephemerals are powered by the energy reserves of sunlight stored in the fleshy tubers and corms as starches and oils. There's not quite enough light to support photosynthesis, so leaves will often come out a little later. Right now it's about drawing in the first beetles, flies and bumblebees to drag around pollen and get the procreation thing going.

At Reedy Creek, the main entrance to the James River Park, there is a remnant stand of the earliest spring ephemerals. You'll find them on the other side of the creek, in the flat, fertile floodplain of the creek, opposite the parking lot. Look for small, delicate, simple white flowers standing on slender stalks — a circle of petals and a few anthers sticking up, like a child's version of a flower. These spring beauties have leaves like slender blades of grass and often the flower stems appear to grow adjacent to the leaves as if from a separate plant. Not so common now, they once grew in dense colonies wherever floodwater or storm drainage would spread out soft, sandy soil. Groups of Aboriginal girls would come with flat, wooden sticks to dig up the plants and remove the tiny thumbnail-sized tubers that looked like little potatoes — food that might have been shared with leprechauns. Today you are more likely to see toothworts. Small, four-petaled flowers with several on each short stem. They get their name from the little triangular buds on the sides of the cylindrical rootstock. The "doctrine of signatures" indicates that it addresses both tooth issues — perhaps it's the accompanying grit that might scratch away plaque.

At Pony Pasture Rapids the Virginia bluebells should be up. Same story: energy stored from last year is used to present the reproductive parts this year. The fertilization needs to happen before the flowers are hidden by surrounding vegetation. This is a nice display. All the more so because it's restored native habitat. The environmental scab of invasive species (bush honeysuckle, periwinkle, English ivy and the like) has been gradually cleared away by park volunteers and the open land, under the tall trees, replanted.

The increasing light affects the water as well. About the middle of March the shad, herring and rockfish begin to spawn. (Look for the fishermen on the shoreline and islands upstream of the Mayo Bridge.) Freshwater streams have far fewer predators than ocean environments, so even though it takes a lot of energy to swim upstream it means a lot more eggs and juveniles will live. It takes a lot more effort than simply swimming. It also takes energy to metamorphose from living in a salty water (where fish skin keeps the thin body fluids from leaking out into the dense soup around them), to fresh water (where the skin has to hold in mineral rich blood and keep thin river water from squeezing in and diluting the blood.) Fish are cued by both light and temperature with the latter the more important since light can't penetrate very far into muddy water.

The energy-flow into the river then cycles back onto the land where birds and mammals eat the fish. A good place to experience this is along the Pipeline Walkway at the viewpoint for the Heron Rookery. Best time is at a rising tide early in the morning. But during the height of the fish migration in early April there are fish moving at all hours and tidal stages, mostly shad. That is peak season to see herons fishing. You'll find them along the shoreline, patiently wading in shallow water, and stabbing the water with lightning-fast jabs. Swallowing the food is an entirely more stressful and entertaining endeavor. The fish can be significantly thicker than the bird's neck, to there is much straining and twisting to get it down, and the fish tail sometimes remains hanging out flapping like a fat silver tongue — a glistening reminder of the glittering sunlight that made it all possible.



Pony Pasture Rapids on the James. Soft pastel by Shavon Peacock

Other Contributions by FOJG Members **Celebrating Earth Day**

Haiku by Joe Brancoli The storm will retreat.

Moon shines through Clouds over Earth. Wind moves, may it snow?

Book Nook

Suggestions from FOJG members: Author Lyanda Lynn Haupt displays winning good humor and speaks in

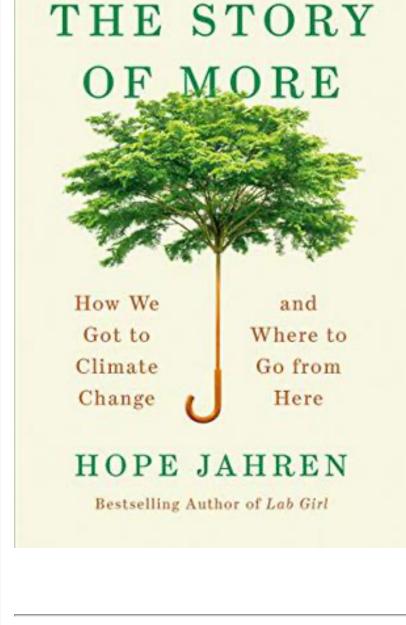
animals and local nature near Seattle. • The Urban Bestiary: Encountering the Everyday Wild • Crow Planet: Essential Wisdom from the Urban Wilderness

accessible ways in her books about the large lessons to be found in small

• Rare Encounters with Ordinary Birds Also, she writes on a very different topic from her other works but you will find it

• Pilgrim on the Great Bird Continent: The Importance of Everything and Other Lessons from Charles Darwin's Lost Notebooks Suggested by Joe Brancoli

Hope Jahren's recently released *The*



"Hope Jahren is the voice that science has been waiting for," -Nature

is just as engaging:

Story of More which presents a concise summary of climate change is already on the bestseller list from independent booksellers. Jahren, author of Lab Girl, is a noted geochemist and geobiologist, currently at the University of Oslo. Her first-person narrative makes the book extremely readable. The book's chapters include a discussion of food,

as a whole. Her mantra is "Use less and share more." She illustrates how the world is divided into two groups — those who consume too much and waste, and those who live on much less. She explains, but never preaches, about the consequences of global warming and suggests actions that we can take.

especially changes in production and consumption, energy, and the planet

This title is available from Chesterfield County

Public Library and Henrico County Public

Library.

Review by Kate McClory









Get involved! Visit HERE to learn about **FOJG Committee Structure 2020 FOJG EXECUTIVE**

COMMITTEE

- Joe Brancoli, FOJG Chair; Vice Chair, Virginia Chapter Ex Comm • Andrew Peacock, Treasurer
- **Shavon Peacock**, Secretary • Glen Besa
- Steve Carter-Lovejoy • Kate McClory
- Bruce Tarr • Lee Williams
- Steve Yarus • **Daryl Downing**, Chair of Sierra Club's Virginia Chapter Ex Comm

e-news, website, publicity and social media.

- Conservation & Advocacy Committee conservation, legislative/political, pollinators,
- bike/pedestrian issues. Meets on the fourth Wednesday each month. Membership Engagement Committee membership,

• Communications Committee

- programs, outings and fundraising. Meets on the last Thursday of each month.
- "Skip the Plastics RVA" **Committee** fights single use plastic in the Richmond area.

New members are welcome. Interested?



Facebook



Twitter Websites: Virginia Chapter | Falls of the James Group

100 W Franklin St, Mezzanine Richmond, VA 23220-5048